

12/15/1978

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



State of Oregon
**Department of
Environmental
Quality**

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

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

ENVIRONMENTAL QUALITY COMMISSION MEETING
December 15, 1978

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

- 9:00 am A. Minutes of the October 27, 1978 EQC meeting
- ~~B. Monthly Activity Report~~ DEFERRED
- C. Tax Credit Applications
- PUBLIC FORUM - Opportunity for any citizen to give a brief oral or written presentation on any environmental topic of concern. If appropriate, the Department will respond to issues in writing or at a subsequent meeting. The Commission reserves the right to discontinue this forum after a reasonable time if an unduly large number of speakers wish to appear.
- D. OEC Petition - Reconsideration of petition from Oregon Environmental Council requesting promulgation of rules to regulate noise emissions from airports.
- E. Field Burning Rules - Proposed adoption of revisions to Agricultural Burning Rules, including open field burning acreage limitations for 1979-80 burning season, OAR 340-26-005 through 26-030.
- ~~F. Medford Ashland AQMA - Proposed adoption of particulate and volatile organic compounds (VOC) offset rules for the Medford Ashland Air Quality Maintenance Area (AQMA).~~ DEFERRED
- G. Volatile Organic Compounds Rules - Proposed adoption of rules to control emissions of volatile organic compounds (VOC) in Air Quality Maintenance Areas.
- H. Chem-Nuclear License - Proposed adoption of amendments to Chem-Nuclear's license for operation of Arlington Hazardous Waste Disposal site.
- ~~10:30 am I. Sunrise Village, Bend - Reconsideration of appeal of sub-surface sewage disposal requirements.~~ DEFERRED
- ~~11:00 am J. Contested Case Reviews:~~
- ~~a. DEQ v. Arline Laharty - Motion to Dismiss~~
- ~~b. DEQ v. George Suniga - Civil penalty for alleged open burning violations.~~ DEFERRED
- K. Noise Control Rules - Proposed adoption of amendments to noise control regulations for the sale of new snowmobiles, OAR 340-25-025.
- 1:30 pm L. Ochoco Pellet Plant, Prineville - Request for variance from particulate emission limitations, OAR 340-21-015, 21-030, and 21-040.
- M. Stipulated Orders - Request for Approval of Stipulated Consent Orders for the cities of Brownsville and Cave Junction, and Bear Creek Valley Sanitary Authority; and amendments to the Cities of Rockaway and Seaside Stipulated Final Orders.
- N. City of Portland, Gertz-Schmeer Road - Order to connect sewage disposal facilities to City of Portland sewer system.

Because of uncertain time spans involved, the Commission reserves the right to deal with any item at any time in the meeting, except items I, J and L. 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.

The Commission will breakfast (7:30 am) at the Standard Plaza Building, Conference Room B, 1100 S. W. Sixth; and lunch in Room 511, DEQ Headquarters, 522 S. W. Fifth Avenue.

MINUTES OF THE ONE HUNDRED FOURTH MEETING
OF THE
ENVIRONMENTAL QUALITY COMMISSION

December 15, 1978

On Friday, December 15, 1978, the one hundred fourth meeting of the Oregon Environmental Quality Commission convened in room 511 of the Yeon Building, 522 S. W. Fifth Avenue, Portland, Oregon.

Present were Chairman Joe B. Richards and Commission Member Ronald M. Somers. Connected by telephone was Commission Member Albert H. Densmore. Vice-Chairman Grace S. Phinney and Commission Member Jacklyn L. Hallock were absent. 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 -MINUTES OF THE OCTOBER 27, 1978 EQC MEETING

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that the minutes of the October 27, 1978 EQC meeting be approved as presented.

AGENDA ITEM C - TAX CREDIT APPLICATIONS

It was MOVED by Commissioner Somers that the Director's recommendation to issue pollution control facility certificates to applications T-1018, T-1026, T-1030, T-1031 and T-1022 and to revoke Certificate No. 533 because the certified facility was no longer in use, be approved.

For the benefit of Commissioner Densmore, Commissioner Somers explained that application T-1022, Publishers Paper Company, concerned the Company making application for the building of a turbine generator and electrical generating system to utilize their waste steam which was previously used for just heating the dry kilns in the wood process. He said the Company relied on the fact that the statute was enacted to encourage industries to use waste products and develop new energy resources from them. According to the information provided the Commission, Mr. Somers said, the Company accomplished the intent of the Legislature in that they not only recovered heat from a previously wasted commodity they also recovered an additional 5000 KW of electrical energy which meets the electrical demands of their plant and provides additional power to the community.

Mr. Lew Krauss, Rough and Ready Lumber Company, appeared regarding the proposed denial of their request for preliminary certification for tax credit. He said they had applied for preliminary certification under the solid waste statute on the basis of their installation of a system which would include a boiler and kilns. He said that the dry kiln portion of the facility was turned down for tax credit by the Department's staff.

Mr. Krauss presented exhibits to the Commission in support of his testimony. These exhibits are made a part of the Commission's record on this matter. Chairman Richards told Mr. Krauss that he would like to study the material presented. He said the Commission had discussed at their breakfast meeting what the legislative intent was and his preliminary feeling was that since the other applicant was producing energy in the commonly accepted sense, it would qualify for a tax credit because of the 1977 legislative change. Chairman Richards continued that he had tentatively felt that probably Mr. Krauss' application did not qualify. However, he said, he would not be prepared to make a decision at this time. Commissioner Somers said that the boiler could qualify for tax credit under either air or solid waste, but the problem was whether the construction of the dry kiln was utilizing waste as an energy source. He continued that it was obvious that the other system being discussed for Publishers Paper was generating electricity more than the plant needed. Commissioner Somers said that to approve these dry kilns would do severe damage to the tax credit program.

Mr. Krauss said he wanted to stress that this facility was a package unit. He said the dry kilns were not separable from the boiler. In response to Chairman Richards, Mr. Krauss said there would be no reason to produce the energy without the kilns.

Commissioner Densmore said he would be uncomfortable to vote on something he had not had time to review and suggested that this matter be deferred until the next Commission meeting. Chairman Richards agreed that the matter of the preliminary certification for Rough and Ready Lumber Company would have to be deferred until the next meeting.

Mr. Richard Miller, representing Rough and Ready Lumber Company, said they had noted that the Department has approved several particleboard plants in which the end product of the plant was composed of waste materials. He said they were asking for tax credit for the part of their facilities that really utilized the waste materials.

Chairman Richards gave Mr. Krauss and Mr. Miller a letter written by Mr. Tom Donaca of Associated Oregon Industries which summarized AOI's view of the legislative intent on this matter. He continued that the Commission did not feel that the legislative language included the type of facility Rough and Ready Lumber wished to have certified.

Commissioner Densmore asked if the Company had known that the kiln would not qualify for tax credit, would they still have built the facility. Mr. Krauss said he was unable to answer that, other than they did take various types of tax credit into consideration when they were figuring the investment in the facility.

Mr. Miller said that the kiln portion of the facility was denied on the basis that the substantial purpose of the facility was not to utilize waste material. However, he said, that further on in the statute it said, "the substantial purpose of the facility would be to utilize material that would otherwise be solid waste by the use of materials for their heat content or other forms of energy of or from the material." He said that they did not feel the heat content of their facility would go to any use unless they built the dry kilns. Without the dry kilns, he said, they had no use for the source of power.

Chairman Richards then called for the vote on the motion to approve the Director's recommendation as previously stated and noted that action on Rough and Ready Lumber Company's application for preliminary certification for tax credit would be deferred until the Commission's next meeting. The motion passed unanimously.

AGENDA ITEM K - PROPOSED ADOPTION OF AMENDMENTS TO NOISE CONTROL REGULATIONS FOR THE SALE OF NEW SNOWMOBILES, OAR 340-25-025

Mr. John Hector, of the Department's Noise Section, said the International Snowmobile Association had petitioned the Department to recind the 75 dBA standard scheduled to become effective for 1980 model snowmobiles. He said a public hearing was authorized and held in Portland on October 31, 1978. The major arguments offered at this hearing, he continued, were that noise levels emitted by the new 78 dBA snowmobiles did not pose a threat to the environment, and the state of the art of noise technology precluded the achievement of the 75 dBA standard for all models.

In response to testimony, Mr. Hector said the Director recommended that the 75 dBA standard be recinded. He said most standards were based on what industry could achieve and what DEQ as a regulatory body could get industry to achieve to a level that the environment was protected.

A representative of the snowmobile manufacturing industry answered questions of Commission members.

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that the Director's Recommendation in this matter be adopted.

LINCOLN COUNTY SOLID WASTE OPEN BURNING VARIANCE

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that the solid waste open burning variance for Lincoln County be extended until July 1, 1979.

Commissioner Somers declared his conflict that he owned a condominium in Lincoln City.

In response to a request by Commisisoner Densmore, the staff was instructed to furnish him with further information on this matter as he was unable to attend the breakfast meeting where this matter was discussed.

LADD HENDERSON PETITION FOR DECLARATORY RULING

Director William Young said it would be his recommendation to not issue a declaratory ruling on this matter.

Mr. Ladd Henderson said he wished to point out several errors in the draft recommendation on this matter written by Mr. Robert Haskins of the Department of Justice.

Mr. Henderson said Mr. Haskins' main objection was to whether or not testimony or exhibits could be presented at the hearing for declaratory ruling. He said this matter could be settled by both parties stipulating to the taking of testimony at the hearing.

Chairman Richards said the question was whether or not the Commission should accept the petition and schedule a hearing. Mr. Henderson said he wanted to point out that he was not furnished with a copy of Mr. Haskins' recommendation until the day before. He said he did not feel it was adequate notice to prepare for a response. Commissioner Somers said it was not uncommon for an attorney to file a trial brief the day of the trial. Mr. Henderson said he would accept that.

Mr. Henderson said the petitioners would like to go on record as being in favor of allowing testimony at the time of hearing if the hearing was held.

Chairman Richards told Mr. Henderson he needed to convince the Commission that this proceeding should be acceptable to the Commission. He advised Mr. Henderson to only present those things that he believed to be issued which he had not had the opportunity to present before. Mr. Henderson replied that Mr. Haskins had stated that the Commission could not even entertain a petition which was based on untrue statements. He said he was trying to prove that the statements made were true. Chairman Richards said that the procedure Mr. Henderson had chosen was designed to draw the Commission's attention to issued which had not been dealt with in other ways. He continued that if Mr. Henderson was only raising the same issues which had been heard before and asked that he raise those issues which he felt were unique for this proceeding. Mr. Henderson replied that he found it difficult to separate the merits of the petition from the decision to hear it or not.

Mr. Henderson said that at no time was the issue of permit denial addressed. He said that the Hearing Officer ignored the daily monitoring reports for the City of Hood River sewage treatment plant. Mr. Henderson said the monitoring reports gave the information necessary to make a decision on whether or not the system was being operated in compliance.

Mr. Henderson said Mr. Haskins went on to state that the petitioners did not state sufficient facts for the Commission to make a declaratory ruling. However, he continued, had they submitted exhibits Mr. Haskins would have said they were pleading evidence. Mr. Henderson offered the following alternatives: (1) the previous offer of allowing testimony in evidence at the hearing, or (2) attaching the exhibits to the petition or resubmitting the petition with the exhibits made a part of it.

Mr. Henderson asked why DEQ should not be required to prove the applicability of an administrative rule which had been consistently used to deny the petitioners a permit over a period of one year and ten months and also asked why DEQ should have such a demonstrated fear of such a declaratory ruling. He said the Commission needed to decide if they wanted the problem solved at their level or in the courts as recommended by Mr. Haskins.

Chairman Richards said that Commissioner Densmore, because of the fact he was hearing the meeting by telephone, did not have the opportunity to see Mr. Henderson's exhibits. He said he would like to consider Mr. Henderson's brief and would like to defer action on this matter until the next meeting when hopefully all members of the Commission would be present. Mr. Henderson said he did not object to the Commission deferring action in this matter.

Mr. Haskins asked that a deadline be placed on the petitioners for submittal of their brief which would allow the department time to respond before the next Commission meeting. Chairman Richards said that Mr. Henderson was responding to Mr. Haskins brief, however if there were any added exhibits the Department should have the opportunity to respond to them.

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that this matter be deferred until the Commission's next regular meeting. The record notes that the petitioners had no objection to this motion.

AGENDA ITEM G - PROPOSED ADOPTION OF RULES TO CONTROL EMISSIONS OF VOLATILE ORGANIC COMPOUNDS (VOC) IN AIR QUALITY MAINTENANCE AREAS

Mr. Peter Bosserman, of the Department's Air Quality Division, presented the summary and Director's Recommendation from the staff report. Mr. Bosserman said they had received additional information regarding these rules and presented three changes to the staff report and the rules. These changes are made a part of the record on this matter.

Mr. Gene Hopkins, Executive Vice President of the Greater Medford Chamber of Commerce presented testimony regarding these rules. He said that despite the efforts of DEQ they still did not have a good information base on which to calculate specific or overall control strategies for the unique air pollution situation in the Medford-Ashland area. He requested that the Commission request from the the upcoming legislative session specific funding for the purpose of establishing a greater data base.

Mr. J. C. Michaelson, 3M Company, White City, said they had reviewed the proposed amendments to the rule and afelt that their plant could work within the framework of those regulations.

Mr. James R. Watts, Attorney for the Roofing Contractors Association of Portland, said that following the October 1978 hearing the Association asked a consultant to draft a rule dealing with roofing kettle emissions to be submitted to DEQ. He said that DEQ took into account several recommendations of the consultant in drafting the proposed rule before the Commission. He said they had no conflict with the rule prepared by DEQ staff, however the rule they propose would go into more detail. Mr. Watts requested that the Commission substitute the rule prepared by their consultant for the rule prepared by DEQ staff.

Chairman Richards asked Mr. Watts if their proposed rule would have the effect of allowing greater or fewer emissions than the rule prepared by staff. Mr. Watts replied that their rule incorporated the same standards with respect to emissions but it detailed the standard in the rule.

Mr. John Platt, Oregon Environmental Council, said they had been following the Department's work in the preparation of these rules. He said they were concerned about the exceeding of photochemical oxidant health standards which occur in various areas of the state. He said that the proposed rules represented an important first step in coming into compliance with ambient air quality standards.

Mr. Platt said that OEC could not support the proposed rules for the surface coating industry. However, he continued, they realized that further reductions would occur later when the surface coating industry was examined as a source category.

Mr. William C. Cornitius, petroleum jobber, addressed the Commission concerning the proposed rule pertaining to the maximum gallons without vapor recovery for bulk plants. He said the cost estimates prepared by the staff were not correct and it would cost between \$80,000 and \$100,000 to comply fully for bulk plants versus the \$10,000 to \$18,000 indicated by the staff. This would, he said, cause a severe economic hardship to the bulk plants.

Mr. Tom Donaca, Associated Oregon Industries, wanted to make the Commission aware that this was a two-stage process in which large contributors were regulated in the first round, but in the second round those affected were not even aware of what was going on, but the proposed rule would greatly affect them. He said the staff should be giving the Commission a better indication of the actual relationship of the industrial/commercial contribution to the identified problem than they have given to date.

Mr. Donaca commended the staff for taking on EPA on the question of when controls should be operated. He said that the staff should be talking with EPA about intermittent controls.

It was MOVED by Commissioner Somrs that the Director's Recommendation as amended be approved with the exception of modifying 340-22-11594) to read: (4) Loading facilities loading [10,000 liters (2,375 gallons)] 76,000 liters (20,000 gallons) . . . The motion was seconded by Commissioner Densmore and carried unanimously.

AGENDA ITEM D - RECONSIDERATION OF PETITION FROM OREGON ENVIRONMENTAL COUNCIL REQUESTING PROMULGATION OF RULES TO REGULATE NOISE EMISSIONS FROM AIRPORTS

State Representative Sandy Richards, House District 22, questioned whether the public notice requirements had been satisfied by the moving of the meeting location, and registered a complaint by one of her constituents who wished to testify and expected the matter to be heard earlier but had to return to his job responsibilities. Chairman Richards said they regretted any inconvenience caused and if the party would like to send in written testimony it would be accepted.

Representative Richards said her only involvement in this matter was her attendance at the citizen advisory committee meeting, discussions with Port of Portland officials on the preparation of their master plan and conversations with DEQ officials. She said she was pleased with the technical input and policy recommendations of the Department throughout the Port's master planning process.

Representative Richards said she wanted to convey the frustrations of the public that were impacted by aircraft noise and who have been dealing with this problem for the last several months. She said she understood that the airport was now at 1980 projected traffic and the residential areas around the airport had built up markedly over the last few years. She continued that corresponding situations in other states had prompted rule adoptions.

Representative Richards said the proposal to defer rulemaking and develop a noise abatement program over the next six months was being interpreted in the community as simply another delay by another public agency.

In regard to the statement in the Director's Recommendation reading: ". . . the necessity for the adoption of specific rules and standards shall be determined" Representative Richards said that offered no guarantee that there would be rulemaking steps taken and some enforcement responsibility established.

Representative Richards asked that if noise abatement program development was the Commission's choice and the petition was denied, at the very least a serious effort be made to contact community leaders and legislators involved in the affected areas and involve the community in the noise abatement program development. She also requested that the Director's Recommendation be amended to indicate that rulemaking steps would be taken at the end of the noise abatement program development.

Commissioner Somers declared his conflict of interest because he was chairman of an airport commission in the State of Washington owned by the City of The Dalles. He said he also owned an airplane and was a pilot. Commissioner Somers said that the residents under approach corridors wanted to know that something was going to be done to take care of their immediate problem, and that would be the implementation of a noise abatement procedure. He said that if the Commission didn't take some action then a lot of unnecessary litigation would result. He asked Representative Richards if the people in her district would be willing to participate in a legislative process of hearings to make a reasonable determination

as to what noise they can live with. Representative Richards replied they were seeking to fill a void that no one was looking at the noise impacts beyond the Port facility along the approach and take-off corridors. She said they did not desire to shut down the airport, but simply wanted their noise concerns addressed in an administrative structure.

Mr. John Platt, Oregon Environmental Council, said that the noise problem at the Portland International Airport had experienced a history of delays and a lack of real recognition by the Port of the noise problem. To some extent, he said, their noise program was one of retrofitting which had not been funded by Congress and had no present likelihood of being funded. He said their petition asked for standards and for rulemaking. Mr. Platt said that the first staff report done for the Commission recognized the need for public hearings and recommended they be held. It also recognized the lack of pre-emption over certain areas of aircraft noise regulation, he said.

Mr. Platt said there had been staff criticism of the particular standard OEC proposed. He said they believed their proposed standard was strict but variance procedures could be set up along with it. He said it was essential that the Department ascertain its jurisdiction over this problem by rulemaking procedures and then proceed with an abatement program. Otherwise, he continued, the Department would be taking on the burden of showing the Port it did have an interest in the noise question, and also the burden of establishing the program rather than having the Port establish the program in order to meet standards.

Mr. Platt said that denying the petition would be only extending the delay that had been inherent in the problem of airport planning for noise. They believed, he continued, that after six months there would still be no agreement by the Port and DEQ and that a request for rulemaking would again have to be made.

In response to Chairman Richards, Mr. Platt said that other states had implemented standards and then gone through a planning process to establish variance procedures. Therefore, he said, they felt their proposed standard was sufficient as a basis for public hearings. He said they would not object to staff proposing their own standards incorporating those of OEC.

Commissioner Densmore asked if the Department took on jurisdiction over this particular noise problem without funding from the Legislature, then more harm than good would come of it. He asked if resources might be forthcoming. Mr. John Hector, DEQ Noise Section, replied that he felt his present staff could initially address this problem. He said that once the standard was adopted it would theoretically be accomplished by the airports themselves and he did not see a great need for additional Department staff. Commissioner Densmore asked about monitoring and identifying where problem areas were. Mr. Hector said they did have some monitoring capabilities and as they started to look at other airports around the state the demands on staff would increase. He said they would be concentrating on the eight commercial airports in the state.

Mr. Gary Gregory, said they did not want to close the airport. He said that the present problem had been going on for approximately 18 months. Mr. Gregory presented maps to the Commission showing the present flight corridors. He said that without a specific rule promulgated by DEQ, they could not be sure that aircraft would fly through the designated corridors. Chairman Richards asked if it was clear the Commission had the power to establish flight corridors. Mr. Gregory replied that the FAA recognized enforcement power at the local level working with the airport proprietor. He said the proprietor had the power to recommend policies to the FAA and they had certain things they could implement without FAA approval. Mr. Gregory said that a noise abatement procedure already existed but was not followed with the exception of Northwest Airlines. He said they wanted the rulemaking process to develop operational guidelines with specific standards so the public would know they could call DEQ with problems.

Chairman Richards asked Mr. Gregory, as a petitioner, if hearings were to be held did he want hearings on the rules proposed in the petition. Mr. Gregory replied that he would go along with Mr. Platt's suggestion of working with DEQ to perhaps develop specific rules governing this problem.

Mr. Clifford A. Hudsidge, Port of Portland, expressed a willingness to cooperate with DEQ should the Commission decide on the Director's Recommendation on this matter. He asked that any report to the Commission fully express the powers and responsibilities of the various agencies which may be identified as implementing a noise abatement program:

Commissioner Densmore asked if the recent airline deregulation would increase the problems at the Portland Airport. Mr. Hudsidge said deregulation would not have a significant effect on the amount of activity coming into the Airport. What might make an effect, he said, was the FAA ruling on retrofitting. He said that has to take place whether there was federal funding for it or not.

Ms. Jean Baker, testified she had reviewed the staff recommendation and felt it was deficient in not stating absolutely that a standard would be arrived at after a hearing process. She said that without standards there could be no noise abatement program. She said then the noise abatement program could be a part of the airport's responsibility. She said no one was proposing to preempt federal regulations on the operation of aircraft except that community noise levels should not be exceeded by a specified standard. Ms. Baker said it had already been demonstrated there was a need for standards.

Ms. Baker urged the Commission to approve OEC's original petition and to start the hearing process and rulemaking procedures.

Mr. John Hector, DEQ's Noise Section, said this item had been brought before the Commission at their November meeting and at that time staff was directed to outline the areas of jurisdiction and to develop recommendations to be considered at this meeting. He said the staff report explained the role of the airport proprietor, the state and local government and the federal government in the control of airport noise. He said the staff believed the Commission had the authority to adopt airport noise standards for which the proprietor must assure compliance.

Mr. Hector said the petitioners believed the noise problems could be solved by the use of operational controls. He said the effect of these types of controls would be to reduce the area of noise impact on land.

Mr. Hector presented the following Director's Recommendation from the staff report.

Director Recommendation

Based upon the Summation in the staff report, it is recommended that the Commission approve the following:

1. Deny the petition from the Oregon Environmental Council and co-petitioners for the reasons set forth above, and instruct the staff to notify the petitioners.
2. Authorize the Department to develop a noise abatement program for Portland International Airport to be submitted for Commission approval. This program shall assess all airport noise mitigation measures including airport operations, aircraft noise emissions and land use controls. Program implementation, compliance and assurance methods shall be identified and the necessity for the adoption of specific rules and standards shall be determined. Cooperation shall be requested from all concerned parties to develop this program, including the Port of Portland, the State Division of Aeronautics, the City of Portland, Multnomah County, the Federal Aviation Administration and the petitioners.
3. Within six months of this date, the Department shall propose, as necessary, a noise abatement program for Portland International Airport for Commission consideration and approval.
4. Subsequent to the approval of the Portland International Airport noise abatement program, the Department shall evaluate other Oregon airports and make recommendations to the Commission on the need for noise abatement programs.

Mr. Hector said that the day before this meeting the Department had received another petition on this matter. He said that after speaking with one of the signers of this new petition, Ms. Jean Baker, he understood that it was not the intent of the new petition to be a supplement or reinforcement of the one presently before the Commission. Therefore, Mr. Hector continued, the staff believed Commission action would be necessary on this second petition at a later date.

Chairman Richards asked Mr. Hector his reaction to the Commission denying the petition before it now, and then asking the staff to come back to the Commission within 60 to 90 days with Department-proposed rules, rather than going to a negotiated abatement strategy. Mr. Hector replied that he thought that would be an acceptable alternative. Chairman Richards said he would not want to go to hearings with rules in which they questioned the language.

After some discussion, Commissioner Somers MOVED to deny the petition and instruct the Department to within 60 days propose a set of rules that could be taken to hearing. The motion was seconded by Commissioner Densmore with the clarification tha the Commission was exercising its prerogatives under ORS Chapter 467. The motion passed unanimously.

PUBLIC FORUM

Ms. Liz VanLeeuwen, asked why, after repeated requests, she was not receiving notification of EQC meetings. Chairman Richards replied that he assumed that was an internal mistake and that the Department and Commission were not trying to exclude anyone from adequate notice of meetings. Ms. VanLeeuwen, testifying for the Linn County Farm Bureau and Women for Agriculture, said they objected to the Commission's consideration of matters of major importance like the water quality 208 program which the Commission heard in Eugene in November and which they understood would be heard at this meeting. Chairman Richards asked Ms. VanLeeuwen for her address and assured her that she would receive the agenda notification of EQC meetings.

AGENDA ITEM L - OCHOCO PELLET PLANT, PRINEVILLE - REQUEST FOR VARIANCE FROM PARTICULATE EMISSION LIMITATIONS, OAR 340-21-015, 21-030, and 21-040

Mr. Richard Nichols, DEQ's Central Region Manager, presented the following Director's Recommendation from the staff report.

Director's Recommendation

Based upon the summation in the staff report, the Director recommends that the Environmental Quality Commission:

1. Enter a finding that strict compliance remains inappropriate due to the physical and financial condition, and the new ownership of Ochoco Pellet Plant.
2. Extend the variance for Ochoco Pellet Plant to operate in excess of emission standards described in Oregon Administrative Ruoles, Chapter 340, Section 21-015(2)(b), 21-030(a) and 21-040 until October 1, 1979, subject to the following conditions:
 - a. Visible emissions shall not exceed 60%
 - b. Emissions shall be maintained at the lowest practical levels.
 - c. By March 1, 1979, the permittee shall submit proper plans and specifications for approval for construction of pollution control equipment.
 - d. By July 1, 1979, the permittee shall begin installation of pollution control equipment.

- e. By September 1, 1979, the permittee shall complete installation and schedule an appointment for Department personnel to verify that this facility is capable of operating in continuous compliance with State Air Quality Standards.

After some discussions, Mr. Nichols said they would like to change the date in the Director's Recommendation part D of item 2 from July 1 to June 1; and part E from September 1, 1979 to July 1, 1979. He said this would alleviate problems with EPA. The Company agreed this was reasonable.

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that the Director's recommendation in this matter, with the above amendments, be approved.

AGENDA ITEM E - FIELD BURNING REGULATIONS AND AMENDMENT TO THE OREGON STATE IMPLEMENTATION PLAN, PROPOSED PERMANENT RULE REVISION TO AGRICULTURAL BURNING RULES, OAR CHAPTER 340, SECTIONS 26-005 THROUGH 26-030 - RULE ADOPTION

Chairman Richards said that the public hearing on this matter had been concluded except for the holding open of the record for 10 days for written testimony. The Commission agreed to accept testimony from the City of Eugene and the Seed Council pertaining to the changes that had taken place in the rule as a result of the public hearing held in November.

Mr. Scott Freeburn, DEQ's Air Quality Division, in response to a question by Chairman Richards, said that as a result of the emission testing program during the last burning season it had been established that there was an effect moisture content had to increasing the total emissions from field burning. However, he said, it was staff opinion that the effect of atmospheric ventiation could drastically alter smoke impacts far more than moisture content. He said that to implement the program with the least amount of field personnel, the criteria suggested by the City of Eugene seemed appropriate. The City of Eugene suggested, Mr. Freeburn said, that the set value for loose straw moisture content be dropped and a criteria where there would so much waiting time after a given amount of rainfall be incorporated. He also said the city suggested keeping the 50% relative humidity limitation. However, Mr. Freeburn said he would suggest a 65% relative humidity limitation.

Chairman Richards asked if further modifications could be made in the rules after adoption as new data developed. Mr. Freeburn said they intended to submit the rules to EPA and ask them not to consider the rules except in combination with the rest of the SIP revision package.

In response to Chairman Richards, Mr. Freeburn said they intended the proposed rules to be the rules for next summer. Chairman Richards asked what would cause these rules to be modified before the next burning season. Mr. Freeburn replied that probably something as a result of Legislative activity or the results of some analyses that they had yet to complete.

Mr. Freeburn presented the following revised Director's Recommendation:

Director's Recommendation

Based upon the information set forth in pages 1-18 of the Director's December 15, 1978, staff report to the Commission; the testimony in the record of the November 17, 1978, public hearing; and the recommendations of Oregon State University pursuant to ORS 468.460(3), it is recommended that the Environmental Quality Commission act as follows:

1. Enter a finding that the open burning of 180,000 acres pursuant to the proposed rules in Attachment 1 to the Director's Staff Report will not substantially impair public health and safety and will not substantially interfere with compliance with relevant State and Federal Laws.
2. Designate as its final State of Need for Rulemaking the Statement of Need set forth on pages two and three of the Director's Staff Report.
3. Adopt as permanent rules the proposed rules set forth in Attachment 1 to the Director's Staff Report, such rules to become effective upon their prompt filing (along with the State of Need for Rulemaking) with the Secretary of State and to include an Order establishing 180,000 acres annually as the number of acres for which permits may be issued for open field burning.
4. Instruct the staff to submit the rules set forth in Attachment 1 of the Director's Staff Report to EPA pursuant to Federal rules, but request that these rules not be acted upon by EPA except as they may be later submitted as a part of an overall State Implementation Plan Revision package.

In regard to proposed rule OAR 340-26-010(6), which reads:

"(6) No person shall conduct open burning which results in a direct smoke and/or ash nuisance for adjacent residential communities, schools, or other smoke sensitive areas."

Mr. Freeburn said this proposed rule came about because of an incident which occurred during the last burning season in which there was some inappropriate burning next to a residential area. He said this proposed rule was intended to prohibit that possibility and to give the Department some recourse in responding to that type of burning in the future. However, he continued, concerns had been mentioned that his might be interpreted at a future date that such residential communities might be an individual house or several houses on a five-acre plot which might be located in an agricultural area.

Mr. Dave Nelson, Oregon Seed Council, recommended that the Commission adopt the acreage figure as required by state law and further recommended that the Commission defer adoption of the permanent operating rules. He

said that perhaps the Commission could state their intention of adopting permanent rules within the next few months. He said they were concerned about some specific items which were changed in the regulations.

He said that originally the rules proposed to keep the acreage limitation criteria to that used in 1978. This had been changed, he said, and they would prefer to see it restored. Mr. Nelson said they supported the direction the staff was going in in regard to the moisture rule, but had some concerns about it as it was proposed. In response to Chairman Richards, Mr. Freeburn said he would not be locked into prohibiting burning by the technicality of the moisture content rule. He said he could allow burning if in his judgment the humidity level would allow it. Mr. Nelson said they supported Mr. Freeburn having that flexibility.

Mr. Nelson provided the Commission with EPA's new policy on protection of agricultural land.

Mr. Nelson said that the acreage limitation in the proposed rules before the Commission was no longer a significant factor in the accomplishment of the smoke management program.

Commissioner Densmore asked Mr. Nelson if he knew of any possible Legislative action which would change the impact of the proposed rules. Mr. Nelson said he knew of no bills being drafted by any interim committee or task force to modify the field burning law. He said the Seed Council would not do anything until the Commission decided what it was going to do. He said there were some housekeeping changes that needed to be made in the field burning law.

Mr. Robert Elfers, City of Eugene, said that although they had some reservations about the proposed rules, they felt they were a fair compromise. Based on last year's experience, he said, they felt the proposed rules would do a good job in allowing the seed industry to continue with its practices and keep smoke impact out of Eugene.

Mr. Elfers said they were concerned about the elimination of the 12% moisture content rule and the 50% relative humidity restriction being lessened to 65%. He said the staff did not have justification in support of this revision. If anything, he continued, data from last summer's emission testing would support the opposite action. Chairman Richards asked Mr. Elfers if he agreed that any moisture content rule would be difficult to enforce. Mr. Elfers agreed and said they did recommend that the 12% moisture rule be dropped and in place have the growers subject to the 50% humidity rule.

Mr. Elfers said the smoke management program had few opportunities to address the question of reduction of emissions and most of it employed techniques of dispersing the smoke. He said that a smoke management program had to balance dispersion of the smoke and also reduction of emissions.

Mr. Elfers submitted a written statement which will be made a part of the Commission's record on this matter.

It was MOVED by Commissioner Somers that the Director's Recommendation on this matter be approved and that the proposed rules be amended as follows:

OAR 340-26-010(6) be eliminated.

26-013(1)(a) - Shall not exceed 180,000 acres [.]
annually.

The motion was seconded by Commissioner Densmore and carried unanimously.

AGENDA ITEM H - PROPOSED ADOPTION OF AMENDMENTS TO CHEM-NUCLEAR'S LICENSE FOR OPERATION OF ARLINGTON HAZARDOUS WASTE DISPOSAL SITE

Mr. Fred Bromfeld of the Department's Hazardous Waste Section, said that after overseeing the operation of the Arlington Hazardous Waste Disposal Site, the Department determined that Chem-Nuclear's license to operate the site needed to be amended. He said the modifications to the license had been presented to the Commission at their last meeting, but concerns were raised about some of the conditions in the proposed license modification. Therefore, Mr. Bromfeld said, condition C7 which had been removed from the proposed new license, was reinserted in a modified form. These changes and modifications to the license were listed in the staff report.

Mr. Bromfeld said they believed the proposed modifications to the license addressed the Commission's concerns and said the Director's Recommendation would be that the modified Chem-Nuclear license be issued.

Mr. Pat Wicks, Chem-Nuclear Systems, Inc., said they had no objection to the proposed modifications of the license.

After some discussion, Commissioner Somers said he had not compared the proposed modifications to the old license because he thought this matter would not come up until the Commission's next meeting. Director Young said this matter had been before the Commission for four or five months and there was nothing that was made known to the Commission only at their previous meeting which had not been carried over from meetings before that. Although there was no great need to conclude this matter at this time, he said, it would be useful to the staff to get a clear sense of direction on what was still deficient in the license. Chairman Richards said he would like to finish this matter at this time.

It was MOVED by Commissioner Densmore, seconded by Commissioner Somers and carried unanimously that this matter be deferred until the Commission's January 1979 meeting.

AGENDA ITEM M - REQUEST FOR APPROVAL OF STIPULATED CONSENT ORDERS FOR THE CITIES OF BROWNSVILLE AND CAVE JUNCTION, AND BEAR CREEK VALLEY SANITARY AUTHORITY; AND AMENDMENTS TO THE CITIES OF ROCKAWAY AND SEASIDE STIPULATED FINAL ORDERS

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that the following Director's Recommendation be approved.

Director's Recommendation

Based upon the summation in the staff report, it is recommended that the Commission approve the following:

1. DEQ vs. City of Seaside, Amendment No. 2 to Stipulation and Final Order No. WQ-SNCR-77-159 (Attachment No. 2).
2. DEQ vs. City of Rockaway, Amendment to Stipulation and Final Order No. SW-SNCR-77-160 (Attachment No. 4).
3. DEQ vs. City of Brownsville, Stipulation and Final Order No. SW-WVR-78-103 (Attachment No. 5).
4. DEQ vs. City of Cave Junction, Stipulation and Final Order No. WQ-SWR-78-152 (Attachment No. 6).
5. DEQ vs. Bear Creek Valley Sanitary Authority, Stipulation and Final Order No. WQ-SWR-78-161 (Attachment No. 7).


AGENDA ITEM M - CITY OF PORTLAND, GERTZ-SCHMEER ROAD - ORDER TO CONNECT SEWAGE DISPOSAL FACILITIES TO CITY OF PORTLAND SEWER SYSTEM

Mr. Stephen Carter, of the Department's Northwest Region Office, said this was a final action on a series that started in 1970 to eliminate health hazards in the Bridgeton-Faloma area of Multnomah County. He said the City had reviewed this matter and were in agreement with the Director's Recommendation. Chairman Richards noted that there was no one present to testify in opposition to the Director's Recommendation.

It was MOVED by Commissioner Somers, seconded by Commissioner Densmore and carried unanimously that the Director's recommendation to approve the order to connect sewage disposal facilities to the City of Portland sewer system, be approved.

There being no further business, the meeting was adjourned.

Respectfully submitted,


Carol A. Spletstaszer
Recording Secretary

A

MINUTES OF THE ONE HUNDRED THIRD MEETING
OF THE
OREGON ENVIRONMENTAL QUALITY COMMISSION

November 17, 1978

On Friday, November 17, 1978, the one hundred third meeting of the Oregon Environmental Quality Commission convened in the Eugene City Council Chambers, 777 Pearl Street, Eugene, Oregon.

Present were all commission members: Mr. Joe B. Richards, Chairman; Dr. Grace Phinney, Vice-Chairman; Mr. Ronald M. Somers; Mrs. Jacklyn L. Hallock; 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 - MINUTES OF SEPTEMBER 22, 1978 EQC MEETING

It was MOVED by Commissioner Somers, seconded by Commissioner Phinney and carried unanimously that the Minutes of the September 22, 1978 EQC meeting be approved as presented.

AGENDA ITEM B - MONTHLY ACTIVITY REPORT FOR OCTOBER 1978

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock and carried unanimously that the Monthly Activity Report for October 1978 be approved as presented.

AGENDA ITEM C - TAX CREDIT APPLICATIONS

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried unanimously that the following Tax Credit Applications be approved: T-972 (Georgia-Pacific Corporation), T-1002 (Edward Hines Lumber Company), T-1027, T-1028 (both Champion International Corporation), and T-1006 (Boise Cascade Corporation).

PUBLIC FORUM

No one wished to appear on any subject.

RESOLUTION

Commissioner Densmore expressed the hope that the resignations tendered by Chairman Richards and Director Young would not be accepted. He said he had observed that the Director had been doing a superior job with the agency, and he believed it would not serve the environmental programs of the state to change Directors of the Department at this time. He also complimented Chairman Richards on the excellent manner in which he directed the Commission.

The following resolution was agreed upon unanimously by Commission members with Chairman Richards abstaining.

BE IT RESOLVED by the State of Oregon, Environmental Quality Commission, that Governor-Elect Victor Atiyeh consider and reject the resignations of Mr. Joe B. Richards, Chairman of the Environmental Quality Commission, and Mr. William H. Young, Director of the Department of Environmental Quality.

It was directed that this resolution be forwarded to Governor-Elect Atiyeh.

AGENDA ITEM L - 208 NONPOINT PROJECT REQUEST FOR APPROVAL TO ADD NEW ELEMENTS TO STATEWIDE WATER QUALITY MANAGEMENT PLAN

Mr. Tom Lucas of the Department's Water Quality Division presented this item. He said that the 2-year 208 project was nearing completion. Some 11 projects had been worked on, he continued, with emphasis on forestry and agriculture. Mr. Lucas presented Volumes V, VI and VII of the Statewide Water Quality Management Plan for Commission approval.

Following questions by Commission members regarding references in the three volumes, Mr. Lucas was requested to reference the document clearly and return later in the Commission meeting for adoption. It was noted that no one was present to testify on this matter.

AGENDA ITEM D - PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO INDIRECT SOURCE RULES OAR 340-20-100 THROUGH 20-135

Mr. Howard Harris of the Department's Air Quality Division, said a change to the rules was being sought to meet the terms of an out-of-court settlement agreement. The proposed amendments, he said, did not change the type or amount of information required by the current Indirect Source Rules.

Mr. Harris said the major change was in the information requirements of the rules which would require the Department or Regional Authority to consider an application complete if a written demand for additional information was not mailed or delivered within a 15 day period.

Mr. Harris then presented the following Director's Recommendation.

DIRECTOR'S RECOMMENDATION

Subject to such changes as the Commission may find appropriate after receiving testimony at the public hearing, it is the Director's Recommendation that the Commission take the following actions.

1. Adopt the Proposed Amendments to OAR 340-20-129 as permanent Rules to become effective upon their prompt filing with Legislative Counsel, Legislative Counsel Committee, and the Secretary of State.
2. Adopt as Final Statement of Need for the Rules that statement contained in the staff report on this item.

Mr. Marc Kelley of the City of Portland's Mayor's Office, appeared opposing the change in indirect source rules. The rule change they were concerned with, he said, dealt with the less stringent standards proposed for sources of 1000 parking spaces or more outside of large metropolitan areas. Mr. Kelley said the City would like to see the technical justification for why some sources over 1000 spaces in nonattainment areas would be reviewed under a different criteria than sources of the same size within the same nonattainment area. They realized, he said, that DEQ reserved the right to request additional information from those projects outside of the metropolitan areas.

Mr. Kelley said they believed that any development of 1000 spaces or more within urban growth boundaries should be required to submit the same information as a matter of course and not as a matter of the Department requesting it. He urged that the present rules which required the same information from all applicants of large sources be continued.

Mr. Douglas DuPrist, attorney with Coons and Anderson in Eugene, appeared representing several organizations that were involved in the process that lead to the proposed amendments. He said that the amendments were proposed as a means of eliminating certain issues that were raised by the present regulation. He expressed the support of the organizations he represented for the proposed amendments and encouraged their adoption.

Mr. DuPrist wanted the Commission to be aware that although the amendments reduced the number of issues between his clients and the Commission they would not eliminate them entirely. He said the remaining issues were set forth in an exhibit attached to the Settlement Agreement which the Commission would take up later in the meeting. He wanted to reiterate their objections on those other issues. He also asked that the Commission consider testimony and evidence from an earlier hearing with regard to the proposed rule amendments. Their concern, Mr. DuPrist said, was that the proposed amendments address specific technical corrections; and it was their position that the adoption of those refinements did not constitute a readoption of the entire rules.

Commissioner Hallock asked if it was necessary for the Commission to act on this matter at this meeting. She indicated she had some concerns about the Settlement Agreement and the proposed rules which she would like additional time to review.

Mr. Robert Haskins, Department of Justice, responded that according to the Settlement Agreement, it was effective provided the Commission adopted the agreed-upon amendments within six months. The Agreement was signed by the last party in September 1978, he said, therefore it would be possible for the Commission to act at a later date. Mr. Harris said that since he administered the program he would be pleased to have the amendments adopted at this meeting and did not see a significant change in the proposal would come by further review.

It was MOVED by Commissioner Somers, seconded by Commissioner Phinney, and carried with Commissioners Hallock and Densmore desenting that the Director's Recommendation as stated above be approved.

AGENDA ITEM E - PUBLIC HEARING ON PROPOSED REVISIONS TO THE AGRICULTURAL BURNING RULES TO ESTABLISH MAXIMUM ACREAGE LIMITATIONS AND BURNING PROCEDURES FOR 1979 AND 1980 FIELD BURNING SEASONS, OAR 340-26-005 THROUGH 26-030

Representative Nancie P. Fadeley, Eugene, requested the Commission keep in mind that the report in front of them talked about the impact of burning valley-wide; dealt with average levels of pollution throughout the valley; and did not address those peaks in certain areas.

Representative Fadeley was also concerned that this report did not deal with fine particulate which caused health problems. She wanted the Commission to keep in mind that the monitoring this summer did not pick up the fine particulate which contributed to the health problems in the area. In response to Chairman Richards, Representative Fradeley said she was not opposed to the Department's recommendations on this matter and thought the Department was doing the best it could with what they had to work with.

Mr. Lawrence Barton, Sweet Home City Council, appeared on behalf of the City Council and also presented a memorandum from the Sweet Home Chamber of Commerce. He said the City did not have the expertise to comment on the technical aspects of the proposed field burning regulations, however they wished to comment based on the citizen complaints of smoke intrusions which the City had received. Mr. Barton complimented the Department on their willingness to respond to citizen complaints, especially by Mr. Scott Freeburn's appearance on a local radio talk show.

Mr. Barton said it was their impression that the smoke intrusions into the Sweet Home area were becoming worse over the years instead of better. He said they objected to the smoke intrusions, but did not object to the grass seed industry and did not wish to use the smoke issue to cause

economic problems to the industry. He said they would encourage self-policing by the industry rather than more governmental regulation. They realized, he said, that some monitoring standards were necessary and it would be appropriate for DEQ to monitor compliance as they do with municipal wastewater facilities.

Mr. Barton also encourage continued research into alternate techniques to burning. He presented some results of a survey by the Chamber of Commerce in the area on field burning. He said it was 2 to 1 in favor of designating Sweet Home as a smoke-sensitive area, and 2 to 1 opposed to deregulation concerning field burning. He said that the majority of responses acknowledged the economic necessity of field burning to the grass seed industry.

Chairman Richards said the staff report before the Commission on this matter was basically the same as was submitted to the Commission in October. He asked if any additional information had caused a modification of the Director's recommendation in this matter.

Mr. Scott Freeburn, DEQ's Air Quality Division, said that a report received from AeroVironment, Inc., pointed out that field burning and slash burning had significant impact on fine particulate matter. He said that monitoring done this summer showed increased in fine particulate levels when field burning smoke was intruding into the monitoring area.

In response to Commissioner Phinney, Mr. Freeburn said that approximately 152,000 acres were burned during the last burning season and approximately 171,000 acres were burned in 1977.

Chairman Richards said it was intended that testimony be taken at this public hearing and that the record be kept open for 10 days to receive additional comments. Final action, he continued, would be taken at the Commission's next meeting scheduled for December 15.

In response to Chairman Richards, Mr. Freeburn said that the State Law required the Commission to establish an acreage limitation prior to January 1, for the next two years based on the AeroVironment study and what the Department felt was a fairly good year in terms of smoke impacts in the Eugene-Springfield area. Mr. Freeburn said they recommended retaining the 180,000 acre limit with the possible check-off to 150,000 acres upon noted smoke intrusions.

Chairman Richards asked if there was a reasonably good prospect that smoke intrusions on the Eugene-Springfield area could be held down as successfully as was done during the burning season just past. Mr. Freeburn said that the weather factors were significant in holding the smoke intrusions down this year and that given similar or better circumstances they should be able to continue on that level.

Mr. John Vlastelicia, Oregon Operations Office of the Environmental Protection Agency, said he was not appearing to present an EPA position either for or against the proposed regulation. He wanted to make sure that the relationship between the proposed action and the Federal Clean Air Act requirements was understood and to outline EPA's concerns about proposed field burning regulations. He said that EPA's basic concern was that the final State Implementation Plan (SIP) demonstrated attainment and maintenance of the National Ambient Air Quality Standards.

Mr. Vlastelicia said that the most immediate and critical requirement was the SIP revision for the Eugene-Springfield nonattainment area which was to be submitted to EPA by January 1, 1979. He said that this SIP revision had to demonstrate attainment by 1982 through control of those sources impacting the nonattainment area, and the decision on the control of field burning was only a part of the total SIP revision package. Delays in final adoption of the SIP, he continued, might inhibit EPA's consideration of any field burning regulation revision, and unless the SIP was revised, the current SIP provision of limiting burning to 50,000 acres would still be in effect.

Mr. Vlastelicia said that without submission of an approvable SIP before the 1979 field burning season began, the interested parties would be faced with the alternatives of litigation or an acceptable Interim Strategy.

EPA was concerned, Mr. Vlastelicia said, that the proposed regulations would result in a substantial increase in emissions over those allowed by both the current SIP and the 1978 Interim Strategy. He said that the 1978 Interim Strategy was accepted by EPA because it employed all reasonable measures and both emissions and air quality impact under the strategy were expected to be about the same as that which would result under the current SIP.

Mr. Vlastelicia said EPA recognized that State Law required new acreage limitations be set by January 1, 1979, but did not feel it was appropriate to develop permanent SIP regulations without the benefit of study results not possible outside the context of the overall SIP strategy for attaining and maintaining standards.

Mr. Vlastelicia said that Prevention of Significant Deterioration (PSD) regulations must also be taken into consideration when adopting the proposed field burning regulations. He said any SIP revision for field burning must show that increased emissions over that allowed in the SIP would not cause or contribute to violations of Class II increments in the Willamette Valley or Class I increments in any of the five Class I areas adjacent to the Willamette Valley.

Mr. Vlastelicia reiterated that EPA's prime concern was that the State develop strategies to attain and maintain national standards. Since the State had in the past controlled field burning to some degree, he said, any proposed relaxation of that control must be accompanied by a demonstration that such action would not cause or contribute to violations of national standards or PSD increments.

Mr. Robert J. Elfers, appeared representing the City of Eugene. He said that although they would be making a number of suggested modifications to the proposed rules, they generally supported the approach that rules similar to the temporary rules of 1978 were justified for the next few years. However, he said they were not clearly in favor of the present proposed rules.

Mr. Elfers said that the 1978 rules were successful from the standpoint of air quality in the Eugene-Springfield area. Even though, he said, there was a lengthy period of rain during the past burning season, the total number of burning days was not substantially different from previous seasons. He said they had concluded that the dramatic reduction in the air quality impact of field burning on the Eugene-Springfield area was primarily caused by the revised Smoke Management Plan. However, he continued, striplighting and moisture requirements were ineffective.

Their analysis of DEQ emission tests, Mr. Elfers said, indicated a reduction of only 2% in average straw moisture content when 180,000 acres of fields were burned would reduce the particulate emissions by 5500 to 6800 tons. It appeared, he said, that the data indicated an emission rate of 171 pounds per ton at the 12% moisture level which would mean that 180,000 acres of field burning could produce over 55,000 tons of particulate. If this data were correct, he said, it would be additional justification for maintaining and improving the Smoke Management Program.

Mr. Elfers presented the following six recommendations to improve the proposed rules and make them more effective, flexible, easier to administer and to allow for some additional burning opportunities.

1. A modification to the acreage release system,
2. A revision of the moisture content restriction,
3. Objections to the controlled up-wind burning in certain south valley priority areas,
4. Extension of the striplighting requirement,
5. Support for future actions which would place additional responsibility and accountability in the seed industry in the management of its own air quality problems.

Mr. Elfers said the City's primary objective was the improvement and maintenance of clean air in the Eugene-Springfield area. Mr. Elfers presented a written statement which contained additional technical information prepared by the City's Environmental Analyst in support of the City's recommendations. This statement will be made a part of the Commission's record on this matter.

Mr. Terry Smith, City of Eugene, appeared to discuss some of the points made by Mr. Elfers. He said the results of the Department's open burning testing during last summer indicated that straw moisture was extremely important in effecting a reduction in total emissions. He said that the emission factors found for field burning from the summer's research work

were considerably larger than had been previously expected. Mr. Smith said the entire emissions from Eugene-Springfield were 16,000 tons for the year; consequently, three Eugene-Springfields reduced to 0 emissions would be needed to offset the emissions of field burning. No matter what the actual emissions were from field burning, he said, the same measured impact would be present. Trying to comply with those points brought up by EPA's testimony, he continued, would be extremely difficult in light of the new data from the summer's burning season.

Commissioner Phinney asked if the ideas about the contribution slash burning had changed in light of the new data. Mr. Smith replied that new information had been obtained on slash burning also so that its relative importance to field burning would be about the same. He said it did make field and slash burning the largest single emitters in the entire state.

Mr. Donald A. Haagensen, Oregon Seed Council, appeared to testify about the legal issues involved with the Clean Air Act, Oregon SIP revisions and the proposed field burning rules. Mr. Haagensen said that when Congress enacted the Clean Air Act, among the pollutants identified by EPA was particulate matter and EPA set standards for control based on total suspended particulate (TSP) present in the area. Once these pollution standards were established, he said, the primary responsibility for controlling air quality through use of those standards fell to individual states.

Mr. Haagensen said that under the nonattainment provisions of the Clean Air Act, Oregon had the duty to submit a revision for particulate matter to its SIP for the Eugene-Springfield AQMA. However, he said, none of the requirements for nonattainment area revisions dictated that Oregon adopt a particular scheme of regulation for field burning. Field burning, he said, was classified by EPA as a non-traditional source which in EPA's view need only be controlled to the extent necessary to meet the Clean Air Act schedules set up for attainment.

Mr. Haagensen said field burning operations in the Willamette Valley occurred in areas that were attaining the national air standards and the 1977 amendments to the Clean Air Act required a particulate matter revision to Oregon's SIP which contained emission limitations and other measures necessary to prevent significant deterioration of air quality in attainment areas. He said the PSD provision of the Clean Air Act required states to implement a permit program for any "major emitting facilities". However, he said none of these requirements for attainment area revisions dictated that Oregon adopt a particular scheme of regulation for field burning.

Mr. Haagensen said that by submitting rules designed to minimize nuisance effects as part of an SIP revision the state would relinquish its control over those rules and set the rules "in concrete" as federally enforceable rules. This procedure would mean, he continued, that as new field burning regulations were adopted each year they must be submitted to EPA and approved before they replace the prior rules.

Mr. Haagensen presented written testimony which is made a part of the Commission's record on this matter.

Chairman Richards read into the record a statement by the League of Women Voters of Central Lane County in support of the revisions to the field burning rules. This written statement is made a part of the Department's record on this matter.

Mr. Hal Burkitt, Oregon Seed Council presented an analysis of the AeroVironment, Inc. study. He said this evaluation related to the data which had been collected by the monitoring network and DEQ. Mr. Burkitt said it could be concluded from the data collected and presented in the AeroVironment study that the absence of any measurable impact on TSP values from field burning was significant, especially when rules were being considered to regulate that activity. Also, he said, there appeared to be a high degree of variation between sampling sites only a few miles apart with no correlation of TSP emitted from field or slash burning.

Mr. Burkitt said that based on collected data, the proposed rules for field burning had no scientific evidence as a reason for adoption or any indication that if adopted they would enhance the air quality in the Willamette Valley. He suggested the Commission adopt a meteorological ventilation index to determine the number of acres which could be burned on a given day with minimal impact on populated areas. He also suggested that up-wind burning of the Eugene-Springfield area be continued to be given special consideration.

Mr. Burkitt commended the EQC and the Department for their efforts in identifying the impact of field burning in the Willamette Valley. He said that based on the data collected, field burning could not be identified as a cause for exceeding any TSP daily or annual standards. He urged the Commission to adopt only rules which could be supported by sound scientific evidence.

Mr. Burkitt submitted a written statement which is made part of the Commission's record on this matter.

Mr. Dave Nelson, Oregon Seed Council, submitted a written statement which is made part of the Commission's record on this matter. He briefly commented on some of the points made in this statement.

Mr. Nelson said that the Department's staff report stated burning was satisfactory under the 1978 rules and the rules and their implementation prevented measurable impact on air quality standards. However, he said, the study indicated that the rules had nothing to do with preventing measurable impact and without any rules there would be little measurable impact on the standards. Also, Mr. Nelson said, there had been a couple of reports over the last few years which determined that field burning was not really the problem in the Eugene-Springfield area.

Mr. Nelson reminded the Commission that their objective through the Clean Air Act was to provide attainment of the primary standards established by EPA to protect health levels, and to attain soon thereafter the secondary standards to protect the livability of an area.

Mr. Nelson said they had experienced a high incidence of health complaints contributed to field burning during times when there was no burning going on, or there were other smoke intrusions than field burning. Because of the high visibility of the practice of field burning, he said, people tend to blame it for their problems.

Mr. Nelson said it was the Seed Council's recommendation that the acreage limitation be discontinued and the acreage burned on any given year be the sum of the acreage burned on each individual day on which burning is authorized. He said the annual limit only caused a hardship on growers and did not reduce particulate. The monitoring report, he continued, showed that 65+% of the particulate problem in the Southern Willamette Valley was from dust. He said that eliminating field burning would increase tillage and therefore increase dust.

The nephelometer standards, Mr. Nelson said, served only to reduce the amount of burning when an accident or an act of God caused smoke to drift into Eugene. He said there was no visibility standard at the present time and if one were implemented it should be applied to all sources of emissions causing the visibility reduction. Mr. Nelson also said there was no justification for the moisture content rule. The rule, he said, served only to reduce the amount of overall burning that could take place. Because there was no handy method of determining fuel moisture, Mr. Nelson recommended the rule should be dropped.

Mr. Nelson said they supported the restructuring of the special south valley priority burning and believed it could be accomplished if sufficient flexibility was given to the program coordinator. He said they also thought the backfiring and striplighting requirements should be eliminated from the rules because of negligible savings and because the low energy smoke had been identified as the biggest problem. He said the rules should encourage using rapid ignition as investigated by Oregon State University during the last burning season.

Mr. Nelson submitted to the Commission a copy of the proposed rule with the Seed Council's recommended changes.

Mr. Bob Davis said that what they should be interested in is the air quality in the City of Eugene. The air quality in the area was not good, Mr. Davis said, but obviously it was not the result of field burning. He said that based on the scientific data to date, if field burning were phased out completely the City of Eugene would still have an air quality problem.

Mr. Davis said it was the responsibility of the Commission and DEQ to investigate what was really causing the air quality problems in Eugene and adopt some regulations to attack those problems instead of wasting time on a source which has a minimal contribution to the air quality problem.

Mr. Davis said he thought the State should fight the federal government on this issue, and he didn't think the federal government wanted regulation of field burning. He said it was the State that put regulation of field burning into the SIP and therefore the State could remove it.

Mr. James L. Carnes, Albany Area Chamber of Commerce Agriculture, Natural Resource and Rural Affairs Committee, said his committee recommended that the proposed field burning rules be based on air quality and not on acreage limitations. He urged that field burning not be singled out and designated as a single pollutant contributor in the SIP. Mr. Carnes presented to the Commission copies of a booklet titled "Look Who's Supporting Oregon's Grass Seed Industry" which contained letters of support from 42 Chambers of Commerce, 56 Willamette Valley Cities, 16 County Boards of Commissioners and 44 fire districts, in addition to the City of Portland, Western Environmental Association and the Oregon State Board of Agriculture.

Mr. Carnes said that since DEQ had documented evidence that pollution from open field burning was far less than other measured sources of pollution, his Committee felt all sources of pollution should be measured and restricted on an equal basis and it was not realistic for open field burning to remain a part of the SIP for the State of Oregon.

Mr. Carnes submitted written testimony along with the booklet mentioned above which became part of the Commission record on this matter.

Ms. Marie Jensen, Oregon Women for Agriculture, testified to the economic impact of the regulation of field burning. She said the history of the Valley showed there had always been smoke in the Valley from grass fires or timber fires. She said the elimination of field burning would cause development of presently agricultural land.

Ms. Jensen said farmers were getting weary of regulation and most of them cannot go into growing other crops because the land is only suited to grass seed crops.

Ms. Jensen was concerned that the elimination of field burning would cause the farm land to disappear to development.

Ms. Sue Corwin, Oregon Farm Bureau, presented a written statement from the Benton County Farm Bureau which will be made a part of the Commission's record on this matter. She said they concurred with the opinions of the Seed Council already presented. They wanted to reinforce, she said, that field burning should not be included in the State Implementation Plan for the Clean Air Act.

Ms. Corwin also expressed the feeling that the farm community was weary of the field burning battle and would like to see the problem resolved. She urged the Commission to take into account the benefits of agriculture and what would happen if those benefits were eliminated.

Ms. Liz VanLeeuwen, Linn-Benton Women for Agriculture, also asked that field burning not be included in the State's Implementation Plan. She asked that the acreage limitations on field burning be removed so growers could utilize the favorable burning days in such a way as to get the maximum acreage burned with a minimal total smoke intrusion impact. She said experimental burning techniques had been used on her farm and had not proved successful.

Ms. VanLeeuwen presented a written statement which is made part of the Commission's record on this matter.

Mr. Elfers said the City of Eugene would try to prepare some additional information to be submitted to the Commission within the 10-day period before the record closed. He said he was concerned about the importance being placed on the AeroVironment report statement that there was small impact from field burning. He said he was concerned whether or not this report was being used wisely and presented accurate information. They felt it was unreasonable for the seed industry to seek to not be regulated at all, he said. Mr. Elfers said the City of Eugene was seeking adequate and sufficient quality of air for the Eugene area.

Mr. Nelson responded that the Seed Industry was not asking to be unregulated. He said they felt the smoke management program was crucial. However, he said, they believed there was a great deal of refinement needed to that program. Mr. Nelson said they were asking that regulation of field burning be kept within the State and out of the SIP.

Chairman Richards then concluded the public hearing on this matter.

AGENDA ITEM F - PROPOSED ADOPTION OF PARTICULATE AND VOLATILE ORGANIC COMPOUNDS (VOC) OFFSET RULES FOR THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA (AQMA)

Mr. Dennis Belsky, of the Department's Air Quality Division, presented the item pertaining to the particulate emissions and volatile organic compound (VOC) rules for the Medford-Ashland AQMA. Mr. Belsky said that further growth in the area either from existing sources or from new sources could not occur until an offset policy was in effect to mitigate the effect of the emissions.

Mr. Stuart Foster appeared on behalf of the Greater Medford Chamber of Commerce. He said they were concerned about the economic impact from the proposed offset rules. He said it appeared to them that the burden of controlling air pollution in Jackson was being placed 100% on industry

which only accounted for 25% of the identified emissions. Mr. Foster continued, that they believed these regulations would provide a disincentive for growth or new industry in the area. He said the Chamber of Commerce opposed an offset policy; however, they were not in favor of rolling back the burdens which were put on industry through the control strategy.

Mr. Foster said they felt the Commission should reevaluate its control strategy to make it broader and request legislation in areas that it does not presently have authority.

Chairman Richards said the only alternatives facing the Commission were either no-growth or offsets. Mr. Foster said they realized that the control strategies had been adopted, and urged the Commission to reevaluate those strategies because they did not believe offsets were needed.

After some discussion with Commissioner Somers, Mr. Foster requested the Commission take into account the impact of the proposed rules on the economy of Southern Oregon and reminded the Commission that one of the LCDC goals was to protect and diversify the economy.

Mr. Foster presented a written statement which is made part of the Commission's record on this matter.

Mr. Gary Grimes, SWF Plywood Company, Medford, testified on the particulate attainment portion of the proposed rules as they relate to the AQMA. He said his company wanted to be assured of the Commission's understanding and intent or direction to the staff in applying the mechanisms of these proposed rules. In particular, he said, they were concerned that in order to comply with the standards eliminating wigwam burners, they may be forced to seek an outside offset as mandated by the proposed rules. Mr. Grimes said that the Medford/Ashland AQMA Committee identified that there would be little benefit to the airshed by the removal of wigwam waste burners and a solid waste problem could be created by their elimination.

Mr. Grimes suggested the following wording be incorporated into the proposed rule:

"Sources required to cease operation for purposes of meeting compliance with the particulate attainment strategy rule are exempt from the provisions of this offset rule."

Some provisions to that, he continued, would be any new emission sources required in the phase-out would be in compliance with the particulate strategy and there should be a net improvement or resultant decrease in total emissions than existed with the facility being phased out.

In response to Commissioner Densmore, Mr. Grimes said he had discussed some changes in the rule with the staff, but not specific wording, and it would be only fair to let the staff have a chance to look at it.

Mr. Tom Donaca, Associated Oregon Industries, testified he was concerned about some issues that had come up since the public hearings. He suggested the Commission might be moving too rapidly in adopting these rules, especially in light of two ongoing studies in other air quality maintenance areas. He cited in particular a wage and price control study which pointed out that the VOC regulations on a national basis would cost between \$5 and \$9 billion a year; this would include transportation-related controls.

Commissioner Somers asked Mr. Donaca if the Medford area would be substantially prejudiced if this matter was held over until the December meeting of the Commission. Mr. Donaca replied that in light of the information that was currently available to the Portland AQMA Advisory Committee, there was reason to request a delay on the part of Portland in adopting rules. He said he could not speak for Medford or Eugene/Springfield. He said there was reason to investigate whether EPA was going to hold to a hard time line in all cases.

Commissioner Densmore commented that the position the Commission was in was having the federal mandate and the severe sanction of the possibility that, if an approval SIP was not submitted, no air quality permits could be issued in the State. He continued that until the Commission received some Legislative authority in certain areas they were stuck.

Mr. Donaca replied that the Portland AQMA Committee would be looking at some alternatives. He said they had reason to believe that fuel oil consumption was going down in the state and that would contribute to reductions in emissions. Another alternative would be determining what could be done about road dust emissions, he said.

Mr. David Sant, Manager of Industrial Development for the Department of Economic Development, testified that they had been unable to meet with local officials regarding this proposed rule, as they would have liked. They were concerned, he said, that the offset rules would be too restrictive and prevent further economic development in the Medford/Ashland area. He said the economic problem was equal to or greater than the air quality problem in the area. They were concerned, Mr. Sant said, that the proposed offset rules would carry the message that the Medford/Ashland area was closed to future economic growth.

Mr. Sant said his Department would supply a staff representative, if desired, to assist DEQ in developing a viable alternative solution to the offset rules.

After some discussion among Commission members and staff it was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried unanimously that this matter be deferred until the Commission's December 1978 meeting.

AGENDA ITEM G - RECONSIDERATION OF ADOPTION OF PROPOSED AMENDMENTS
TO NOISE CONTROL REGULATIONS FOR NEW AUTOMOBILES AND LIGHT TRUCKS,
OAR 340-35-025

Mr. John Hector of the Department's Noise Control Section, said this item was presented at the last meeting; however, the Commission made no decision at that time. Mr. Hector presented the following Director's Recommendation on this matter:

Director's Recommendation

Based on the Summation in the staff report, it is recommended that the effective date for the 75 dBA noise level for automobiles and light trucks be amended from model years after 1980 to read model years after 1982.

Mr. Hector said he had received a telegram from the Ford Motor Company supporting their position that the 75 dBA standard be recinded due to the effect it will have of significantly reducing available power train combinations in light vehicles. He said they noted that trailer towing packages for vehicles may not be available in the future due to this standard. Also, he said, they had recently received a letter from Mr. F. Glen Odell supporting the 75 dBA standard.

In response to Commissioner Somers, Mr. Hector said it was not absolutely necessary to set the standard over until 1982, but it did give the industry two more years to gear up for the new standard. He said that the Director's Recommendation was hard to make and was a compromise. Commissioner Phinney asked if Mr. Hector was aware of how much gearing-up the industry did during the past two-year extension and what reason would the Commission have to expect that the next two years would be different. Mr. Hector replied that the problem was the industry did not take the Commission seriously last time and he had no idea if they would deal with the situation any more differently this time.

Commissioner Somers said that information he had indicated that other states were doing exactly what the Director was recommending in this situation.

Mr. Edwin Ratering, Director of Vehicular Noise Control of the Environmental Activities Staff of General Motors Corporation, said at a minimum they supported the Director's Recommendation. He said if the recommendation were not approved, Oregon would be the only state to have a 75 dBA standard in 1981. From their standpoint, he said, it was extremely difficult to comply with non-uniform state regulations.

Mr. Ratering said the major automobile noise problem was caused by modified and poorly maintained vehicles and not by newly manufactured automobiles and light trucks. This particular proposed regulation, he said, did not address those major noise problems as they relate to

automobiles. The 75 dBA standard, he said, would not result in a perceptibly quieter environment because motor vehicles are driven at wide-open throttle less than 1/2 of 1% of the time. He said it was clear that at least 85% of the time engine-related noise levels were not a substantive factor with respect to motor vehicle noise. With the exception of modified and poorly maintained vehicles, Mr. Ratering said tire noise also dominates. Therefore, he continued, a 75 dBA standard would impact the availability of tires and other options to some degree.

Mr. Ratering said regulations governing exhaust emissions, fuel economy and noise levels produce design requirements which run counter to each other. He asked that they be given time to develop solutions to those various problems.

In addressing the staff report, Mr. Ratering said that EPA reports on noise testing should not be used as a basis for regulation because they had already found discrepancies in the sound levels which EPA reported. He said that testimony by an engineering consultant in support of the regulation that was referred to in the staff report, was replete with errors, presented no factual data to support claims and was thoroughly discredited in industry responses.

Mr. Ratering said Oregon should take note of the substantial investigative effort that EPA was conducting prior to proposing regulations on passenger cars and light trucks. Until those studies had been completed, he said, it was premature to arbitrarily establish regulated levels.

Mr. Rich Kister, Oregon Automobile Dealers Association, submitted to the Commission the results of an economic analysis entitled, "The Impact of Oregon's Franchised Automobile Dealers on the State Economy." This document is made a part of the Commission's record on this matter.

Mr. Joe Romania, Eugene car dealer, said it appeared obvious from the statement by General Motors there was a need for the Commission to roll back the 75 dBA standard. He said that should the 75 dBA standard be implemented there would be a severe shortage of vehicles available to Oregon dealers for sale to Oregonians. Mr. Romania said he was concerned that this standard would severely restrict the consumer on the variety of automobiles available for sale in Oregon.

Mr. Robert A. Laws, Eugene Police Department, addressed this matter from the standpoint of people-problems with automobile noise. He said the vehicular noise was the single most noise problem in the metropolitan Eugene area. In addition to modified and poorly maintained cars, Mr. Laws said that manufacturers encourage people to buy certain models for their high performance. These cars, he continued, were not being operated under normal driving situations, therefore the noise levels from these cars was higher.

Commissioner Somers said the basic problem the Commission was facing was that Oregon only constituted 2% of the total automobile market in the United States. Therefore, he continued, automobile manufacturers were not going to gear up differently just for Oregon. Commissioner Phinney responded that the problem the Commission was dealing with was the effect of noise on the citizens of Oregon and she couldn't see that the evidence warranted throwing out the present regulation. Chairman Richards said the federal government was looking at this problem and there was the possibility that all state standards would be thrown out and a federal standard of 1981 implemented.

AGENDA ITEM H - CONSIDERATION OF PETITION FROM OREGON ENVIRONMENTAL COUNCIL REQUESTING PROMULGATION OF RULES TO REGULATE NOISE EMISSIONS FROM AIRPORTS

Mr. Lloyd Anderson, Port of Portland, appeared in response to a petition filed by the Oregon Environmental Council requesting public hearings on whether emissions from airports should be promulgated. The Port presented a slide presentation before the Commission concerning their position on this matter. They also submitted a written statement which is made a part of the Commission's record on this matter. Mr. Anderson requested the Commission delay its decision until legal limits of its authority were established; until the technical differences between the Port and DEQ staff were established; and to clearly identify what is wanted out of the hearing process. He said if it was the intent of the hearing process to find out what the problems are around the airports in the State, then he suggested that a public hearing might not be the best way to find out that information. He suggested that detailed surveying of an area might be better.

If it is determined that public hearing should be held, Mr. Anderson said a clear statement of the objectives of those hearings should be established.

Mr. John Hector, of the Department's Noise Section, presented the staff report on this matter. He said it would be the Department's position that public informational hearings be held on the petition and the subject matter in general to develop a proposal that addresses the grievances of the petitioners.

In response to Commissioner Phinney, Mr. Hector said they would initially be holding hearings in the areas of airports to assess the magnitude of the problem and perhaps the OEC petition would be proposed as a mechanism to cure the problem.

Chairman Richards asked about a pending court case which questioned the authority of states to regulate airports because federal law preempted states in this regard. Mr. Hector replied he understood states could not set standards for individual aircraft, however the airport proprietor has

the authority and ability to operate the airport in any way he desires. Some things however, he continued, had to be approved by the FAA for safety considerations.

Chairman Richards said he felt there were enough alternatives to be explored that perhaps the petition should be denied and the Department directed to work with the Port on this problem. Then, he continued, the petitioners could petition again in 90 to 120 days if that effort did not appear to be making headway. Mr. Hector said he understood that the petitioners had been working with the Portland International Airport and did not feel the proprietor of that airport had recognized that there was a noise problem, nor was an acceptable solution being worked on.

Ms. Jean Baker, Oregon Environmental Council, said they had been involved with this problem for 18 months and for that period of time they listened to citizen advisory groups talk about noise. She said they waited as long as they could see if the Port would make a showing of good faith, and so far they had not.

Ms. Baker said they had looked into the FAA directive, and short of the Commission accepting their petition, there was really no way to achieve that directive. The state had no authority to control an airport, she said. Also, she said, there was no tower control of planes, therefore pilots were free to come into the airport on any flight path they felt comfortable with.

Ms. Baker said DEQ and the Port had been working on this problem for about two months and it resulted in a 27 page report on their unresolved differences. She said they wanted some serious attention on the part of the Port to citizen complaints and a plan on what was going to be done to remedy the situation.

Ms. Baker said the Port should be more demanding, and perhaps impose fines on those pilots who do not use designated flight paths into the airport. So far the Port has been remiss in doing this, she said.

Chairman Richards said the law required the Commission to, within 30 days of the filing of a petition, either reject it or to initiate rule-making proceedings. He asked Ms. Baker about the possibility of extending the time and requesting staff to better define the scope of the proposed public hearings. Ms. Baker replied that she was not familiar with the EQC petition process, but would not feel comfortable if the staff did not address all those things of concern to the neighborhood groups. She said if it had to be done, she would agree to it.

It was MOVED by Commissioner Phinney that this matter be postponed until the Commission's next meeting, and that the staff be directed to report on what they see as a viable topic for public hearings. The motion was seconded by Commissioner Hallock and carried with Commissioner Somers desenting.

AGENDA ITEM J - PROPOSED ADOPTION OF TECHNICAL AMENDMENTS TO CLATSOP
PLAINS SUBSURFACE SEWAGE DISPOSAL RULES OAR 340-71-020(7)

Mr. T. Jack Osborne, of the Department's Subsurface and Alternative Sewage Disposal Section, said the amended Clatsop Plains moratorium rule provided for a density of one family unit per acre within the moratorium area. He said lots of less than one acre in size existing prior to April 2, 1977 were exempt. A temporary rule adopted earlier changed that exemption date to October 28, 1977, he said. The Commission was being asked to make that temporary rule permanent, he continued.

In response to Chairman Richards, Mr. Osborne said the Department had received no objections to this proposal.

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

Director's Recommendation

It is the Director's recommendation that, based on the summation in the staff report, the Commission take action as follows:

1. Adopt as a permanent rule Attachment A of the Hearing Report, such rule to be filed with Legislative Counsel and the Secretary of State before its expiration as a temporary rule.
2. Adopt as its final State of Need for Rulemaking the Statement of Need incorporated in this report, such statement to be filed with the rule as set forth above.

AGENDA ITEM K - PROPOSED ADOPTION OF AMENDMENTS TO CHEM-NUCLEAR'S
LICENSE FOR OPERATION OF ARLINGTON HAZARDOUS WASTE DISPOSAL SITE

Mr. Fred Bromfeld, of the Department's Solid Waste Division, said it was proposed that the Commission modify the Chem-Nuclear license for operation of the Arlington Hazardous Waste Disposal Site. Basically, he said, the modifications were housekeeping changes. He said it was the Director's Recommendation that the modified Chem-Nuclear license be issued.

After some discussion among staff and Commission on the proposed modifications, the Commission, by unanimous consent, indicated that they would not approve the proposed permit without the reinsertion of the old condition C7 relating to conveying title of the property to the state in event of a default on the part of the company. Mr. Bromfeld was directed to convey this to the Company.

By unanimous consent of the Commission, this matter was deferred until the Commission's next meeting.

AGENDA ITEM G - RECONSIDERATION

It was MOVED by Commissioner Hallock that the proposed noise rule relating to new automobiles and light trucks be amended to read "models after 1981," and approved of the Director's Recommendation as amended. The motion was seconded by Commissioner Somers and carried unanimously.

AGENDA ITEM L - COMPLETION

Commissioner Somers said that when this item was presented earlier in the meeting it was noted that there were several references in the report to appendices which appeared to have no significance. He said the staff had referenced Exhibit A to the staff report to each appendix.

Commissioner Somers MOVED the Director's recommendation be approved with the amended Volume 5 submitted by the staff. The motion was seconded by Commissioner Phinney and carried unanimously.

AGENDA ITEM M - SUNRISE VILLAGE, BEND - APPEAL OF SUBSURFACE SEWAGE DISPOSAL REQUIREMENTS

Mr. Richard Nichols, Regional Manager of the Department's Central Region, said this item concerned an appeal by Sunrise Village of a subsurface disposal requirement imposed on their development. Mr. Nichols then read the summation and presented the following Director's Recommendation from the staff report.

Director's Recommendation


Based upon the summation, it is recommended that the Environmental Quality Commission direct the Department to not permit a community sewage disposal system for Sunrise Village unless such system is a part of the overall regional sewerage plan and would be connected to the Bend regional sewerage system at some future time. The Commission should also direct the Department staff to work with the City of Bend and Sunrise Village to reach agreement for ultimate connection of the sewage system to the regional system.

Mr. Martin West, one of the principals of the Sunrise Village development, said they were appearing before the Commission for economic reasons and out of general principle. They contend, he said, Sunrise Village was outside the original sewer service area EPA planned and funded for in the City of Bend plan. He also said that Sunrise Village had not received equal treatment compared to the Cascade Junior High School in regard to subsurface sewage disposal and city sewer agreements.

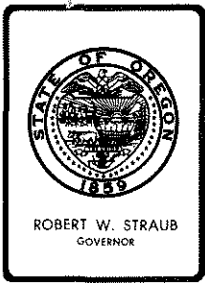
After considerable discussion among the Commission, staff and the developers of Sunrise Village, it was MOVED by Commissioner Somers, seconded by Commissioner Hallock and carried unanimously that this matter be deferred until the Commission's next meeting.

There being no further business, the meeting was adjourned.

Respectfully submitted,



Carol A. Spletstaszer
Recording Secretary



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. C, December 15, 1978 EQC meeting

TAX CREDIT APPLICATIONS

Director's Recommendation

It is recommended that the Commission take action on the attached five requests as follows:

1. Issue Pollution Control Facility Certificates to the following applications: T-1018, T-1026, T-1030 and T-1031.
2. Revoke Pollution Control Facility Certificate No. 533, issued to Publishers Paper Company, because the certified facility is no longer in use (see attached review report).

WILLIAM H. YOUNG

CASplettstaszer
229-6484
Attachments



Contains
Recycled
Materials

Proposed December 1978 Totals:

Air Quality	\$ 49,570
Water Quality	65,778
Solid Waste	202,800
	<u>\$ 318,148</u>

Calendar Year Totals to Date
(Excluding December 1978 Totals)

Air Quality	3,250,367
Water Quality	6,192,720
Solid Waste	16,028,264
	<u>\$ 25,471,251</u>

Total Certificates Awarded (monetary values)
Since Beginning of Program (excluding December 1978 Totals):

Air Quality	\$115,437,352
Water Quality	91,487,886
Solid Waste	30,456,893
	<u>\$237,382,131</u>

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

1. Applicant

HERCULES INCORPORATED
Portland Oregon Plant
P. O. Box 2723
Portland, Oregon 97208

The applicant owns and operates a chemical plant at 3366 N.W. Yeon Avenue in Portland.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a carbon absorption system to control solvent emissions from the rosin production process. The facility cost consists of the following:

Carbon absorption system	\$17,813
Ductwork	1,174
Piping	2,249
Electrical Equipment	1,714
Installation and engineering	<u>4,554</u>
	\$27,504

Request for Preliminary Certification for Tax Credit was made on May 27, 1977, and approved on June 30, 1977.

Construction was initiated on the claimed facility in July 1977, completed in April 1978, and the facility was placed into operation on April 12, 1978.

Facility Cost: \$27,504 (Accountant's Certification was provided).

3. Evaluation of Application

The carbon absorption system was installed as part of a project to change the solvent used in the process. The original solvent used in the process was benzene, which was found to be a carcinogen. Because of these health effects the company wanted to replace it with a different solvent. The solvent chosen to replace the benzene was methylene chloride which is more volatile than the benzene and thus required control.

The facility has been inspected by the Department and is operating satisfactorily.

The carbon absorption system collects solvents which can be reused in the process. The annual value of the solvents collected minus the operating expenses of the system is \$2,515.

Over the 13-year life of the facility this is a return on investment before taxes of 2.6 percent. The company requires a return on investment of 19.2 percent to invest in a proposed project. The percent allocable to air pollution control is determined by comparing 2.6% to 19.2% as follows:

$$\frac{19.2\% - 2.6\%}{19.2\%} = 86.5\%$$

The cost allocated to pollution control is 86.5%.

4. Summation

- A. Facility was constructed after receiving approval to construct and preliminary certification issued pursuant to ORS 468.175.
- B. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling or reducing air pollution.
- D. The facility was required by the Department and is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- E. The amount allocable to air pollution control is 80 percent or more. This was determined by comparing the return on the project with the company's minimum rate of return for investment.

5. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$27,504 with 80% or more allocated to pollution control be issued for the facility claimed in Tax Credit Application No. T-1018.

FASkirvin:as
(503) 229-6414
11/24/78

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

1. Applicant

Champion International Corporation
Champion Building Products
P. O. Box 10228
Eugene, Oregon 97440

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

Application was made for tax credit for a solid waste pollution control facility.

2. Descriptions of Claimed Facility

The facility described in this application is a hog fuel preparation system consisting of:

A. Lamb-Grays Harbor hammer hog (S/N 76115-1), electric motor and related equipment.	\$146,395.32
B. Peerless 42.5 unit mono bin, conveyors and related equipment.	<u>56,405.00</u>
TOTAL	\$202,800.32

Request for Preliminary Certification for Tax Credit was made July 21, 1975, and approved January 25, 1977.

Construction was initiated on the claimed facility March 2, 1976, completed September 1, 1977, and the facility was placed into operation, September 1, 1977.

Facility Cost: \$202,800.32 (Accountant's certification was provided.)

3. Evaluation of Application

Previously, approximately 44 dry tons per day of wood waste was burned in a wigwam burner. As a result of the claimed facility, the wigwam burner is no longer on continuous operation. The bark, lily pads, slabs and round-up are now screened, classified and/or hogged and along with the sawdust are sold.

4. Summation

- A. Facility was constructed after receiving approval to construct and preliminary certification issued pursuant to ORS 468.175.
- B. Facility was under construction on or after January 1, 1973 as required by ORS 468.165 (1) (c).

Appl. T-1026
Date 11/8/78
Page 2

- C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling or reducing solid waste.
- D. The facility is necessary to satisfy the intents and purposes of ORS Chapter 459, and the rules adopted under that chapter.

5. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$202,800.32 with 100% allocated to pollution control be issued for the facility claimed in Tax Credit Application Number T-1026.

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

1. Applicant

Morton Milling Company
500 Rossanley Drive
Medford, Oregon 97501

The applicant owns and operates a feed mill at Medford, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a Jemco bag dust collector installed to control cyclone emissions.

Request for Preliminary Certification for Tax Credit was made on November 14, 1975, and approved on November 20, 1975.

Construction was initiated on the claimed facility on February 22, 1978, completed on March 22, 1978, and the facility was placed into operation on March 22, 1978.

Facility Cost: \$22,066 (Accountant's Certification was provided).

3. Evaluation of Application

This facility is the final of a three phase project to reduce particulate emissions from the feed mill. The first two phases received tax credit certificates on December 20, 1976 and October 26, 1977.

The claimed facility controls the discharge of particulate matter from an airlift cyclone. Emissions from the airlift cyclone had been found in violation of the Department's regulations.

The facility has been inspected by the Department and is operating satisfactorily.

The value of the material which is collected by this facility is less than the operating expenses. Therefore, it is concluded that the facility was installed solely for air pollution control.

4. Summation

A. Facility was constructed after receiving approval to construct and preliminary certification issued pursuant to ORS 468.175.

- B. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).
- C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling or reducing air pollution.
- D. The facility was required by the Department and is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- E. The Department has concluded that 100% of the cost of this facility is allocable to air pollution control, since the facility was installed solely for air pollution control.

5. Director's Recommendation

Based upon the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$22,066 with 80% or more allocated to pollution control be issued for the facility claimed in Tax Credit Application No. T-1030.

FASkirvin:eve
(503) 229-6414
11/16/78

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

1. Applicant

Evans Products Company
Fiber Products Division
1115 S. E. Crystal Lake Drive
Corvallis, OR 97330

The applicant owns and operates a facility which manufactures separators for use in electrical storage batteries. The plant is located in Corvallis, Oregon.

Application was made for tax credit for water pollution control facility.

2. Description of Claimed Facility

The facility described in the application consists of a 40,000 gallon tank, a mechanical filter, and several pumps for the recirculation of filtered whitewater. The system has resulted in the reduction of waste waters from the separator plant from 750,000 GPD to approximately 200,000 GPD.

Request for Preliminary Certification for Tax Credit was made January 3, 1977 and approved January 10, 1977. Construction was initiated on the claimed facility in March 1977, completed in May 1977, and placed into operation in June 1977.

Facility Cost: \$65,778 (Certified Public Accountant's statement was provided)

3. Evaluation

The system is designed to reduce the plant's fresh water consumption. By reducing the volume of wastes, the biological treatment system's detention time has increased, resulting in a reduction of pollutants discharged to the Willamette River.

4. Summation

- A. Facility was constructed after receiving approval to construct and Preliminary Certification issued pursuant to ORS 468.175.
- B. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).

- C. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling or reducing water pollution.
- D. The facility was required by the Department of Environmental Quality and is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.
- E. Applicant claims 100% of costs allocable to pollution control.

5. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate be issued for the facility claimed in Application T-1031, such Certificate to bear the actual cost of \$65,778 with 80% or more allocable to pollution control.

Charles K. Ashbaker
Larry D. Patterson:em
229-5374
November 8, 1978

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

REVOCATION OF POLLUTION CONTROL FACILITY CERTIFICATE

1. Certificate Issued to:

Publishers Paper Company
Dwyer Division
419 Main Street
Oregon City, Oregon 97045

The Pollution Control Facility Certificate was issued for an air pollution control facility.

2. Discussion

On December 20, 1974, the Environmental Quality Commission issued Pollution Control Facility Certificate No. 533 to Publishers Paper Company for their sawmill at 6637 S. E. 100 Avenue, Portland, Oregon. The Certificate was in the amount of \$81,009.00, and was issued for a baghouse and water sprays for reducing wood particulate emissions from existing cyclones.

On November 30, 1978, the Company notified the Department that they had ceased operations at the plant where the certified facility was located (see attached letter).

3. Summation

Pursuant to ORS 317.072(10), Certificate No. 533 should be revoked because the facility is no longer in use.

4. Director's Recommendation

Revoke Pollution Control Facility Certificate No. 533 issued to Publishers Paper Company in the amount of \$81,009.00, effective May 26, 1978.

MJDowns:cs

229-6485

12/8/78

Attachments (2)

Certificate No. 533

Letter from Publishers Paper Co.

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Publishers Paper Company Dwyer Division 419 Main Street Oregon City, Oregon 97045	As: Owner	Location of Pollution Control Facility: 6637 S. E. 100 Avenue Portland, Oregon Multnomah County
Description of Pollution Control Facility: Baghouse and water sprays for reducing wood particulate emissions from existing cyclones.		
Date Pollution Control Facility was completed and placed in operation: <u>04-74; 04-74</u>		
Actual Cost of Pollution Control Facility: \$ <u>81,009.00</u>		
Percent of actual cost properly allocable to pollution control: <u>Eighty percent (80%) or more</u>		

In accordance with the provisions of ORS 449.605 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "pollution control facility" within the definition of ORS 449.605 and that the facility was erected, constructed, or installed on or after January 1, 1967, and on or before December 31, 1978, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air or water pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapter 449 and regulations thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the desired purpose of preventing, controlling, and reducing air pollution.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

Signature B.A. McPhillipsTitle B.A. McPhillips, Chairman

Approved by the Environmental Quality Commission

on the 20th day of December 19 74



November 30, 1978

Department of Environmental Quality
522 S.W. 5th Avenue
P. O. Box 1760
Portland, Oregon 97207

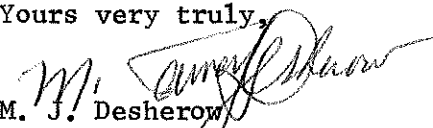
Attention: Tax Credits Section

Gentlemen:

On May 26, 1978 Publishers Paper Co. ceased operations at its Portland sawmill. Pollution control certificate number 533 was issued by your agency applicable to the sawmill.

Accordingly, we will not claim tax credit against this certificate commencing with 1978.

Yours very truly,


M. J. Desherow
Vice President

hrm

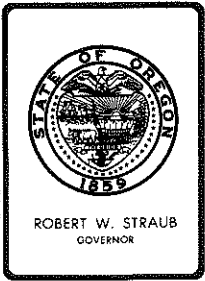
cc: Pete Schnell
Bud Smith
Jim Murray

Management Services Div.
Dept. of Environmental Quality
R E C E I V E D
DEC 04 1978



Publishers Paper Co. was named in 1972 as the first recipient of the Oregon C.U.P. (Cleaning Up Pollution) Award for outstanding achievements in protecting the environment and has received the Award in each succeeding year.

419 MAIN ST., OREGON CITY, OREGON 97045, TELEPHONE (503) 656-5211



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Addendum to Agenda Item No. C, December 15, 1978,
EQC Meeting
Tax Credit Applications

Director's Recommendation

It is recommended that the Commission issue a Pollution Control Facility Certificate to Tax Credit Application No. T-1022, Publishers Paper Co.

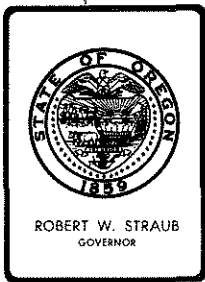
Bill

WILLIAM H. YOUNG

CASplettstaszer
229-6484
12/14/78
Attachment



Contains
Recycled
Materials



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item D, December 15, 1978, EQC Meeting

Staff Report - Reconsideration of Petition from Oregon
Environmental Council Requesting Promulgation of Rules
to Regulate Airport Noise Emissions

Background

Oregon Revised Statute Chapter 467 directs that "the Environmental Quality Commission shall adopt rules relating to the control of levels of noise emitted into the environment of this state and including the following:

- a) Categories of noise emission sources, including the categories of motor vehicles and aircraft."

On October 27, 1978, the Department received a petition from the Oregon Environmental Council and members of the public as co-petitioners, to amend existing noise rules. The petition would amend OAR Chapter 340 Section 35-015 (13) to include noise levels generated by the operation of aircraft in the definition of "industrial or commercial noise levels." It would also amend Section 35-035-5(j) to delete the exemption presently provided to airport flight operations. The result would be that airport generated noise would be regulated by the same noise standards controlling other commercial and industrial operations.

This matter was brought before the Commission at its November 17 meeting in Eugene. After input from staff, the proprietor of Portland International Airport and the petitioner, the Commission decided that this item should be reconsidered at the December 15, EQC meeting.

Evaluation

The control of aircraft noise near major airports has historically been a difficult task. Since the advent of commercial jet powered aircraft in the early 1960's, the area of noise impacts surrounding airports has grown. At the same time, the expanding population demands on buildable land have brought more people into airport noise impacted areas. Most local airport authorities have not been responsive to public complaints of airport caused noise. However in 1969 the Congress gave the Federal Aviation Administration



Contains
Recycled
Materials

(FAA) the responsibility to regulate aircraft design for noise reduction purposes. Federal regulations (FAR Part 36) are now in place requiring most commercial jet aircraft to comply with noise emission standards by 1985. Funding mechanisms were considered by Congress that would provide for retrofitting, re-engining or replacing the non-complying aircraft with quiet planes which meet the standards. However, opponents of the legislation argued that assistance to airlines in meeting federal environmental standards would establish bad precedent, cause inflation in fuel prices, and invite other industries to seek federal assistance in meeting environmental regulations. This session of Congress (95th) has ended without such funding legislation being passed.

In addition to the efforts to reduce the noise emissions of the commercial aircraft fleet, the federal government has realized that much of the problem may be mitigated by changes in operations at the airport and land use compatibility planning in the vicinity surrounding the airport. Two documents prepared by the FAA have outlined the federal posture in this area. The Aviation Noise Abatement Policy, dated November 18, 1976, provides a summary of aviation noise abatement policy and an analysis of the noise problems, legal framework, and description of the federal action program.

This policy states:

"The Federal Government has the authority and responsibility to control aircraft noise by the regulation of source emissions, by flight operational procedures, and by management of the air traffic control system and navigable airspace in ways that minimize noise impact on residential areas, consistent with the highest standards of safety. The federal government also provides financial and technical assistance to airport proprietors for noise reduction planning and abatement activities and, working with the private sector, conducts continuing research into noise abatement technology.

"Airport Proprietors are primarily responsible for planning and implementing action designed to reduce the effect of noise on residents of the surrounding area. Such actions include optimal site location, improvements in airport design, noise abatement ground procedures, land acquisition, and restrictions on airport use that do not unjustly discriminate against any user, impede the federal interest in safety and management of the air navigation system, or unreasonably interfere with interstate or foreign commerce.

"State and Local Governments and Planning Agencies must provide for land use planning and development, zoning, and housing regulation that will limit the uses of land near airports to purposes compatible with airport operations.

"The Air Carriers are responsible for retirement, replacement, or retrofit of older jets that do not meet federal noise level standards, and for scheduling and flying airplanes in a way that minimizes the impact of noise on people.

"Air Travelers and Shippers generally should bear the cost of noise reduction, consistent with established federal economic and environmental policy that the adverse environmental consequences of a service or product should be reflected in its price.

"Residents and Prospective Residents in areas surrounding airports should seek to understand the noise problem and what steps can be taken to minimize its effect on people. Individual and community responses to aircraft noise differ substantially and, for some individuals, a reduced level of noise may not eliminate the annoyance or irritation. Prospective residents of areas impacted by airport noise thus should be aware of the effect of noise on their quality of life and act accordingly."

In summary, the FAA expects that the airport proprietor and state and local government will take most of the responsibility to control this problem aside from the regulation of noise emissions from the individual aircraft.

The FAA Policy document makes it clear that they believe that the airport proprietor is responsible for noise produced by the airport operations:

"The FAA will encourage airport proprietors, who are legally responsible for the effect of aircraft noise on the surrounding community, to assess their particular noise problem and, where local authorities determine that there is a significant problem, to develop an action plan to reduce the impact of noise. That action plan should include a program to ensure maximum land use compatibility with airport operations both by the acquisition of easements or other rights in the use of land or airspace and by encouraging local governments to adopt and enforce zoning or other land use controls. It should also address other actions that may be taken, such as the establishment of a formal noise abatement runway system, control of ground operations, and preferential arrival and departure routes. The proprietor may wish to propose to the FAA special landing and takeoff procedures to deal with any unique conditions around his airport.

FAA summarizes the legal framework with respect to noise as follows:

- "1. The federal government has preempted the areas of air-space use and management, air traffic control, safety and the regulation of aircraft noise at its source. The federal government also has substantial power to influence airport development through its administration of the Airport and Airway Development Program.
- "2. Other powers and authorities to control airport noise rest with the airport proprietor - including the power to select an airport site, acquire land, assure compatible land use, and control airport design, scheduling and operations - subject only to Constitutional prohibitions against creation of an undue

burden on interstate and foreign commerce, unjust discrimination, and interference with exclusive federal regulatory responsibilities over safety and airspace management.

- "3. State and local governments may protect their citizens through land use controls and other police power measures not affecting aircraft operations. In addition, to the extent they are airport proprietors, they have the powers described in paragraph 2."

FAA states in their Policy document that the airport proprietor may wish to consider the following categories of action:

- "a. Actions that the airport proprietor can implement directly:
- (1) location of engine run-up areas;
 - (2) time when engine run-up for maintenance can be done;
 - (3) establishment of landing fees based on aircraft noise emission characteristics or time of day.
- "b. Actions that the airport proprietor can implement directly if he has authority, or propose to other appropriate local authorities:
- (1) plan and control of land use adjacent to the airport by zoning or other appropriate land use controls, such as utility expenditures and the issuance of building permits;
 - (2) enact building codes which require housing and public buildings in the vicinity of airports to be appropriately insulated; and
 - (3) require appropriate notice of airport noise to the purchasers of real estate and prospective residents in areas near airports.
- "c. Actions that the airport proprietor can implement directly in conjunction with other appropriate local authorities and with financial assistance from the FAA, where appropriate:
- (1) acquire land to insure its use for purposes compatible with airport operations;

- (2) acquire interests in land, such as easements or air rights, to insure its use for purposes compatible with airport operations;
- (3) acquire noise suppressing equipment, construction of physical barriers, and landscape for the purpose of reducing the impact of aircraft noise; and
- (4) undertake airport development, such as new runways or extended runways, that would shift noise away from populated areas or reduce the noise impact over presently impacted areas.

"d. Actions that the airport proprietor can propose to FAA for implementation at a specific airport as operational noise control procedures:

- (1) a preferential runway use system;
- (2) preferential approach and departure flight tracks;
- (3) a priority runway use system;
- (4) a rotational runway use system;
- (5) flight operational procedures such as thrust reduction or maximum climb on takeoff;
- (6) higher glide slope angles and glide slope intercept altitudes on approach; and
- (7) displaced runway threshold.

"e. Actions an airport proprietor can establish, after providing an opportunity to airport users, the general public and to FAA to review and advise:

- (1) restrictions on the use of or operations at the airport in a particular time period or by aircraft type, such as:
 - (a) limiting the number of operations per day or year;
 - (b) prohibiting operations at certain hours - curfews;
 - (c) prohibiting operation by a particular type or class of aircraft; and
- (2) any combination of the above

"f. Actions an airport proprietor can propose to an airline:

- (1) Shifting operations to neighboring airports.
- (2) Rescheduling of operations by aircraft type or time of day."

In response to public opposition to aircraft noise, some airports have imposed or are considering various operational restrictions. These include curfews, restrictions on the use of specific, noisy, aircraft types and other operational limitations. The FAA Policy document lists the following examples of completed or proposed actions by airport owners to reduce noise by operational constraints. In some of these cases the restrictions were developed through agreements between the proprietor and State or local government, while in others they have been imposed unilaterally by the airport proprietor:

- Nighttime Operating Restrictions - Lindbergh Field in San Diego, California; Pearl Harbor, Oahu; Washington National
- Total Jet Ban - Santa Monica Municipal Airport, California; Watertown Municipal Airport, Wisconsin
- Exclude Non-Part 36 Jet Aircraft - Los Angeles International, Logan International, Boston
- Limit Number of Aircraft Operations - Steward Airport, N.Y.
- Exclude Particular Types of Aircraft - Los Angeles International and Logan International have prohibited SST's, JFK International has considered a similar ban
- Limit Number of Nighttime Operations - Minneapolis-St. Paul
- Operational Noise Limits - JFK International
- Displaced Threshold - Logan International, Portland International and many others
- Noise Preferential Runways - Atlanta, Miami, Tampa, San Juan, Boston-Logan, Hartford-Bradley, O'Hare, Midway, Cleveland Hopkins, Detroit-Wayne County, Minneapolis-St. Paul, Moisant-New Orleans, Denver, Pittsburgh, LaGuardia, Newark, Los Angeles, San Francisco, Portland International and others.

Airport - Land Use Compatibility Planning, published by FAA in December 1977, provides guidance to develop noise control plans as encouraged by the Policy document. The implementation of the plan is accomplished through three major actions: controlling noise, controlling development and correcting or remedying incompatibilities.

The first action, noise control, includes all development and operation features that may affect noise levels. Location and alignment of runways are very important in establishing noise impacts to the surrounding community. Operational controls and restrictions may effectively reduce the area of noise impact. Operational plans must be followed in accordance with specified procedures or consistency between actual and forecast noise patterns will not be achieved.

The second action, development control, uses the typical land use controls to limit the encroachment of noise sensitive uses into airport impacted zones. Such controls include zoning, easements, transfer of development rights and land purchase.

The third action includes modifications undertaken to resolve the conflict of noise sensitive uses within impacted zones. These modifications include changes in land use, sound proofing, and acquisition of interest in land for airport use, public use or for compatible resale.

The Oregon Department of Transportation's Aeronautics Division has placed Oregon's airports into five major categories. In the first category are the many landing strips such as Alkali Lake and Santiam Junction. Second are the general aviation airports with low numbers of mostly single-engine aircraft. In this category are Condon, Pacific City and 26 others. The third category are those general aviation airports with moderate numbers of operations, including a few light twin-engines but few or no jets. This category includes Independence, Prineville and 28 others. The fourth group includes mostly general aviation with moderate to high numbers of operations. Business jets and heavy twin engine craft are common with both precision and non-precision approaches. This category includes Hillsboro, The Dalles and 13 others. The last category is the air carrier airport. This includes Eugene, Klamath Falls, Medford, North Bend, Pendleton, Portland International, Redmond and Salem.

In terms of noise impact, only the last two categories have the potential to cause major aircraft noise impacts to the surrounding communities. However those smaller facilities, in areas of low ambient noise, have also been a source of complaints to the Department.

At least one Oregon airport, Salem's McNary Field, has recently developed a land use plan that recommends land use control measures to mitigate the airport's noise impacts upon the surrounding community. In fact, community block grant funds for neighborhood revitalization are being used for sound insulation of homes within a specific noise contour (L_{dn}^{-65}) near McNary Field. Other recommendations include the elimination of cumulative zoning and encouraging industrial development near the airport. Recommendations were also made to the airport proprietor to institute noise abatement procedures.

The petitioners request to include Oregon's airports within the scope of the rules for other industrial and commercial noise sources (OAR 340-35-035) would most likely place all of the air carrier airports in excess of the standards. Additionally, many other airports may exceed these standards on days of high general aviation activity.

The allowable noise standards within the industrial/commercial noise rules are not well suited to measure airport noise. These rules use a one-hour statistical noise descriptor which is acceptable to measure operations of a continuous nature. Airport noise is intermittent and the intensity varies significantly throughout the day, so a cumulative descriptor, such as the day-night noise level (L_{dn}) is a more appropriate measurement tool.

Most airport noise control programs are based upon calculated noise levels rather than actual measurements. Analytical methods are used to calculate contours of equal noise levels around the airport based upon the "annual average daily aircraft traffic." Due to the variations in the usage of the airport runways and the temporal distribution of flights throughout any day, the "average annual" noise descriptor has gained popularity with airport operators. The defect in the "average annual" descriptor is that the airport's noise impact is averaged to such an extent that atypical days may show no impact.

An example of this defect is found in the noise impact analysis of Portland International's cross-wind runway, Runway 2/20. Although this runway is only used one percent of the time, and therefore the impact shown using the "average annual" descriptor is obscured, the number of complaints from people living under the approach and departure paths is very high.

In consideration of the above facts, staff does not believe that the existing rules for industrial and commercial noise sources would be appropriate to regulate airport flight operations. The commonly used "annual average" cumulative noise descriptor also has limitations but is preferable to the one-hour statistical descriptor. Therefore the Department does not endorse the amendments proposed by the petitioner due to technical limitations in the proposal.

Much of the petitioners' concerns have developed through the present planning effort at Portland International Airport. The Port of Portland has been developing a master plan which includes both future development of the airport facilities, and development of the surrounding vicinity area impacted by the airport. The petitioners have participated in this planning effort as members of a Citizens Advisory Committee. Although they have had input to the planning effort, the petitioners believe that the plan is not responsive to the noise issues that have been raised in public meetings.

The Department has also participated in this planning effort by serving on a Technical Advisory Committee. Our concerns with the noise impacts caused by the operations of the airport have not been fully addressed through this planning effort.

The Port of Portland recommended plans for Portland International Airport and its vicinity are now being scheduled for local governmental approval. A resolution has been approved by the Multnomah County Board of Commissioners giving its approval to portions of the plan. However they found the recommendations to mitigate noise through airport operational modifications were inadequate and therefore included the following:

"Resolved, that Multnomah County requests that the Port of Portland continue to work with DEQ on airport operational modifications as part of an Environmental Quality Commission approved Noise Abatement Program."

Summation

Drawing from the background and evaluation presented in this report and from the report on the same subject presented to the Commission at the November 17, 1978 EQC meeting, the following facts and conclusions are offered:

1. The Commission is provided specific authority to adopt rules to control aircraft noise under ORS 467.030.
2. The petitioner proposes to regulate airport noise to the same standards applied to most other industrial and commercial activities.
3. The federal government has preempted the regulation of aircraft source noise emission levels.
4. The airport proprietor may place restrictions on airport use that do not unjustly discriminate against any user, impede the federal interest in safety and management of the air navigation system, or unreasonably interfere with interstate or foreign commerce in order to achieve lower ambient noise levels in surrounding communities.
5. State and local government may protect their citizens through land use controls and other police powers.
6. Eight air carrier airports and 15 general aviation airports in Oregon have the potential to cause major noise impacts. Many other Oregon airports may increase their operations to a level that could cause major noise impacts.
7. The master plan for Portland International Airport has not fully addressed the noise concerns of petitioner or Department.
8. Multnomah County has resolved that the Department, working with the Port of Portland, submit for Commission approval, a Noise Abatement Program for Portland International Airport.
9. A noise abatement program for Portland International Airport should be developed for Commission approval. Such a program would be developed by the Department with the assistance and cooperation from the Port of Portland, the State Aeronautics Division, the City of Portland, Multnomah County, the Federal Aviation Administration and the petitioners.
10. The noise abatement program would primarily focus on airport operational measures to mitigate existing noise levels, however the program would also include the effect of aircraft noise emission regulations and land use controls.

11. The petition should be denied in order to allow the Department to address their concerns through the development of a noise abatement program. If such a program falls short of their expectations and does not provide noise relief, they may resubmit their petition at a future date.
12. Upon approval of a noise abatement program for Portland International Airport, other Oregon airports should be evaluated and recommendations made whether similar programs need to be developed.

Director Recommendation

Based upon the Summation, it is recommended that the Commission approve the following:

1. Deny the petition from the Oregon Environmental Council and co-petitioners for the reasons set forth above, and instruct the staff to notify the petitioners.
2. Authorize the Department to develop a noise abatement program for Portland International Airport to be submitted for Commission approval. This program shall assess all airport noise mitigation measures including airport operations, aircraft noise emissions and land use controls. Program implementation, compliance and assurance methods shall be identified and the necessity for the adoption of specific rules and standards shall be determined. Cooperation shall be requested from all concerned parties to develop this program, including the Port of Portland, the State Division of Aeronautics, the City of Portland, Multnomah County, the Federal Aviation Administration and the petitioners.
3. Within six months of this date, the Department shall propose, as necessary, a noise abatement program for Portland International Airport for Commission consideration and approval.
4. Subsequent to the approval of the Portland International Airport noise abatement program, the Department shall evaluate other Oregon airports and make recommendations to the Commission on the need for noise abatement programs.

Bill

WILLIAM H. YOUNG

John Hector:dro
229-5989
11/30/78

Attachment (1)

1. OEC Petition

PETITION TO AMEND RULES
BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE
STATE OF OREGON

In the matter of amending rules)	
35-015 (13) to include airports)	
in definition of Commercial-)	
Industrial classification;)	
35-035-1 (a) adding appropriate)	Petition to Amend Rules
noise source allowable sound)	35-015 (13), 35-035-1(a),
levels; delete 35-035-5 (j),)	35-035-5(j) delete.
exemptions.)	

1. Petitioner's name is Oregon Environmental Council, 2637 S.W. Water Avenue, Portland, Oregon, and members of the public within Multnomah County who have signed as co-petitioners on attached sheet.

2. Petitioners are individuals and members who enjoy the quiet sanctity of their homes, air, water and soil resources of the State of Oregon, free from deterioration of their quality of life imposed by excessive noise and fuel emissions from aircraft operations at Portland International Airport. Petitioners rely upon the State of Oregon to protect them from harmful effects upon their safety, health and welfare from such emissions.

3. Petitioners propose that Rule 35-015-(13) be amended to define airports as a Commercial-Industrial use, bringing them into a regulatory status in the State of Oregon, thereby protecting the petitioners and public and to delete 35-035-5(j) regarding exemptions of preemptory federal regulations.

4. Rule 35-015 (13) as petitioners propose to be amended would read as follows:

"Industrial or Commercial Noise Levels means those noises generated by a combination of equipment, facilities, operations, or activities employed in the production, storage, handling, sale, purchase, exchange or maintenance of a

Petition to Amend Rules

Page 2

product, commodity, or service and those noise levels generated in the storage or disposal of waste products." This definition includes sounds generated by the operation of aircraft which ~~is~~ ^{are} not subject to preemptive federal regulation.

5. Under ORS 467.010, the Environmental Quality Commission is given authority to develop and enforce rules. Under Chapter 340, Oregon Administrative Rules, Division 35, (35-005) EQC policy is:

(1) "To provide a coordinated statewide program of noise control to protect the health, safety, and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions;

(2) To facilitate cooperation among units of state and local governments in establishing and supporting noise control programs consistent with state program and to encourage the enforcement of viable noise control regulations by the appropriate local jurisdictions;

(3) To develop a program for the control of excessive noise sources which shall be undertaken in a progressive manner, and each of its objectives shall be accomplished by cooperation among all parties concerned."

ORS 467.030-1 (a) Further sets down the authority for the Environmental Quality Commission to adopt rules for categories of motor vehicles and aircraft. (b) Provides for Department of Environmental Quality regulation of collection, reporting, interpretations and use of data obtained from noise monitoring activities.

The U.S. Department of Transportation Aviation Noise Abatement Policy, FAA, November 18, 1976, cites airport proprietor's (Port

of Portland) options for reducing excessive community noise levels by the following methods:

1. A preferential runway use system;
2. Preferential approach and departure flight tracks;
3. A priority runway use system;
4. A rotational runway use system;
5. Flight operational procedures such as thrust reduction or maximum climb on takeoff;
6. Higher glide slope angles and glide slope intercept altitudes on approach;
7. Displaced runway thresholds.

Additional actions an airport proprietor can propose to an airline: (1) shifting operations to neighboring airports; (2) re-scheduling operations by aircraft type or time of day (or night).

FAA policy relies on state and local governments and citizens to undertake cooperative efforts for land use planning, airport operational procedures, and regulations to insure the greatest possible airport/community compatibility.

6. As a part of the current PIA (Portland International Airport) Master Plan process, a Citizen's Advisory Committee was formed by the Port to "act as a citizen's sounding board for the master plan. Members of the committee will be responsible for involving citizens who have an interest in land use in the vicinity of PIA and who can help identify additional issues the study team should address in the planning process. Citizen concerns expressed to this committee will be relayed directly to the Port Commission."

CAC heard citizens who described noise from aircraft as intolerable, contributing to sleep disturbances, speech interference, and interference with productive education in local schools. Additional testimony included examples of pervasive

and unacceptably high concentrations of solid fuel emissions on the exterior and interior of homes under the runway 2-20 glide path. Residents also complained of military weekend flights as "formation practicing hot-doggers" who fly too low. Repeatedly throughout the 15 months of hearing citizens, the problem remains to be low-flying aircraft in residential areas.

According to PIA records, approximately 200,840 aircraft arrive or depart PIA each year, with a projected increase to 75,000 aircraft by the year 2000. This figure is based upon phaseout of currently used aircraft and replacement with jumbo jets. Passenger use is placed at 1,541,758 in 1975 and projected at 4,292,000 by the year 2000. Passenger usage for the current year is up 15% over projections, giving large doubt as to the accuracy of Port projections over a 22 year period.

Thus far in the planning process, which is nearing completion and adoption, the Port has taken no action to recommend noise mitigation practices protecting the public in the south-east section of the Master Plan Vicinity Area and none for the residents outside the vicinity area who experience noise levels equal to those inside the vicinity area boundary.

According to FAA guidelines (Nov. 1976) aircraft retrofitting, scheduled for completion in seven years, will depend on the following favorable conditions: 1) A stable national economy; 2) Airlines economic stability; 3) Fuel prices remaining at proportionately priced levels. In light of the current expectations of massive fuel price increases this winter, all three conditions

may be seriously affected. It seems highly questionable to base an entire plan on such tenuous circumstances.

Current noise contours for the area are not being used as a basis for noise mitigating recommendations, but rather, mitigation recommendations are based on the year 2000 projected contours, markedly reduced from today. This method of recommending mitigation effectively abandons the concerns of those who addressed the CAC, both inside and outside the Vicinity Area. In the meantime, 22 years will elapse before the desired condition which the plan describes could be accomplished, if even then.

It appears that the lack of recommendations for noise mitigation is based on FAA projections of probability of litigation by individuals and groups. Noise measurements and contours for the plan and subsequent mitigation recommendations are based on a yearly average of aircraft noise. For those affected by the use of the cross-wind runway (2-20), now used 1% of the time, according to the Port, noise contours are barely visible and do not reflect the noise which occurs during that 1% use. When examined, noise contours for 2-20 are well outside the official contours, going deep into North Portland and Vancouver, Washington. On days when the other runways cannot be used, 2-20 can be responsible for accommodating the PIA operations in excess of 500 planes per day.

In these areas, citizens have expressed concern regarding excessive noise and filth from aircraft fuel residue. Health hazards for those living in close proximity to high power take-offs have not been explored by the Port of CAC. Vancouver residents are very

concerned about the possibility of accidents.

The public testimony before the Port and CAC did not ask for relief from excessive aircraft noise by the year 2000 or for those living directly adjacent to the runways. They asked for a good-faith effort by the Port to institute mitigation for all those in high noise areas, by methods available to the Port at this time.

PIA proprietors, the Port of Portland, has failed to initiate adequate or reliable noise mitigation actions. Petitioners rely on the State of Oregon through the Environmental Quality Commission to provide relief by adoption of petitioners' proposals.

7. Petitioners waive rights to written 15 day notice.

8. Petitioners believe that all persons owning land or living on or adjacent to the PIA Vicinity Area in Wilkes, Culley-Parkrose, Argay Terrace, Concordia, and the City of Gresham have an interest in the disposition of this petition and further believe that Petition to Amend Rules notice to all interested parties would be practical and desirable. In addition, to insure adequate notice to interested parties, petitioners have informed the media of the filing of this petition.

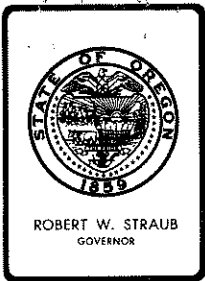
9. Petitioners respectfully request the opportunity to present oral arguments in support of their petition at an Environmental Quality Commission meeting within 60 days of filing date.

October 27, 1978

JOHN C. PLATT
Executive Director

CO-PETITIONERS

1. Mr. Vincent James 3811 N.E. 137th Place Portland, Oregon
2. Mrs. Jeanne Quan 3431 N.E. 132nd Portland, Oregon
3. Mr. George Grant 4236 N.E. 125th Place Portland, Oregon
4. Mr. & Mrs. Robert Haines 1841 S.W. 13th Gresham, Oregon
5. Mrs. Daisy Goldsmith 14544 N.E. Braze Portland, Oregon
6. Mr. Gene Gambee 11349 N.E. Prescott Portland, Oregon
7. Mr. Gary Gregory 3542 N.E. 131st Place Portland, Oregon
8. Mr. & Mrs. E. Sasser 4005 N.E. 132nd Place Portland, Oregon
9. Ms. Barbara Jaeger 7130 N. Wall Portland, Oregon



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. E, December 15, 1978, EQC Meeting

Field Burning Regulations and Amendment to the Oregon State Implementation Plan, Proposed Permanent Rule Revision to Agricultural Burning Rules, OAR Chapter 340, Sections 26-005 through 26-030 -- Rule Adoption

Background

Oregon Law requires the Environmental Quality Commission (EQC) to establish by order by January 1, 1979, the amount of acreage to be permitted for open field burning during 1979 and 1980. The law further states such limits should be set only after considering local air quality conditions and soil characteristics, the extent, type, or amount of open field burning of perennial and annual seed crops and grain crops, and the availability of alternative methods of field sanitation and straw utilization and disposal. In establishing such limitations the EQC must find:

" ... that open burning such acreage will not substantially impair public health and safety and will not substantially interfere with compliance with relevant state and federal laws regarding air quality."
(ORS 468.475 (3))

In addition, ORS 468.460 (3) requires the Commission to consult with Oregon State University and may consult with other agricultural agencies prior to adopting rules regulating open field burning.

Finally, the Federal Clean Air Act Amendments of 1977 require each state to submit a new State Implementation Plan identifying procedures whereby National Ambient Air Quality Standards (NAAQS) will be met and maintained in current non-attainment areas. Rules pertinent to the regulation of open field burning's impact on attainment of NAAQS must be filed with the Environmental Protection Agency in early 1979.

On November 17, 1978, the Environmental Quality Commission received testimony regarding the proposed field burning rules. Additional testimony was accepted through December 1, 1978, as indicated by the Notice of Public Hearing.



Contains
Recycled
Materials

Statement of Need

The Environmental Quality Commission is requested to consider adoption, as permanent rules, proposed, revised Agricultural Field Burning Rules (OAR, Chapter 340, Section 26-005 through 26-030).

1. Legal Authority: ORS 468.020, 468.460, and 468.475
2. Need for Rule:
 - a. To provide permanent operating rules to comply with 1977 law, Chapter 650 (HB 2196) and federal law.
 - b. To provide rules to facilitate improvements in smoke management and air quality.
 - c. To establish acreage for which field burning permits may be issued during 1979 and 1978.
3. Documents Relied Upon:
 - a. Staff report from William H. Young, Director, Department of Environmental Quality, presented at March 31, 1978, EQC meeting.
 - b. Memorandum and attachments regarding "Field Straw and Stubble Moistures," Thomas R. Miles, May 23, 1977.
 - c. Staff report from William H. Young, Director, Department of Environmental Quality, presented at May 26, 1978, EQC meeting.
 - d. Draft report on south Willamette Valley grass straw moisture content measurements during summer 1978, Department of Environmental Quality, October 9, 1978.
 - e. Preliminary results of Department of Environmental Quality open field burning emission test program, 1978--not published as of time of this writing, December 7, 1978.
 - f. Personal communication with various representatives of the Oregon Seed Council, September 29 and October 5, 1978.
 - g. Preliminary results of the Department of Environmental Quality field burning air quality monitoring program, November 15, 1978.
 - h. Personal communication with various representatives of the City of Eugene, September 29 and October 6, 1978.

- i. Written testimony from Robert J. Elfers, representing the City of Eugene, presented at November 17, 1978, EQC meeting.
- j. Memorandum from Terry Smith, Environmental Analyst, City of Eugene, dated November 16, 1978, presented at November 17, 1978, EQC meeting.
- k. Written testimony from David S. Nelson, representing the Oregon Seed Council, presented at November 17, 1978, EQC meeting.
- l. Written testimony from H. H. Burkitt of H. H. Burkitt, Project Management, representing the Oregon Seed Council, presented at November 17, 1978, EQC meeting.
- m. Letter from Harold Youngberg, representing Oregon State University, dated November 17, 1978, to Scott Freeburn, DEQ.
- n. Written testimony from Donald A. Haagensen, representing the Oregon Seed Council, presented at November 17, 1978, EQC meeting.
- o. Written testimony from John Vlastelicia representing the Environmental Protection Agency, Region 10, presented at November 17, 1978, EQC meeting.
- p. Written testimony from Janet Calvert, representing the League of Women Voters of Central Lane County, presented at November 17, 1978, EQC meeting.
- q. Written testimony from Liz Van Leeuwen, representing Oregon Women for Agriculture, presented at November 17, 1978, EQC meeting.
- r. Written testimony from John Cameron, Master, Linn County Pomona Grange, presented at November 17, 1978, EQC meeting.
- s. Written testimony from Wesley C. Miller, President, Benton County Farm Bureau, presented at November 17, 1978, EQC meeting.
- t. Written testimony from Jim Carnes, representing the Albany Area Chamber of Commerce, presented at November 17, 1978, EQC meeting.
- u. Memorandum from Bob Elfers and Terry Smith, representing the City of Eugene, to the EQC dated November 22, 1978.
- v. Staff report from William H. Young, Director, Department of Environmental Quality, presented at November 17, 1978, EQC meeting.
- w. Record of Public Hearing conducted on November 17, 1978 before the Environmental Quality Commission.

The proposed rules would meet these needs by providing permanent operating rules for agricultural field burning, refining and limiting burning under conditions which are judged to provide better smoke management and setting a maximum allowable acreage for burning during 1979 and 1980.

Evaluation

Testimony received at the public hearing and afterward has been reviewed by staff.

The presentations and written documents pertinent to rule changes and State Implementation Plan submittal procedures are summarized below. Staff comments follow each summarization.

1. Availability of Alternatives

Oregon State University

As required by Oregon Law, Oregon State University provided testimony to the Commission regarding the availability of alternatives to open field burning. Though an oral presentation was not made, written testimony was received on the date of the public hearing (Attachment II).

OSU testimony states that there is no chemical or substitute thermal treatment available to farmers in 1979 to control ergot, blind seed disease, or seed nematode other than open field burning. Field burning also remains the only available technique for the control of insects that cause silver top. Field burning is an essential practice for weed control in both annual and perennial grasses grown for seed.

Staff Comments:

Though the DEQ staff does not have direct expertise in the areas of chemical alternatives to open field burning, those projects undertaken to date as part of the DEQ research programs have shown no feasible alternatives or alternatives which are economically viable for general application to the grass seed industry.

2. Annual Acreage Limitation

Oregon State University

OSU suggests that there should be less reliance on the total number of acres for burning, i.e., an acreage limitation, and that more effort be directed toward reducing emissions and improvement of smoke management techniques. Emission-reducing techniques such as straw and stubble moisture limitations must be examined to determine their practicality. In addition, OSU testimony states "since there were such poor results from burning in 1978, all grass seed fields should be burned in 1979 to gain control of diseases and weeds."

City of Eugene

As a result of the 1978 experience, including the data and results obtained through this year's DEQ field burning studies, the City presented modifications to the proposed acreage limitation rule. Though a maximum limitation of 180,000 acres is suggested to be retained, a two-step, acreage reduction system based upon smoke intrusions would be incorporated such that if within four weeks of the start of the season five hours of smoke intrusion occur, the acreage

limitation is reduced by 10,000A. Similarly, if within the first eight weeks of the season, 16 hours of intrusions occur the original maximum of 180,000A would be reduced by 30,000A.

The City supports this proposed change claiming four and eight week periods to be more flexible than the fixed August 15 date currently proposed and would therefore be more equitable to growers. Also, the eight week period provides protection for the City after August 15 when intrusions have historically been more common. The suggested limits for hours of intrusion are based on the average minus one standard deviation of the number of hours of smoke intrusion during the specified four and eight week periods for the years 1973 through 1977. It is stated that since intrusion from South Valley priority burning has been essentially eliminated, the proposed hour limitations can reasonably be met when burning 180,000A under average weather conditions.

Oregon Seed Council

The Seed Council believes the annual acreage limitation should be removed stating it plays no role in reducing particulate and is a severe hardship on growers. On similar grounds, the Seed Council opposes the use of nephelometer "standards" as a criterion for effecting further reductions in the acreage limitation. The Seed Council also states that acreage limitations will insure increased tilling of fields thereby increasing dust from this source. Since dust is the major source of particulate in Eugene-Springfield, an acreage limitation is "directly contrary to attainment of standards in Eugene-Springfield."

H. Burkitt Project Management of Portland, consultant to the Oregon Seed Council, in presenting a technical evaluation of the "Interim Report on Willamette Valley Field and Slash Burning Impact - Air Surveillance Network Data Evaluation" concluded that, based on results from the Interim Report, there is no scientific evidence to support adoption of an acreage limitation. The "worst case" smoke intrusion incident at Lebanon, resulting in a six percent contribution by field burning to the total particulate loading, was cited in support of this conclusion.

Staff Comment

As stated in the November 17 staff report extrapolations to the effect on smoke intrusions of acreage increases or decreases from the 180,000 acre limitation is difficult. The role of acreage limitations is not clear or consistent because of the substantial effects of seasonal meteorology and substantial operational program changes over the last several years. A further complication is that administrative program changes have likely caused additional reductions in acreage burned. Still, intuitively, an increase in burned acreage should result in an increase in smoke intrusions of a given value assuming a larger number of forecasts and decisions must be made to accomplish the increased burning. Thus staff does believe annual acreage limits play a role in reducing at least field burning related particulates.

A strong correlation between acres burned annually and Eugene-Springfield smoke intrusions can be calculated (see City of Eugene testimony, 11-17-78), though

the DEQ staff believes such a calculation greatly oversimplifies and overstates the cause/effect relationship. As mentioned, staff believes the acres burned/smoke effects relationship to be complex. In fact, the reverse correlation to that suggested by the City may be more correct, that is, program changes which were effective in minimizing hours of smoke intrusion resulted in fewer acres being burned.

As previously stated, the need to minimize nuisance effects of field burning is a far more stringent control criterion than compliance with even 24-hour federal standards. Smoke problems, eliciting considerable complaints and causing serious visibility reductions, occurred in Lebanon and Sweet Home. These smoke problems tend to argue in favor of further acreage restrictions or restraints in the management program, or both.

In addition, the data from this summer's preliminary monitoring study indicates field burning may have a significant impact on a short-term basis. Though the average effect on Total Suspended Particulate at Lebanon was only six percent for the June through mid-August period, substantial effects on 24-hour particulate loading were measured under heavy field burning impact. On August 11, field burning is estimated to have contributed roughly one-half the 100 ug/m^3 24-hour average particulate loading. While expressing caution because of the preliminary nature of such results, the report contractor stated that such measurements indicate, "that field and slash burning can have a measurable impact on suspended particulate matter levels at receptor locations in the general vicinity of the burning site."

The Department is proposing retention of the 180,000 acre limitation until such time as:

1. The analysis of this summer's monitoring activities are completed and thoroughly reviewed. (It may also be necessary to develop and run computer simulations of increased burning scenarios in order to determine acceptable levels of increase.)

2. Operational changes increasing the protection provided to Lebanon-Sweet Home area are completed.

With regard to the use of nephelometer measurements of smoke intrusions as a further regulator of the annual acreage limitation, staff can see no particular advantage to the two-step acreage restriction proposed by the City of Eugene. The possibility of a single acreage reduction later in the season should provide the additional protection requested by the City.

The proposed criteria suggested by Eugene for an eight-week decision period appear reasonable. Using the 16 hours of $B\text{-scat} > 2.4 \times 10^{-4}$ criteria for imposition of a 150,000A limitation, burning would have been curtailed once in the last four years. Sixteen hours of smoke intrusion were registered by September 1 of the 1977 season, though 150,000A were not reported burned until September 14.

The end of the eighth week generally falls in the period September 9 \pm 6 days. Since the variation of a few days over an eight week period is of less significance than earlier in the season, staff would propose that smoke intrusions be

analyzed at the end of the first week in September. Over the last four seasons in which acreage limitations have been in effect, the completion of 150,000 acres of burning has occurred after September 7, thus decisions on this date would probably not result in an immediate cessation of burning.

With regard to burning all grass seed acreages in 1979, as suggested by OSU, 1978 registrations would indicate there to be about 258,000 acres of grass seed registered for open burning. Records of the smoke management program, during the period prior to acreage limitations, would indicate that burning this much acreage may have smoke impacts now considered unacceptable. However, the increased restrictions of the present smoke management program over that which existed during the periods of no acreage limitation cannot fully be assessed at this time.

The effect of an acreage limitation on tillage dust has yet to be determined. In general, dust loadings are thought to represent the amount of dust-creating activity near the sampler. Transport of dust for long distances is not thought to be significant. Therefore, tilling activity is not thought to significantly affect the Eugene-Springfield area.

3. Loose Straw Moisture Content Restrictions

City of Eugene

The City supports retention of moisture content restrictions, however, rather than a 12 percent moisture content limitation, restrictions on burning after rainfall are proposed. Such restrictions on burning would last up to four days. In addition, moisture content restrictions would not be lifted on "Unlimited Ventilation Days" and burning would be prohibited at relative humidities above 50 percent.

The City cites the preliminary results of the field burning emission testing conducted this summer by the DEQ which indicate the very strong effect moisture content has on particulate emissions. The City supports the use of rainfall and relative humidity as a criterion for field moisture since monitoring and administering a 12 percent moisture content rule is complex and costly.

Oregon Seed Council

In light of the preliminary results of the field and slash monitoring program, Seed Council representatives believe the moisture content rule serves no practical purpose because a reduction of ten percent in field burning particulate emissions due to such a rule is not significant when field burning results in no measurable impact on standards. The seed industry expects the rule to result only in less burning, especially since no field test is available.

H. H. Burkitt, consultant to the Seed Council, recommends the elimination of a moisture content limitation rule because, at the present time, there is no practical field method for determining straw moisture content, and because such a rule could not be enforced through after-the-fact investigation.

Staff Comments

As stated in the November 17, 1978 staff report, high moisture content fuel adversely affects plume rise while causing increases in particulate matter. When high moisture content is associated with green regrowth poorer field sanitation is expected as a result of burning.

In the past (prior to 1978), the DEQ staff have regulated burning after rainfall through rainfall data and consultation with fire districts. This method normally resulted in about two to three days delay after significant rainfall and allowed staff review of specific areas or individual cases where field conditions were expected or reported to be drier than the general conditions.

Staff supports the concept of moisture limitations to the extent that they can reduce smoke impacts and improve field sanitation effects. However, staff also believes that atmospheric ventilation conditions under which a given field is burned are a far more significant factor in determining the possible smoke effects than is fuel moisture content. In that during certain times of the year good ventilation conditions and low moisture content days tend to be mutually exclusive, the staff believes it is necessary to retain the authority to burn a field under the best ventilation and wind direction conditions rather than to unnecessarily restrict burning of a given field to times when moisture content limitations are met but best ventilation conditions are not available. With this concept in mind staff would revise the previously proposed rules eliminating the set percent moisture content and incorporating the weather criteria proposed by the City of Eugene to control the moisture content. These criteria would apply under conditions of general burning. However, staff also proposes to retain the right to except individual fields or areas from these criteria when appropriate ventilation conditions are available to minimize smoke impact.

Maximizing burning on days of "Unlimited Ventilation" was significant in terms of burning accomplishment and minimization of smoke effect during 1978. Imposition of moisture content restrictions on these days would be expected to reduce burning accomplishment on such days which should be utilized to the greatest reasonable extent.

Finally, staff would propose to restrict burning on days of relative humidity above 65 percent. This value more closely corresponds with 12 percent moisture content originally suggested as a maximum loose straw moisture content level.

4. Restrictions on Burning Upwind of the City of Eugene

City of Eugene

The City supports continuation of burning restrictions on fields upwind of the City of Eugene in both the South Valley and the East Marion County "Silverton Hills" areas. The City, however, does not support the proposed burning upwind of the Eugene-Springfield area allowing smoke to pass overhead above 3,000 feet. City staff refers to priority burning under pre-1978 rules as causing smoke problems greater than anticipated or desired under the smoke management program.

Oregon Seed Council

With regard to south priority burning areas, the Seed Council supports the proposed DEQ operation of burning in these priority areas. They expressed the further concern that overly stringent rules should not be adopted that would tend to restrict the flexibility of the field burning coordinator in making decisions regarding the burning of these fields. Mr. Burkitt suggested that continued special consideration be given this area.

Staff Comments

The staff would propose to approach the burning of south priority areas much as it did the burning of these areas in 1978. That is, the nephelometer readings in the Eugene-Springfield and other areas will remain the criteria for controlling burning in the south priority areas. If nephelometer readings should exceed the "2.4" value as a result of burning conducted in the south priority areas, even though closely observed and coordinated by the DEQ staff, such burning operations would be curtailed and restricted to wind conditions which will not carry smoke toward Eugene.

5. Requirements for Striplighting Annuals and Cereal Grain

City of Eugene

The City staff agrees with the DEQ on the abandonment of backfiring while supporting the increased use of striplighting techniques. They suggest allowing the last ten percent of a striplit field be headfired to avoid adverse low level smoke effects identified in the previous staff report.

City staff also argues that the emission reduction potential of striplights are best utilized when plume rise is expected to be poor due to inadequate mixing or high fuel moisture content. Under such conditions the expected reduced plume rise of the striplight is not observable according to City testing this summer.

Striplighting is suggested for use on annuals and perennials particularly late in season as fuel loading and moisture content increase. City staff disputes the contention that striplights will cause excessive burnout in perennial species. This speculation is based on similar flame propagation rates for striplights and headfires under late season conditions.

Oregon Seed Council

The Seed Council believes backfires and striplighting should be eliminated from the rules because the savings is again ten percent of "no measurable impact." Negative effects include "a lot of low level, low energy smoke that has been identified as the biggest problem." In addition, the burning techniques are very slow and would reduce the amount of burning that may be accomplished by growers in the time periods allowed for burning. Because it is so slow it would cause violations of the fires-out time. Mr. Nelson stated that the industry has continued to strive to burn only during the good times of the good days, thus requiring the use of the fastest techniques. The rules should be revised to encourage rapid ignition instead of requiring very slow lighting techniques.

Mr. Burkitt, in commenting for the Seed Council, recommended that the use of backfiring and striplighting techniques be eliminated from rule regulation due to their characteristically low plume rise. It was suggested that, to be consistent with emission control policies for other industries, the selection of specific control techniques be left to the regulated industry.

Staff Comments

At this time, staff supports use of striplighting and a rule change allowing the last 15 percent of the field to be headfired. This headfiring should help reduce low-level smoke. The combination of reduced emissions and apparently acceptable plume rise should result in lessened field smoke from this technique. However, staff believes the effectiveness of striplighting may be significantly altered according to its implementation. Preliminary observations made as part of the OSU plume evaluation study, conducted under contract to the Department, indicate that into-the-wind striplighting when used as a rapid ignition technique begins to resemble a headfire in terms of flame progression and burning rates. It is expected that particulate emissions may well increase (along with an observed increased in plume rise) under these conditions. The effect of the trade-off between total emissions and plume height may be partially addressed by the final OSU report due in February, however, mathematical simulation of field burning plumes in a smoke management scenario is required to estimate overall effects.

As growers expedite burning while using striplighting techniques, burns will tend to more closely simulate headfires.

Results of the effects of backfires and striplights on perennials will not be observable until this spring. Visual observations made at that time cannot quantify overall effects on yield, etc. OSU, though not commenting on the unknown effect of striplights, indicates backfire to reduce yield. Staff does not support or propose the striplighting of perennial grasses without knowledge of the effects.

6. Procedural Changes to Protect Lebanon and Sweet Home

Both the City of Eugene and the Oregon Seed Council support the staff commitment to procedural changes to minimize smoke effects in the Lebanon-Sweet Home area. The City suggested an acreage restriction system may be applicable to this area as well as Eugene, while the Seed Council indicated that operational changes aimed toward improvement should be explored prior to development of regulations. The City of Sweet Home testified in support of changes to reduce smoke impact on that city.

7. State Implementation Plan Revisions

Major testimony relative to the continued inclusion of field burning into the State Implementation Plan was presented by the City of Eugene, John Vlastelicia of the EPA, and Donald A. Haagensen, attorney for the Oregon Seed Council. Testimony from each of these sources is summarized below, followed by staff comments in response to the specific issues presented.

City of Eugene

The City of Eugene, in written testimony submitted by Bob Elfers and Terry Smith after the public hearing (Attachment III) recommended that field burning control strategies be included in the State Implementation Plan. The following conclusions were cited in support of this recommendation:

1. Field burning is one of the largest man-made sources of particulate in the state.
2. A great deal is now known about successful and economical strategies for controlling impacts from field burning.
3. The impact of well-regulated burning on 24-hour TSP concentrations can be substantial, this impact increasing with acreage burned.
4. It cannot yet be determined how many acres can be burned without exceeding standards or applicable Prevention of Significant Deterioration (PSD) increments.

Environmental Protection Agency, Region X

John Vlastelicia of the EPA presented testimony with the intent of clarifying the relationship between proposed rule revisions and Federal Clean Air Act requirements. Specifically, the EPA is concerned that final SIP regulations demonstrate attainment and maintenance of the National Ambient Air Quality Standards.

It was stated that of immediate concern is the attainment of standards in the Eugene-Springfield Air Quality Maintenance Area, and compliance with the PSD increments. Regarding the attainment of standards, the following conclusions were stated:

1. If the SIP is not revised, the current SIP limitation of 50,000 acres would still be in effect, a situation which could potentially result in litigation or the necessity to adopt an Interim Strategy prior to the 1979 field burning season. It was noted that the 1978 Interim Strategy, allowing up to 180,000 acres to be burned, was accepted by the Regional Administrator in order to conduct studies necessary to define the impact of field burning.
2. The regulations now proposed would result in a substantial increase in emissions over those allowed by both the current SIP and the 1978 Interim Strategy. That is, the 1978 Interim Strategy employed all reasonable control measure such that resultant emissions and air quality impacts were expected to be about the same as those from burning the 50,000 acres required by the current SIP. This is not true for the regulations now being proposed. Therefore, in the absence of an approvable SIP revision or the demonstration that standards and PSD increments will not be violated as a result of the proposed regulations, the current 50,000 acre SIP limitation would be enforced.
3. It is not appropriate, nor possible outside the context of the overall SIP strategy for attaining and maintaining standards, to develop permanent SIP regulations without benefit of the (final) study results.

With regard to the Prevention of Significant Deterioration (PSD) increments, it was stated that any SIP revision which could result in deterioration of air quality must demonstrate that it will not cause or contribute to a violation of the applicable (allowed) increment. That is, the proposed SIP revisions must show that resultant emission increases over that allowed in the current SIP will not cause or contribute to violations of the Class II increments in the Willamette Valley or the Class I increments in any of the adjacent mandatory Class I areas.

In addition to these issues presented, it was stated that several other issues will eventually need to be considered when implementing SIP regulations. First, the use of a smoke management plan utilizing dispersion techniques to attain and maintain national standards may be prohibited by Section 123 of the Clean Air Act wherein the emphasis is on attaining standards through continuous emission reductions. Second, protection of visibility in mandatory Class I areas will need to be considered. Currently, the smoke management plan directs field burning smoke to areas adjacent to the Willamette Valley, increasing the potential for visibility reductions in these areas. Finally, the EPA's intent to eventually establish a fine particulate standard will likely result in additional control strategies for fine particulate sources, such as field burning.

Donald A. Haagensen, Attorney for the Oregon Seed Council

Donald A. Haagensen presented testimony outlining the requirements of the Clean Air Act as it relates to SIP revision and field burning regulations. With regard to non-attainment areas, such as the Eugene-Springfield Air Quality Maintenance Area (AQMA), revised SIP's must contain a permit requirement for the construction and operation of new or modified "major stationary sources." (42 U.S.C. S 7502 (b)(6).) According to Federal law, a "major stationary source" is defined as any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant (including any major emitting facility or source of fugitive emissions of any such pollutant, as determined by rule by the [EPA] Administrator." (42 U.S.C. S 7602 (j).) Haagensen indicated that the Administrator has not designated any fugitive emission sources as major stationary sources. He further stated that none of the requirements for non-attainment area revisions dictate that Oregon adopt a particular scheme of regulation for field burning, or any regulations at all. The choice of emission limitations, compliance schedules, and other measures necessary to meet the non-attainment area revision requirements is left to the state. (42 U.S.C. S 7502 (b)(8).)

In addition, with respect to SIP revisions for attainment areas, Haagensen indicated that such a revision must contain emission limitations and any other measures necessary to prevent significant deterioration (PSD) of air quality, and that TSP values will not increase above the national ambient air quality standards. Maximum allowable TSP increments were specified as a) 19 micrograms per cubic meter on an annual geometric mean basis, and b) 37 micrograms per cubic meter on a 24-hour basis which is not exceeded more than once a year. Again, it is concluded that permit requirements for any "major emitting facilities" do not specify that field burning regulations be included in SIP revisions.

With regard specifically to the proposed field burning regulations, Haagensen stated that submission of these regulations as part of SIP revisions would not only be incorrect and unwarranted but a surrender of state power. Submission on the basis of nuisance effects, for which the EPA has no authority or standards for evaluation, would also relinquish state control and require that revisions of burning rules each year be approved by the EPA.

Conclusions of Haagensen's testimony are as follows:

1. If it can be concluded that, based on scientific evidence, particulate emissions from field burning have no measurable impact on attainment of TSP standards in the AQMA, then SIP revision should contain no field burning rules.

2. If evidence is to the contrary, then field burning rules should be included in SIP revisions, and should reflect solely the controls necessary to ensure standards attainment.

3. Alternatively, regulations could specify the goals of the smoke management program and establish a general framework for evaluating the specific techniques which could be used to accomplish those goals. These could be resolved yearly so that a full scale SIP revision would not be needed each time rules were revised. The slash burning program was cited as an example.

Staff Comments

The DEQ has discussed with federal authorities the inclusion of field burning rules and other rules in the State Implementation Plan. Our understanding is that if the rules are necessary to keep field burning smoke from being a substantial contributor to violations of NAAQS or PSD increments, then such rules must be included in any SIP submittal. If, as it is believed, unregulated field burning could contribute to violations of federal 24-hour particulate standards, field burning should logically be included in the SIP. With this understanding DEQ would propose to submit the adopted rules as required by federal regulation but ask the EPA not to consider these rules except as they relate to Oregon's complete SIP submission. This approach parallels EPA's testimony.

Because of the substantial amount of technical support documentation required in revising the SIP, the DEQ has a strong interest in eliminating SIP revisions resulting from field burning operational rule changes. This is especially the case with field burning because of the numerous rule revisions. The DEQ is willing to explore the incorporation of state law, simplified rules, or some form of declaratory document describing the operation of this state's field burning program to the satisfaction of the EPA but not unnecessarily fettering procedural changes needed for program operation or improvement. Discussions to date with the EPA have not made clear the possibilities in this regard.

Further discussions with the EPA representatives indicate to staff that the restriction of Section 123 of the Clean Air Act (1977) proscribing the use of dispersion techniques to offset emission increases does not in general apply to smoke management programs for agricultural burning activities. The section also exempts dispersion techniques, the implementation of which predates the enactment of the 1970 Clean Air Act. Oregon's involvement in field burning smoke management began in 1967, though the program has changed significantly since then.

Mr. Vlasteclicia and Mr. Haagensen referred to the Prevention of Significant Deterioration (PSD) increments established by the Clean Air Act for increases in particulate loading in Class I and II areas. Though field burning of itself does not appear to threaten exceedence of the increments, the effect on the establishment of other sources in PSD areas will be addressed as part of Oregon's SIP process.

8. Other Testimony

Other testimony presented by various groups and individuals is summarized below:

City of Eugene

The City recommended that the EQC and staff endeavor to place more responsibility on the seed industry for management of its burning activities. The City supports this "normalization" of the DEQ - Seed Industry relationship provided adequate performance standards are required of the industry.

Oregon Seed Council

David S. Nelson presented several comments regarding the November 17, 1978, staff report in addition to recommendations regarding rule revisions. Several of the comments about the staff report centered on whether or not rules, specifically 1978 rules, affected the impact of field burning and, consequently, the results of the monitoring program this summer. Mr. Nelson states, "the facts from the monitoring study indicates that the rules had nothing to do with preventing measurable impact. The fact is without any rules there would be little measurable impact on standards." Mr. Nelson also states, "page 10 states that field burning had no measurable impact on the federal health and welfare standards for particulates. The staff added 'under the program operation last year.' The report shows that even under worst case situation there is no significant impact."

Mr. Nelson also stated that the limitation on experimental burning currently in the rules should be eliminated as the legislature did not intend such a limit to be imposed. Mr. Nelson said that the hardship (emergency burning) section of the rules will have to be completely rewritten in the next legislative session.

Bob Davis, Oregon Seed Trade Association

Mr. Davis suggested that the EQC, Department and City of Eugene concentrate upon the real problem which is the air pollution in the City of Eugene itself, not the minimal impact of field burning. He also reiterated the argument that SIP development is directly in the hands of the State and since field burning does not contribute to violations of federal standards, it should not be part of the SIP. Finally, Mr. Davis questioned whether the DEQ and EQC had the statutory authority to regulate field burning on the basis of it being a nuisance.

League of Women Voters

The League of Women Voters of Oregon and of Central Lane County presented testimony supporting approval of the proposed burning rule revisions based on the success of this summer's smoke management program. It was recommended that an acreage limitation rule be retained as an additional control element, and as a

means of encouraging planning and coordination efforts between the growers and involved agencies. A concern for the reduction of smoke intrusion into the Lebanon and Sweet Home areas was specifically noted.

Local Agriculture Groups

Testimony on proposed burning rule revision was presented by the Benton County Farm Bureau, the Linn-Benton Women for Agriculture, and the Linn County Pomona Grange. It was the general consensus of this testimony that open field burning continue to be regulated by daily meteorological conditions and that acreage limitations be removed from burning rules and that field burning regulations not be included in the SIP revisions. Concern was expressed for the potential for environmental impacts resulting from more stringent controls of burning, including impacts from increased use of chemicals, generation of dust and increased erosion through increased tilling of unburned fields, and other possible ramifications related to land use pressures. Night burning and increased use of rapid ignition techniques for improved air quality and traffic safety were generally supported.

Staff Comment

The DEQ staff supports increasing participation and responsibility by the seed industry in the operation of a burning program. Increasing industry responsibility may eventually lead to a more typical regulatory role by the DEQ in relation to field burning activities. Staff also believes the industry would have more flexibility in operation of the program provided it proved effective.

Significant questions would have to be answered such as, What will be the program performance standards?; What form will an enforcement program take?; What form would penalties for deficient performance take and against whom would they be levied? Finally, does current law provide for such a change and allow the DEQ to discharge its duties? Staff would propose to undertake discussions with interested parties to answer these questions and to determine the feasibility of such changes.

With regard to Mr. Nelson's comments on the previous staff report, it should be made clear that the results from the preliminary report on field and slash burning impacts covered only the period of May through mid-August. Approximately 70 percent of all burning was completed and all significant smoke intrusions occurred during this period. However, data on the 6.5 hour field burning smoke intrusion in Eugene on July 27 was not analyzed in time for publication of the preliminary report. Results contained in the preliminary report are not expected to change substantively as a result of further analysis. Based on this season's data collection and analysis, two of the preliminary findings of the report are:

1. On a valley-wide basis, field burning has little significant impact on the airshed's particulate mass or composition. Localized impacts can, however, be substantial for short time periods.
2. Field burning under the 1978 smoke management plan has not been found, thus far, to have a great enough impact on total particulate mass to cause exceedances of the annual or 24-hour TSP standards.

Staff believes the conclusions as well as the qualifications on the conclusions applied by the contractor were accurately reflected in the staff report of November 17, 1978.

Summation

Specific rules adopted for the 1978 season and proposed rule revisions, based on this experience and public hearing testimony, for the 1979 season are summarized below. Five specific rule revisions are proposed.

1. Regulation of the total annual acreage limitation based on cumulative hours of smoke intrusion appeared effective in limiting smoke intrusions during 1978. Since the nephelometer is also a useful smoke management tool this 1978 rule is proposed to be retained except the period of nephelometer measurement would be extended to September 7 of each year and the total allowable hours of smoke intrusion would be adjusted from 13 hours to 16 hours. The Oregon Seed Council opposed continued regulation of the acreage limitation by nephelometer. Testimony presented by the City of Eugene supports a concept similar to that proposed for adoption but incorporating a two-step acreage reduction based on four and eight week periods of analysis.

2. Preliminary results show increased loose straw moisture content (MC) to result in increased particulate emissions. Though the 1978 MC rule did not significantly restrict burning, the rule restricting fields to be burned only when loose straw MC is 12 percent or below (except under Unlimited Ventilation Conditions) was difficult to implement. The proposed rule would prohibit burning one day for each 0.10 inch of rainfall up to a maximum of four days. Burning would not be allowed when relative humidity is greater than 65 percent. Burning restrictions based on MC were opposed by the Seed Council in public testimony and supported by the City of Eugene.

3. Rules restricting burning upwind of Eugene effectively reduced smoke intrusions in that city. However, since the burning of special priority areas and quotas caused nephelometer readings to exceed 2.4×10^{-4} B-scat, special priority definitions and quotas used during 1978 are proposed to be dropped. Proposed rules would allow burning in this area only under close Department supervision. Rules restricting the burning of eastern Marion County when that area is upwind of Eugene-Springfield are proposed to be retained.

Because of the threat to traffic safety which burning upwind of a highway represents, temporary rules allowing the practice are proposed to be eliminated.

4. Backfire burning causes extensive ground level smoke under all circumstances. Striplighting appears to develop adequate plume rise though both it and backfiring are slower than headfire techniques. The DEQ preliminary analysis indicates backfires and, by extrapolation from other data, striplights, to have lower emissions than headfires. Because of its extremely poor plume rise, backfiring is proposed for elimination from the rules as an acceptable burning technique. The rule requiring striplighting of annual and cereal grains is proposed to be retained and studied further.

A change to the definition of into-the-wind stripburning would allow the last 15 percent approximately of the field to be headfired. The Seed Council testified

in opposition to continued striplighting based upon increased low level smoke, reduced plume rise and slower burning while Eugene supported striplighting based on reduced emissions.

5. In order to simplify fire district record-keeping and expedite the permitting process, two rules are proposed for elimination. The first, requiring local fire districts to keep records of burning accomplished by approved alternatives to open field burning, and the second, requiring written authorization to burn at the burn site. Authority to burn, however, must be readily demonstrable upon request.

The Department proposes through operational procedures to address smoke problems in the Lebanon-Sweet Home area. This will be accomplished this fall through better fire district coordination and planning, possible adoption of special priority burning zones, and more specific siting of major burn operations. Additionally, operating procedures are proposed to give the public better notice of intended burning activities (using commercial radio) and improve DEQ-Seed Council Smoke Management Committee communications.

Results from special monitoring programs established to determine the impact of field burning on Willamette Valley air quality indicate field burning had no measurable impact on federal health and welfare particulate standards under the rules and acreage limitations in effect during the 1978 burning season. However, field burning has been shown to have measurable effect on particulate loading at receptors in the general vicinity of the burning.

At present, the DEQ plans to submit the proposed field burning rules to the EPA as part of the Oregon State Implementation Plan with the understanding that such rules would be reviewed only in the context of the total SIP. This is agreeable to the EPA. This agreement should allow time for review of our rules should the need for additional changes become evident after completion of reports relating to field burning impact. In the interim period the DEQ would explore methods whereby the extensive operational rules of the smoke management program would not have to be made part of the SIP thereby minimizing changes to that document due to field burning.

The seed industry wishes to eliminate field burning from the SIP based on insignificant impact on federal standards. The City of Eugene, while wishing to see field burning regulated under the SIP, supports minimizing SIP revision due to operational rule revisions.

State law requires that by January 1, 1979, the Commission shall by order indicate the number of acres for which permits may be issued for the burning of such acreage as it considers appropriate and necessary, upon finding that open burning the acreage will not substantially impair public health and safety and will not substantially interfere with compliance with relevant state and federal laws regarding air quality.

The requisite public notice, opportunity for public participation, consultation with Oregon State University and other interested parties, formulation and introduction to the record of the Department's recommendations, land use consistency assurance, and preparation of a Statement of Need for rule making have been undertaken for purposes of rule adoption and State Implementation Plan revision.

It is concluded that the Commission can make the finding that the open burning of 180,000 acres as regulated by the attached proposed rules (Attachment I), will not substantially impair public health and safety and will not substantially interfere with compliance with relevant State and Federal laws regarding air quality.

Director's Recommendation

Based upon the finding in the Summation, it is recommended that the Environmental Quality Commission:

1. Acknowledge as of record the consultation with recommendations as received of Oregon State University pursuant to ORS 468.460(3), and
2. Adopt the attached rules as proposed (Attachment I) or as may be further amended as revisions to the Agricultural Burning Rules, Chapter 340, Sections 26-005 through 26-030.
3. Find that the open burning of up to 180,000 acres pursuant to the rules, adopted in (2) above will not substantially impair public health and safety and will not substantially interfere with compliance with relevant State and Federal laws regarding air quality.
4. Based on the finding in (3) above, issue an order establishing 180,000 acres as the number of acres for which permits may be issued for open field burning.

Bill

WILLIAM H. YOUNG

SAFreeburn
686-7837
12/8/78

- Attachment I: Proposed Field Burning Rules, OAR, Chapter 340, Sections 26-005 through 26-030
- Attachment II: Letter to Scott Freeburn, DEQ, from Harold Youngberg, OSU, November 17, 1978 (mailed under separate cover)
- Attachment III: Memorandum to the Environmental Quality Commission from Bob Elfers and Terry Smith representing the City of Eugene, November 22, 1978 (mailed under separate cover)

Attachment 1

DEPARTMENT OF ENVIRONMENTAL QUALITY
Chapter 340

Agricultural Operations
AGRICULTURAL BURNING

26-005 DEFINITIONS. As used in this general order, regulation and schedule, unless otherwise required by context:

- (1) Burning seasons:
 - (a) "Summer Burning Season" means the four month period from July 1 through October 31.
 - (b) "Winter Burning Season" means the eight month period from November 1 through June 30.
- (2) "Department" means the Department of Environmental Quality.
- (3) "Marginal Conditions" means conditions defined in ORS 468.450(1) under which permits for agricultural open burning may be issued in accordance with this regulation and schedule.
- (4) "Northerly Winds" means winds coming from directions in the north half of the compass, at the surface and aloft.
- (5) "Priority Areas" means the following areas of the Willamette Valley:
 - (a) Areas in or within 3 miles of the city limits of incorporated cities having populations of 10,000 or greater.
 - (b) Areas within 1 mile of airports servicing regularly scheduled airline flights.
 - (c) Areas in Lane County south of the line formed by U. S. Highway 126 and Oregon Highway 126.
 - (d) Areas in or within 3 miles of the city limits of the City of Lebanon.
 - (e) Areas on the west side of and within 1/4 mile of these highways; U. S. Interstate 5, 99, 99E, and 99W. Areas on the south side of and within 1/4 mile of U. S. Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis, [Oregon] Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.
- (6) "Prohibition Conditions" means atmospheric conditions under which all agricultural open burning is prohibited (except where an auxiliary fuel is used such that combustion is nearly complete, or an approved sanitizer is used).

"[----]" represents material deleted
Underlined material represents proposed additions

(7) "Southerly Winds" means winds coming from directions in the south half of the compass, at the surface and aloft.

(8) "Ventilation Index (VI)" means a calculated value used as a criterion of atmospheric ventilation capabilities. The Ventilation Index as used in these rules is defined by the following identity:

$$VI = \frac{\text{Mixed depth (feet)} \times \text{Average wind speed through the mixed depth (knots)}}{1000}$$

(9) [~~(8)~~] "Willamette Valley" means the areas of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties lying between the crest of the Coast Range and the crest of the Cascade Mountains, and includes the following:

(a) "South Valley," the areas of jurisdiction of all fire permit issuing agents or agencies in the Willamette Valley portion of the Counties of Benton, Lane or Linn.

(b) "North Valley," the areas of jurisdiction of all other fire permit issuing agents or agencies in the Willamette Valley.

(10) [~~(9)~~] "Commission" means the Environmental Quality Commission.

(11) [~~(10)~~] "Local Fire Permit Issuing Agency" means the County Court or Board of County Commissioners or Fire Chief of a Rural Fire Protection District or other person authorized to issue fire permits pursuant to ORS 477.515, 477.530, 476.380 or 478.960.

(12) [~~(11)~~] "Open Field Burning Permit" means a permit issued by the Department pursuant to ORS 468.458.

(13) [~~(12)~~] "Fire Permit" means a permit issued by a local fire permit issuing agency pursuant to ORS 477.515, 477.530, 476.380 or 478.960.

(14) [~~(13)~~] "Validation Number" means a unique three-part number issued by a local fire permit issuing agency which validates a specific open field burning permit for a specific acreage of a specific day. The first part of the validation number shall indicate the number of the month and the day of issuance, the second part the hour of authorized burning based on a 24 hour clock and the third part shall indicate the size of acreage to be burned (e.g., a validation number issued August 26 at 2:30 p.m. for a 70 acre burn would be 0826-1430-070).

(15) [~~(14)~~] "Open Field Burning" means burning of any perennial grass seed field, annual grass seed field or cereal grain field in such manner that combustion air and combustion products are not effectively controlled.

(16) "Backfire Burning" means a method of burning fields in which the flame front does not advance with the existing surface winds. The method requires ignition of the field only on the downwind side.

(17) "Into-the-Wind Strip Burning" means a modification of backfire burning in which additional lines of fire are ignited by advancing directly into the existing surface wind after completing the initial backfires. The technique increases the length of the flame front and therefore reduces the time required to burn a field. As the initial burn nears approximately 85% completion, the remaining acreage may be burned using headfiring techniques in order to maximize plume rise.

(18) [~~(15)~~] "Approved Field Sanitizer" means any field burning device that has been approved by the Department as an alternative to open field burning.

(19) [~~(16)~~] "Approved Experimental Field Sanitizer" means any field burning device that has been approved by the Department for trial as a potential alternative to open burning or as a source of information useful to further development of field sanitizers.

(20) [~~17~~] "After-Smoke" means persistent smoke resulting from the burning of a grass seed or cereal grain field with a field sanitizer, and emanating from the grass seed or cereal grain stubble or accumulated straw residue at a point 10 feet or more behind a field sanitizer.

(21) [~~18~~] "Leakage" means any smoke resulting from the use of a field sanitizer which is not vented through a stack and is not classified as after-smoke.

(22) [~~19~~] "Approved Pilot Field Sanitizer" means any field burning device that has been observed and endorsed by the Department as an acceptable but improvable alternative to open field burning, the operation of which is expected to contribute information useful to further development and improved performance of field sanitizers.

(23) [~~20~~] "Approved Alternative Method(s)" means any method approved by the Department to be a satisfactory alternative method to open field burning.

(24) [~~21~~] "Approved Interim Alternative Method" means any interim method approved by the Department as an effective method to reduce or otherwise minimize the impact of smoke from open field burning.

(25) [~~22~~] "Approved Alternative Facilities" means any land, structure, building, installation, excavation, machinery, equipment or device approved by the Department for use in conjunction with an Approved Alternative Method or an Approved Interim Alternative Method for field sanitation.

(26) "Drying day" means a 24-hour period during which the relative humidity reached a minimum less than 50% and no rainfall occurred.

26-010 GENERAL PROVISIONS. The following provisions apply during both summer and winter burning seasons in the Willamette Valley unless otherwise specifically noted.

(1) Priority for Burning. On any marginal day, priorities for agricultural open burning shall follow those set forth in ORS 468.450 which give perennial grass seed fields used for grass seed production first priority, annual grass seed fields used for grass seed production second priority, grain fields third priority and all other burning fourth priority.

(2) Permits required.

(a) No person shall conduct open field burning within the Willamette Valley without first obtaining a valid open field burning permit from the Department and a fire permit and validation number from the local fire permit issuing agency for any given field for the day that the field is to be burned.

(b) Applications for open field burning permits shall be filed on Registration/Application forms provided by the Department.

(c) Open field burning permits issued by the Department are not valid until acreage fees are paid pursuant to ORS 468.480(1)(b) and a validation number is obtained from the appropriate local fire permit issuing agency for each field on the day that the field is to be burned.

(d) As provided in ORS 468.465(1), permits for open field burning of cereal grain crops shall be issued only if the person seeking the permits submits to the issuing authority a signed statement under oath or affirmation that the acreage to be burned will be planted to seed crops (other than cereal grains, hairy vetch, or field pea crops) which require flame sanitation for proper cultivation.

(e) Any person granted an open field burning permit under these rules shall maintain a copy of said permit at the burn site or be able to readily demonstrate authority to burn at all times during the burning operation and said permit shall be made available for at least one year after expiration for inspection upon request by appropriate authorities.

(f) At all times proper and accurate records of permit transactions and copies of all permits shall be maintained by each agency or person involved in the issuance of permits, for inspection by the appropriate authority.

(g) Open field burning permit issuing agencies shall submit to the Department on forms provided, weekly summaries of field burning activities in their permit jurisdiction during the period July 1 to October 15. Weekly summaries shall be mailed and postmarked no later than the first working day of the following week.

~~[(h)-All debris, cuttings and prunings shall be dry, cleanly stacked and free of dirt and green material prior to being burned, to insure as nearly complete combustion as possible.]~~

~~[(i)-No substance or material which normally emits dense smoke or [ob]noxious odors may be used for auxiliary fuel in the igniting of debris, cuttings or prunings.]~~

~~[(j)-Use of approved field sanitizers shall require a fire permit and permit agencies or agents shall keep up-to-date records of all acreages burned by such sanitizers.]~~

(3) Fuel conditions shall be limited as follows:

(a) All debris, cuttings and prunings shall be dry, cleanly stacked and free of dirt and green material prior to being burned, to insure as nearly complete combustion as possible.

(b) No substance or material which normally emits dense smoke or [ob]noxious odors may be used for auxiliary fuel in the igniting of debris, cuttings or prunings.

(c) The Department may, on a field by field basis, prohibit burning of fields containing high moisture content stubble and/or regrowth material which, when burned, would result in excessive low level smoke.

(4) [(3)]. In accordance with ORS 468.450 the Department shall establish a schedule which specifies the extent and type of burning to be allowed each day. During the time of active field burning, the Department shall broadcast this schedule over the Oregon Seed Council radio network operated for this purpose, on an as needed basis, depending on atmospheric and air quality conditions.

(a) Any person open burning or preparing to open burn under these rules shall conduct the burning operation in accordance with the Department's burning schedule.

(b) Any person open burning or preparing to open burn fields under these rules shall monitor the Department's field burning schedule broadcasts and shall conduct the burning operations in accordance with the announced schedule.

(5) [(4)]. Any person open field burning under these rules shall actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department. Normal after smoulder excepted.

(6) No person shall conduct open burning which results in a direct smoke and/or ash nuisance for adjacent residential communities, schools, or other smoke sensitive areas.

26-011 CERTIFIED ALTERNATIVE TO OPEN FIELD BURNING.

(1) Approved pilot field sanitizers, approved experimental field sanitizers, or propane flammers may be used as alternatives to open field burning subject to the provisions of this section.

(2) Approved Pilot Field Sanitizers.

(3) Procedures for submitting application for approval of pilot field sanitizers.

Applications shall be submitted in writing to the Department and shall include, but not be limited to, the following:

- (i) Design plans and specifications;
- (ii) Acreage and emission performance data and rated capacities;
- (iii) Details regarding availability of repair service and replacement parts;
- (iv) Operational instructions.

(b) Emission Standards for Approved Pilot Field Sanitizers.

(A) Approved pilot field sanitizers shall be required to demonstrate the capability of sanitizing a representative harvested grass or cereal grain field with an accumulative straw and stubble fuel load of not less than 1.0 ton/acre, dry weight basis, and which has an average moisture content not less than 10%, at a rate of not less than 85% of rated maximum capacity for a period of 30 continuous minutes without exceeding emission standards as follows:

- (i) Main stack: 20% average opacity;
- (ii) Leakage: not to exceed 20% of the total emissions.
- (iii) After-smoke: No significant amounts originating more than 25 yards behind the operating machine.

(B) The Department shall certify in writing to the manufacturer, the approval of the pilot field sanitizer within thirty (30) days of the receipt of a complete application and successful compliance demonstration with the emission standards of 2(b)(A). Such approval shall apply to all machines built to the specifications of the Department certified field sanitation machine.

(C) In the event of the development of significantly superior field sanitizers, the Department may decertify approved pilot field sanitizers previously approved, except that any unit built prior to this decertification in accordance with specifications of previously approved pilot field sanitizers shall be allowed to operate for a period not to exceed seven years from the date of delivery provided that the unit is adequately maintained as per (2)(c)(A).

(c) Operation and/or modification of approved pilot field sanitizers.

(A) Operating approved pilot field sanitizers shall be maintained to design specifications (normal wear expected) i.e., skirts, shrouds, shields, air bars, ducts, fans, motors, etc., shall be in place, intact and operational.

(B) Modifications to the structure or operating procedures which will knowingly increase emissions shall not be made.

(C) Any modifications to the structure or operating procedures which result in increased emissions shall be further modified or returned to manufacturer's specifications to reduce emissions to original levels or below as rapidly as practicable.

(D) Open fires away from the sanitizers shall be extinguished as rapidly as practicable.

(3) Experimental field sanitizers not meeting the emission criteria specified in 2(b)(A) above, may receive Department authorization for experimental use for not more than one season at a time, provided:

(a) The operator of the field sanitizers shall report to the Department the locations of operation of experimental field sanitizers.

(b) Open fires away from the machines shall be extinguished as rapidly as practicable.

(c) Adequate water supply shall be available to extinguish open fires resulting from the operation of field sanitizers.

(4) Propane Flamers. Propane flaming is an approved alternative to open field

burning provided that all of the following conditions are met:

- (a) Field sanitizers are not available or otherwise cannot accomplish the burning.
- (b) The field stubble will not sustain an open fire.
- (c) One of the following conditions exist:
 - (A) The field has been previously open burned and appropriate fees paid.
 - (B) The field has been flailchopped, mowed, or otherwise cut close to the ground and loose straw has been removed to reduce the straw fuel load as much as practicable.

26-012 REGISTRATION AND AUTHORIZATION OF ACREAGE TO BE OPEN BURNED.

- (1) On or before April 1 of each year, all acreages to be open burned under this rule shall be registered with the local fire permit issuing agency or its authorized representative on forms provided by the Department. A nonrefundable \$1.00 per acre registration fee shall be paid at the time of registration.
- (2) Registration of acreage after April 1 of each year shall require:
 - (a) Approval of the Department.
 - (b) An additional late registration fee of \$1.00 per acre if the late registration is determined by the Department to be the fault of the late registrant.
- (3) Copies of all Registration/Application forms shall be forwarded to the Department and the Executive Department promptly by the local fire permit issuing agency.
- (4) The local fire permitting agency shall maintain a record of all registered acreage by assigned field number, location, type of crop, number of acres to be burned and status of fee payment for each field.
- (5) Burn authorizations shall be issued by the local fire permit issuing agency up to daily quota limitations established by the Department and shall be based on registered fee paid acres and shall be issued in accordance with the priorities established by subsection 26-010(1) of these rules, except that fourth priority burning shall not be permitted from July 15 to September 15 of any year unless specifically authorized by the Department.
- (6) No local fire permit issuing agency shall authorize open field burning of more acreage than may be sub-allocated annually to the District by the Department pursuant to Section 26-013(5) of these rules.

26-013 LIMITATION AND ALLOCATION OF ACREAGE TO BE OPEN BURNED.

- (1) Except for acreage to be burned under 26-013(6) and (7), the maximum acreage to be open burned under these rules:
 - (a) ~~During 1978;~~ Shall not exceed 180,000 acres.
 - (b) May be further reduced such that, if by September 7 of each year, the average of total cumulative hours of nephelometer readings exceeding 2.4×10^{-4} B-scat units at Eugene and Springfield, which have been determined by the Department to have been significantly caused by field burning, equals or exceeds 16 hours, the maximum acreage to be open burned under these rules shall not exceed 150,000 acres and the sub-allocation to the fire permit issuing agencies shall be reduced accordingly, subject to the further provisions that:
 - (A) Unused permit allocations may be validated and used after the 150,000 acre cut-off only on unlimited ventilation days as may be designated by the Department, and
 - (B) The Commission may establish a further acreage limitation not to exceed 15,000 acres over and above the 150,000 acre limitation and authorize permits to be issued pursuant thereto, in order to provide growers of bentgrass seed crops

and other late maturing seed crops opportunity to burn equivalent to that afforded growers of earlier maturing crops.

(c) ~~[(b)]~~ During 1979 and each year thereafter shall be determined and established by the Commission ~~[by-January-1-of-1979-and]~~ by January 1 of each odd year ~~[thereafter]~~. ~~[This-determination]~~ The Commission shall ~~[be-made]~~ after taking into consideration the factors listed in subsection (2) of ORS 468.460, ~~[shall]~~ by order indicate the number of acres for which permits may be issued for the burning of such acreage as it considers appropriate and necessary, upon finding that open burning of such acreage will not substantially impair public health and safety and will not substantially interfere with compliance with relevant state and federal laws regarding air quality.

(2) Any revisions to the maximum acreage to be burned, allocation procedures, permit issuing procedures or any other substantive changes to these rules affecting the open field burning program for any year shall be made prior to June 1 of that year. In making these rule changes the Commission shall consult with Oregon State University (OSU) and may consult with other interested agencies.

(3) Acres burned on any day by approved field sanitizers and approved experimental field sanitizers and propane flammers shall not be applied to open field burning acreage allocations or quotas, and such equipment may be operated under either marginal or prohibition conditions.

(4) In the event that total registration is less than or equal to the acreage allowed to be open burned under section 26-013(1) all registrants shall be allocated 100 percent of their registered acres.

(5) In the event that total registration exceeds the acreage allowed to be open burned under 26-013(1) the Department may issue acreage allocations to growers totaling not more than 110 percent of the acreage allowed under Section 26-013(1). The Department shall monitor burning and shall cease to issue burning quotas when the total acreage reported burned equals the maximum acreage allowed under section 26-013(1).

(a) Each year the Department shall suballocate 110 percent of the total acre allocation established by the Commission, as specified in Section 26-013(1), to the respective growers on a pro rata share basis of the individual acreage registered as of April 1 to the total acreage registered as of April 1.

(b) Except as provided in sub-section (1)(b) of this section, [Each year] the Department shall suballocate the total acre allocation established by the Commission, as specified in Section 26-013(1) to the respective fire permit issuing agencies on a pro rata share basis of the acreage registered within each fire permit issuing agency's jurisdiction as of April 1 of each year to the total acreage registered as of April 1 of each year.

(c) In an effort to insure that permits are available in areas of greatest need, to coordinate completion of burning, and to achieve the greatest possible permit utilization, the Department may adjust, in cooperation with the fire districts, allocations of the maximum acreage allowed in Section 26-013(1).

(d) Transfer of allocations for farm management purposes may be made within and between fire districts on a one-in/one-out basis under the supervision of the Department. Transfer of allocations between growers are not permitted after the maximum acres specified in Section 26-013(1) have been burned within the Valley.

(e) Except for additional acreage allowed to be burned by the Commission as provided for in ~~[(7)]~~ (6) and ~~[(8)]~~ (7) of this subsection no fire district shall allow acreage to be burned in excess of their allocations assigned pursuant to (b), (c) and (d) above.

(6) [~~7~~] Notwithstanding the acreage limitations under 26-013(1), the Department may allow experimental open burning pursuant to Section 9 of the 1977 Oregon Laws, Chapter 650, (HB 2196). Such experimental open burning shall be conducted only as may be specifically authorized by the Department and will be conducted for gathering of scientific data, or training of personnel or demonstrating specific practices. The Department shall maintain a record of each experimental burn and may require a report from any person conducting an experimental burn stating factors such as:

1. Date, time and acreage of burn.
2. Purpose of burn.
3. Results of burn compared to purpose.
4. Measurements used, if any.
5. Future application of results of principles featured.

(a) Experimental open burning, exclusive of that acreage burned by experimental open field sanitizers, shall not exceed 7500 acres during 1978.

(b) For experimental open burning the Department may assess an acreage fee equal to that charged for open burning of regular acres. Such fees shall be segregated from other funds and dedicated to the support of smoke management research to study variations of smoke impact resulting from differing and various burning practices and methods. The Department may contract with research organizations such as academic institutions to accomplish such smoke management research.

(7) [~~8~~] Pursuant to ORS 468.475(6) and (7) the Commission may permit the emergency open burning under the following procedures:

(a) A grower must submit to the Department an application form for emergency field burning requesting emergency burning for one of the following reasons;

(A) Extreme hardship documented by:

An analysis and signed statement from a CPA, public accountant, or other recognized financial expert which establishes that failure to allow emergency open burning as requested will result in extreme financial hardship above and beyond mere loss of revenue that would ordinarily accrue due to inability to open burn the particular acreage for which emergency open burning is requested. The analysis shall include an itemized statement of the applicant's net worth and include a discussion of potential alternatives and probable related consequences of not burning.

(B) Disease outbreak, documented by:

An affidavit or signed statement from the County Agent, State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists due to a disease outbreak that can only be dealt with effectively and practically by open burning.

The statement must also include at least the following:

- i) time field investigation was made,
- ii) location and description of field,
- iii) crop,
- iv) infesting disease,
- v) extent of infestation (compared to normal),
- vi) necessity and urgency to control,
- vii) availability, efficacy and practicability of alternative control procedures,
- viii) probable damages or consequences of non-control.

(C) Insect infestation, documented by:

Affidavit or signed statement from the County Agent, State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists due to an insect infestation that can only be dealt with effectively and practicably by open burning. The statement must also include at least the following:

- i) time field investigation was made,
- ii) location and description of field,
- iii) crop,
- iv) infesting insect,
- v) extent of infestation (compared to normal),
- vi) necessity and urgency to control,
- vii) availability, efficacy, and practicability of alternative control procedures,
- viii) probable damages or consequences of non-control.

(D) Irreparable damage to the land documented by an:

An affidavit or signed statement from the County Agent, State Department of Agriculture, or other public agricultural expert authority that, based on his personal investigation, a true emergency exists which threatens irreparable damage to the land and which can only be dealt with effectively and practicably by open burning. The statement must also include at least the following:

- i) time of field investigation,
- ii) location and description of field,
- iii) crop,
- iv) type and characteristics of soil,
- v) slope and drainage characteristics of field,
- vi) necessity and urgency to control,
- vii) availability, efficacy and practicability of alternative control procedures,
- viii) probable damages or consequences of non-control.

(b) Upon receipt of a properly completed application form and supporting documentation the Commission shall within 10 days, return to the grower its decision.

(c) An open field burning permit, to be validated upon payment of the required fees, shall be promptly issued by the Department for that portion of the requested acreage which the Commission has approved.

(d) Application forms for emergency open field burning provided by the Department must be used and may be obtained from the Department either in person, by letter or by telephone request.

(8) [~~9~~] The Department shall act, pursuant to this section, on any application for a permit to open burn under these rules within 60 days of registration and receipt of the fee provided in ORS 468.480.

(9) [~~10~~] The Department may on a fire district by fire district basis, issue limitations more restrictive than those contained in these regulations when in their judgment it is necessary to attain and maintain air quality.

26-015 WILLAMETTE VALLEY SUMMER BURNING SEASON REGULATIONS

As provided for in Section 6 of Oregon Law 1977, Chapter 650, the Department shall conduct a smoke management program which shall include in addition to other provisions covered in these rules the following provisions:

(1) Classification of Atmospheric Conditions. All days will be classified as marginal or prohibition days under the following criteria:

(a) Marginal Class N conditions: Forecast northerly winds, a mixing depth greater than 3500 feet [~~and relative humidity less than 50 percent.~~]

(b) Marginal Class S conditions: Forecast southerly winds.

(c) Prohibition conditions: Forecast northerly winds, a mixing depth of 3500 feet or less, and/or relative humidity greater than [50] 65 percent.

(d) Unlimited Ventilation conditions: A mixing depth of 5000 feet or greater and a ventilation index of 32.5 or greater.

(2) Quotas.

(a) Except as provided in this subsection, the total acreage of permits for open field burning shall not exceed the amount authorized by the Department for each marginal day. Daily authorizations of acreages shall be issued in terms of basic quotas or, priority area quotas as listed in Table 1, attached as Exhibit A and incorporated by reference into this regulation and schedule, and defined as follows:

(A) The basic quota represents the number of acres to be allowed throughout a permit jurisdiction, including fields located in priority areas, on a marginal day on which general burning is allowed in that jurisdiction.

(B) The priority area quota represents the number of acres allowed within the priority areas of a permit jurisdiction on a marginal day when only priority area burning is allowed in that jurisdiction.

(b) Willamette Valley permit agencies or agents not specifically named in Table 1 shall have a basic quota and priority area quota of 50 acres only if they have registered acreage to be burned within their jurisdiction.

(c) In no instance shall the total acreage of permits issued by any permit issuing agency or agent exceed that allowed by the Department for the marginal day, except as provided for 50 acre quotas as follows: When the established daily acreage quota is 50 acres or less, a permit may be issued to include all the acreage in one field providing that field does not exceed 100 and provided further that no other permit is issued for that day. For those districts with a 50 acre quota, permits for more than 50 acres shall not be issued on two consecutive days.

(d) The Department may designate additional areas as Priority Areas, and may adjust the basic acreage quotas or priority area quotas of any permit jurisdiction, where conditions in their judgment warrant such action.

(3) Burning Hours.

(a) Burning hours may begin at 9:30 a.m. PDT, under marginal conditions but no open field burning may be started later than one-half hour before sunset or be allowed to continue burning later than one-half hour after sunset.

(b) The Department may alter burning hours according to atmospheric ventilation conditions when necessary to attain and maintain air quality.

(c) Burning hours may be reduced by the fire chief or his deputy when necessary to protect from danger by fire.

(4) Extent and Type of Burning.

(a) Prohibition. Under prohibition conditions, no fire permits or validation numbers for agricultural open burning shall be issued and no burning shall be conducted, except where an auxiliary liquid or gaseous fuel is used such that combustion is essentially complete, or an approved field sanitizer is used.

(b) Marginal Class N Conditions. Unless specifically authorized by the Department, on days classified as Marginal Class N burning may be limited to the following:

(A) North Valley: one basic quota may be issued in accordance with Table 1 except that no acreage located within the permit jurisdictions of Aumsville, Drakes Crossing, Marion County District 1, Silverton, Stayton, Sublimity, and the Marion County portions of the Clackamas-Marion Forest Protection District shall be burned upwind of the Eugene-Springfield non-attainment area.

(B) South Valley: one priority area quota for priority area burning may be issued in accordance with Table 1.

(c) Marginal Class S Conditions. Unless specifically authorized by the Department on days classified as Marginal Class S conditions, burning shall be limited to the following:

(A) North Valley: One basic quota may be issued in accordance with Table 1 in the following permit jurisdictions: Aumsville, Drakes Crossing, Marion County District 1, Silverton, Stayton, Sublimity, and the Marion County portion of the Clackamas-Marion Forest Protection District. One priority area quota may be issued in accordance with Table 1 for priority area burning in all other North Valley jurisdictions.

(B) South Valley: One basic quota may be issued in accordance with Table 1.

(d) Special Restrictions on Priority Area Burning.

(A) No priority acreage may be burned on the upwind side of any city, airport, or highway within the same priority areas.

(B) No south priority acreage [may] shall be burned upwind of [any-city; airport;-or-highway-within-a-priority-area-unless-the-mixing-height-is-forecast-greater-than-4,000-feet:] the Eugene-Springfield non-attainment area unless when burned the resultant smoke is effectively passed over the city at no less than 3000 feet above mean sea level.

[(e)-All-south-priority-acreages-located-upwind-of-the-Eugene-Springfield-priority-area-shall-be-burned-using-backing-fire-or-into-the-wind-strip-lighting-techniques;-except-as-provided-by-26-015(4)(c):-]

(e) Restrictions on burning techniques.

(A) All annual grass seed crops, cereal crops, and if so directed by the Department, bentgrass crops shall be burned using into-the-wind strip burning methods except when unlimited ventilation conditions exist.

(B) [(e)] The Department shall require acreages to be burned using [back-fire-or] into-the-wind strip[lighting] burning techniques when, in the Department's judgment, use of such techniques will reduce adverse effects on air quality.

~~[(5)-After-September-1,-1978,-no-field-shall-be-burned-which-has-an-average fuel-moisture-content-greater-than-20-percent-wet-weight-basis,-as-determined-by using-the-Department-of-Environmental-Quality-fuel-moisture-test-procedures.]~~

(f) Restrictions on burning due to rainfall.

(A) Burning shall not be permitted in an area for one drying day for each 0.10 inch of rainfall received at the nearest measuring station up to a maximum of four drying days.

(B) The Department may on a field-by-field or area-by-area basis waive the restrictions of (A) above when dry fields are available through special preparation or unusual rainfall patterns and wind direction and dispersion conditions are appropriate for burning with minimum smoke impact.

TABLE 1
FIELD BURNING ACREAGE QUOTAS
NORTH VALLEY AREAS

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>North Valley Counties</u>		
<u>Clackamas County</u>		
Canby RFPD	50	0
Clackamas County #54	50	0
Clackamas - Marion FPA	[50] <u>100</u>	0
Estacada RFPD	75	0
Molalla RFPD	50	0
Monitor RFPD	50	0
Scotts Mills RFPD	<u>50</u>	<u>0</u>
Total	[375] <u>425</u>	0
<u>Marion County</u>		
Aumsville RFPD	[50] <u>100</u>	0
Aurora-Donald RFPD	50	50
Drakes Crossing RFPD	[50] <u>100</u>	0
Hubbard RFPD	50	0
Jefferson RFPD	225	50
Marion County #1	[100] <u>200</u>	50
Marion County Unprotected	50	50
Mt. Angel RFPD	50	0

TABLE I
(continued)

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>North Valley Counties</u>		
<u>Marion County (continued)</u>		
St. Paul RFPD	125	0
Salem City	50	50
Silverton RFPD	[300] <u>600</u>	0
Stayton RFPD	[150] <u>300</u>	0
Sublimity RFPD	[250] <u>500</u>	0
Turner RFPD	50	50
Woodburn RFPD	<u>125</u>	<u>50</u>
Total	[1675] <u>2575</u>	[200] <u>350</u>
<u>Polk County</u>		
[Polk-County-Non-District] <u>Amity #2</u>	50	0
Southeast Rural Polk	400	50
Southwest Rural Polk	<u>125</u>	<u>50</u>
Total	<u>575</u>	<u>100</u>
<u>Washington County</u>		
Cornelius RFPD	50	0
Forest Grove RFPD	50	0
Forest Grove, State Forestry	50	0
Hillsboro	50	0
Washington County RFPD #1	50	50
Washington County FPD #2	<u>50</u>	<u>50</u>
Total	<u>300</u>	<u>150</u>

TABLE 1
(continued)

<u>County/Fire District</u>	<u>Quota</u>	
	<u>Basic</u>	<u>Priority</u>
<u>North Valley Counties</u>		
<u>Yamhill County</u>		
Amity #1 RFPD	125	50
Carlton RFPD	50	0
Dayton RFPD	50	50
Dundee RFPD	50	0
McMinville RFPD	150	75
Newberg RFPD	50	50
Sheridan RFPD	75	50
Yamhill RFPD	<u>50</u>	<u>50</u>
Total	<u>600</u>	<u>325</u>
<u>North Valley Total</u>	<u>4475</u>	<u>875</u>

TABLE I
(continued)
SOUTH VALLEY AREAS

<u>County/Fire District</u>	<u>Quota</u>	
<u>South Valley Counties</u>	<u>Basic</u>	<u>Priority</u>
<u>Benton County</u>		
County Non-District & Adair	350	175
Corvallis RFPD	175	125
Monroe RFPD	325	50
Philomath RFPD	125	100
Western Oregon RFD	<u>100</u>	<u>50</u>
Total	<u>1075</u>	<u>500</u>
<u>Lane County</u>		
Coburg RFPD	175	50
Creswell RFPD	75	100
Eugene RFPD		
(Zumwalt RFPD)	50	50
Junction City RFPD	325	50
Lane County Non-District	100	50
Lane County RFPD #1	350	150
Santa Clara RFPD	50	50
Thurston-Walterville	50	50
West Lane RPD	<u>50</u>	<u>0</u>
Total	<u>1225</u>	<u>550</u>
<u>Linn County</u>		
Albany RFPD (inc. N. Albany, Palestine, Co. Unprotected Areas)	625	125
Brownsville RFPD	750	100

TABLE I
(continued)

<u>County/Fire District</u>	<u>Quota</u>	
<u>South Valley Counties</u>	<u>Basic</u>	<u>Priority</u>
<u>Linn County (continued)</u>		
Halsey-Shedd RFPD	2050	200
Harrisburg RFPD	1350	50
Lebanon RFPD	325	325
Lyons RFPD	50	0
Scio RFPD	175	50
Tangent RFPD	<u>925</u>	<u>325</u>
Total	<u>6250</u>	<u>1225</u>
<u>South Valley Total</u>	<u>8550</u>	<u>2275</u>

26-020 WINTER BURNING SEASON REGULATIONS.

(1) Classification of atmospheric conditions:

(a) Atmospheric conditions resulting in computed air pollution index values in the high range, values of 90 or greater, shall constitute prohibition conditions.

(b) Atmospheric conditions resulting in computed air pollution index values in the low and moderate ranges, values less than 90, shall constitute marginal conditions.

(2) Extent and Type of Burning.

(a) Burning Hours. Burning hours for all types of burning shall be from 9:00 a.m. until 4:00 p.m., but may be reduced when deemed necessary by the fire chief or his deputy. Burning hours for stumps may be increased if found necessary to do so by the permit issuing agency. All materials for burning shall be prepared and the operation conducted, subject to local fire protection regulations, to insure that it will be completed during the allotted time.

(b) Certain Burning Allowed Under Prohibition Conditions. Under prohibition conditions no permits for agricultural open burning may be issued and no burning may be conducted, except where an auxiliary liquid or gaseous fuel is used such that combustion is essentially complete, or an approved field sanitizer is used.

(c) Priority for Burning on Marginal Days. Permits for agricultural open burning may be issued on each marginal day in each permit jurisdiction in the Willamette Valley, following the priorities set forth in ORS 468.450 which gives perennial grass seed fields used for grass seed production first priority, annual grass seed fields used for grass seed production second priority, grain fields third priority and all other burning fourth priority.

26-025 CIVIL PENALTIES. In addition to any other penalty provided by law:

(1) Any person who intentionally or negligently causes or permits open field burning contrary to the provisions of ORS 468.450, 468.455 to 468.480, 476.380 and 478.960 shall be assessed by the Department a civil penalty of at least \$20, but not more than \$40 for each acre so burned.

(2) Any person planting contrary to the restrictions of subsection (1) of ORS 468.465 shall be assessed by the Department a civil penalty of \$25 for each acre planted contrary to the restrictions.

(3) Any person who violates any requirements of these rules shall be assessed a civil penalty pursuant to OAR Chapter 340, Division 1, Subdivision 2, CIVIL PENALTIES.

26-030 TAX CREDITS FOR APPROVED ALTERNATIVE METHODS, APPROVED INTERIM ALTERNATIVE METHODS OR APPROVED ALTERNATIVE FACILITIES.

(1) As provided in ORS 468.150, approved alternative methods or approved alternative facilities are eligible for tax credit as pollution control facilities as described in ORS 468.155 through 468.190.

(2) Approved alternative facilities eligible for pollution control facility tax credit shall include:

(a) Mobile equipment including but not limited to:

(A) Straw gathering, densifying and handling equipment.

(B) Tractors and other sources of motive power.

(C) Trucks, trailers, and other transportation equipment.

(D) Mobile field sanitizers (approved models and approved pilot models)

and associated fire control equipment.

- (E) Equipment for handling all forms of processed straw.
- (F) Special straw incorporation equipment.
- (b) Stationary equipment and structures including but not limited to:
 - (A) Straw loading and unloading facilities.
 - (B) Straw storage structures.
 - (C) Straw processing and in plant transport equipment.
 - (D) Land associated with stationary straw processing facilities.
 - (E) Drainage tile installations which will result in a reduction of acreage

burned.

(3) Equipment and facilities included in an application for certification for tax credit under this rule will be considered at their current depreciated value and in proportion to their actual use to reduce open field burning as compared to their total farm or other use.

(4) Procedures for application and certification of approved alternative facilities for pollution control facility tax credit.

(a) Preliminary certification for pollution control facility tax credit.

(A) A written application for preliminary certification shall be made to the Department prior to installation or use of approved alternative facilities in the first harvest season for which an application for tax credit certification is to be made. Such application shall be made on a form provided by the Department and shall include but not be limited to:

(i) Name, address and nature of business of the applicant.

(ii) Name of person authorized to receive Department requests for additional information.

(iii) Description of alternative method to be used.

(iv) A complete listing of mobile equipment and stationary facilities to be used in carrying out the alternative methods and for each item listed include:

(a) Date or estimated future date of purchase.

(b) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their total farm or other use.

(v) Such other information as the Department may require to determine compliance with state air, water, solid waste, and noise laws and regulations and to determine eligibility for tax credit.

(B) If, upon receipt of a properly completed application for preliminary certification for tax credit for approved alternative facilities the Department finds the proposed use of the approved alternative facilities are in accordance with the provisions of ORS 468.175, it shall, within 60 days, issue a preliminary certification of approval. If the proposed use of the approved alternative facilities are not in accordance with provisions of ORS 468.175, the Commission shall, within 60 days, issue an order denying certification.

(b) Certification for pollution control facility tax credit.

(A) A written application for certification shall be made to the Department on a form provided by the Department and shall include but not be limited to the following:

(i) Name, address and nature of business of the applicant.

(ii) Name of person authorized to receive Department requests for

additional information.

(iii) Description of the alternative method to be used.

(iv) For each piece of mobile equipment and/or for each stationary facility, a complete description including the following information as applicable:

(a) Type and general description of each piece of mobile equipment.

(b) Complete description and copy of proposed plans or drawings of stationary facilities including buildings and contents used for straw storage, handling or processing of straw and straw products or used for storage of mobile field sanitizers and legal description of real property involved.

(c) Date of purchase or initial operation.

(d) Cost when purchased or constructed and current value.

(e) General use as applied to approved alternative methods and approved interim alternative methods.

(f) Percentage of use allocated to approved alternative methods and approved interim alternative methods as compared to their farm or other use.

(B) Upon receipt of a properly completed application for certification for tax credit for approved alternative facilities or any subsequently requested additions to the application, the Department shall return within 120 days the decision of the Commission and certification as necessary indicating the portion of the cost of each facility allocable to pollution control.

(5) Certification for tax credits of equipment or facilities not covered in OAR Chapter 340, Section 26-030(1) through 26-030(4) shall be processed pursuant to the provisions of ORS 468.165 through 468.185.

(6) Election of type of tax credit pursuant to ORS 468.170(5).

(a) As provided in ORS 468.170(5), a person receiving the certification provided for in OAR Chapter 340, Section 26-030(4)(b) shall make an irrevocable election to take the tax credit relief under ORS 316.097, 317.072, or the ad valorem tax relief under ORS 307.405 and shall inform the Department of his election within 60 days of receipt of certification documents on the form supplied by the Department with the certification documents.

(b) As provided in ORS 468.170(5) failure to notify the Department of the election of the type of tax credit relief within 60 days shall render the certification ineffective for any tax relief under ORS 307.405, 316.097 and 317.072.

Agenda Item E, December 15, 1978, EQC Meeting

FIELD BURNING RULES - PROPOSED ADOPTION OF REVISIONS TO
AGRICULTURAL BURNING RULES, INCLUDING OPEN FIELD BURNING
ACREAGE LIMITATIONS FOR 1979-80 BURNING SEASON, OAR 340-26-005
through OAR 340-26-030

Amended Director's Recommendation

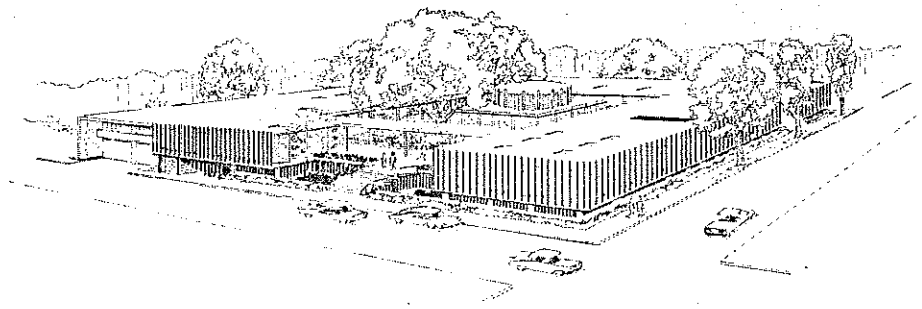
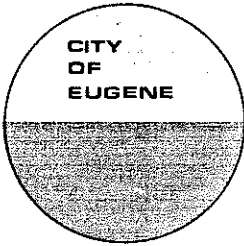
Based upon the information set forth in pages 1-18 of the Director's December 15, 1978, staff report to the Commission; the testimony in the record of the November 17, 1978, public hearing; and the recommendations of Oregon State University pursuant to ORS 468.460(3), it is recommended that the Environmental Quality Commission act as follows:

1. Enter a finding that the open burning of 180,000 acres pursuant to the proposed rules in Attachment 1 to the Director's Staff Report will not substantially impair public health and safety and will not substantially interfere with compliance with relevant State and Federal Laws.
2. Designate as its final State of Need for Rulemaking the Statement of Need set forth on pages two and three of the Director's Staff Report.
3. Adopt as permanent rules the proposed rules set forth in Attachment 1 to the Director's Staff Report, such rules to become effective upon their prompt filing (along with the State of Need for Rulemaking) with the Secretary of State and to include an Order establishing 180,000 acres as the number of acres for which permits may be issued for open field burning.
4. Instruct the staff to submit the rules set forth in attachment 1 of the Director's Staff Report to EPA pursuant to Federal rules, but request that these rules not be acted upon ^{by EPA} except as they may be later submitted as a part of an overall State Implementation Plan Revision package.

Bill

WILLIAM H. YOUNG

PWMC:cs/jas
12/12/78



OFFICE OF THE CITY MANAGER
503/687-5010

P.O. BOX 1967

EUGENE, OREGON
97401

December 15, 1978

TO: ENVIRONMENTAL QUALITY COMMISSION
FROM: ROBERT ELFERS, REPRESENTING THE CITY OF EUGENE
SUBJECT: MODIFICATIONS TO THE PROPOSED FIELD BURNING REGULATIONS

Although the City of Eugene continues to have a number of reservations about the proposed field burning rules, at this time it is primarily concerned with the staff's revised position on straw moisture content restrictions.

The staff originally proposed, at the Commission's hearing on November 17, a retention of the 12% moisture content rule, except on unlimited ventilation days, [26-010(3)(c)] and a prohibition when the relative humidity is greater than 50% [26-015(1)(d)]. The staff supported its proposal with the following justifications:

"...analysis of data accumulated during the 1978 season indicates fuel moisture content to be a significant variable affecting total particulate production from field fires. However, further analysis of the 1978 data may support a change away from the 12% moisture content value to a different value."

"It is believed that the high moisture content in regrowth contributes to higher particulate emission. Analysis of emission testing data collected this summer will help determine more specifically the effect of regrowth on emissions."

"... development of the regulation in c. above, should proceed based upon the analysis of this summer's emission testing..."

However, in the current staff report and proposed regulations, the 12% rule is completely eliminated and the 50% relative humidity restriction is lessened to 65%. No justification is offered by the staff in support of this revision.

Although the City of Eugene had suggested the dropping of the 12% moisture content rule in favor of the 50% relative humidity restriction, it strongly questions the wisdom of relaxing at the same time the 50% restriction. What information from this year's burning data does the staff have to justify its changed position from that position proposed and justified last month? If anything, it would appear that data from this summer's emission testing would support the opposite action.

This area of the rules would appear one of the few opportunities available in the smoke management program to reduce emissions while still allowing burning. The importance of a moisture restriction is to reduce the intensity of any smoke intrusion which may occur. Statistical analyses show that more intensive smoke intrusions are associated with higher relative humidity levels.

The staff's revised proposal appears to amount to no restriction at all. This position is supported by burning statistics from the period 1973-1977. During that time, under a variety of smoke management programs, an average of 17% of the total acres burned were burned when the relative humidity was greater than 50%. However, only an average of 2% of the total acres burned were burned when the relative humidity was greater than the proposed 65% relative humidity. The average number of total acres burned during this 5 year period of time was 213,500 acres. Based purely upon past statistical analysis, an imposition of the 50% relative humidity restriction should not prevent the proposed 180,000 acres from being burned. Additional statistical analysis from these 5 burning

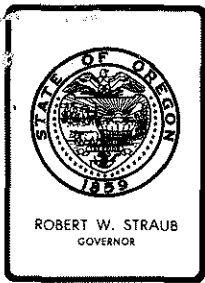
seasons reflects a contrasting potential of a 4,800 ton reduction of emissions to only a 150 ton reduction in emissions under the less restrictive relative humidity rule.

Although the staff equates the 65% relative humidity level to that of a 12% moisture content restriction, this relationship only exists during dry weather conditions. Later in the season, when there is a greater potential for wetter weather, greater straw moisture and regrowth, the 65% relative humidity level may be entirely ineffective.

The City of Eugene is not interested in unnecessarily restricting the number of burning days available to the seed industry. However, it is suggested that the Commission should not support a lessening of the moisture content restrictions unless information is presented to it to document such an action. The City feels that this summer's emission testing data does not support the staff's revised position on this matter.

###

cc: Scott Freeburn
DEQ Field Burning Office
16 Oakway Mall
Eugene, Oregon 97401



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. G, December 15, 1978, EQC Meeting

Three Changes to Proposed Volatile Organic Compound Rules

Background

Since the December 5, 1978, Memorandum on VOC rules was written, additional comment and data has been acquired. Therefore, the staff desires the commission to pass the proposed VOC rules with three amendments: delete two chemicals from the VOC exempt list, add a special standard for a certain paper coating process, and add certain details to the roofing tar rule.

Two errors were found in the December 5, 1978, Memorandum, and the staff would like to enter corrections into the public record. On page 5 it was stated that an LAER rule was needed to receive delegation from EPA to review new sources. This is not true, as the state already conducts new source reviews. The rule is actually needed to satisfy the 1977 Clean Air Act Amendments and keep EPA from imposing those Amendments on Oregon sources through establishment of a parallel federal program.

On page 6 it is stated that filling gasoline into barges and railroad tank cars amounted to only 5% of the gasoline delivered; new data shows that it amounts to 19% of the total gasoline handled. The staff will propose rules for this source after the federal control guideline document for it is published (scheduled for July, 1979).

Evaluation

1. Methyl Chloroform and Methylene Chloride EPA, through letters and comments at a recent conference, is questioning whether Methyl Chloroform and Methylene Chloride deserve to be exempted from VOC rules, even though they are both of negligible photochemical reactivity. These



Contains
Recycled
Materials

compounds have toxic properties and may have an effect on the earth's ozone layer. EPA is moving them off the exempt list, apparently. Therefore, the staff proposes to remove them from the exempt list until EPA resolves their status.

2. Paper Coating - Inert Gas Process The 3M Company has brought to the staff's attention that the paper coating rule is directly applicable to standard drying ovens, but needs considerable adjustment to be applicable to their inert gas process. These adjustments are not specific in the rule, leaving the regulatory process open to staff interpretation. Since the staff and 3M Company are in agreement that a standard of 4.7 lb VOC per gallon of coating excluding water (emission figured on a plant site basis, monthly average) for 3M's inert gas process represents 65% overall control, while the 2.9 lb VOC per gallon represents 57% overall control, the staff proposes a separate 4.7 lb rule for 3M's inert gas process.

2. Roofing Tar The roofing contractor's association gave the staff a model rule (attached with cover letter) too late to be included in the December 5, 1978, Memorandum. The staff considers the model rule too lengthy, but desires to add two minor features of that model rule to the VOC rule. The staff considers the two rules to be in agreement after these amendments. One feature includes exemptions for small kettles under 159 gallon size (most kettles in use are 500 gallon size and up). The other feature makes the rule more stringent by considering the tar's flash point also.

Summation

The Department staff has received additional information concerning the proposed VOC rules. Based on this information, three areas of the VOC rules need amendment.

Director's Recommendation

It is recommended that, based on the above summation and that in the Memorandum dated December 5, 1978, the Commission take action as stated in the recommendation dated December 5, 1978, but also amend the VOC rules as follows:

1. delete methyl chloroform and methylene chloride from 340-22-100(1);

Agenda Item G
December 15, 1978
Page 3

2. add an additional line after "Paper Coating" in 340-22-140 which reads
"or Inert Gas Process Paper Coating 567 g*/l 4.7 lb*/Gal
* emission figured on a plant site basis, monthly average"
3. add in 340-22-150 after (550^oF) "or 30^oF below the flash point whichever is the lower temperature," and add a third paragraph
"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."

WILLIAM H. YOUNG

PBBosserman:mg
229-6278
December 14, 1978

Attachment: Roofing Contractor's Model Rule

RECEIVED
DEC 07 1978

AIR QUALITY CONTROL

November 15, 1978

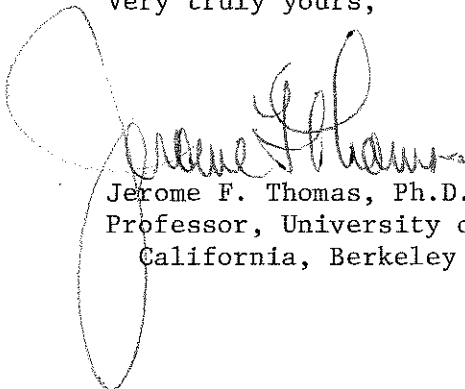
James R. Watts, Esq.
Watts & Watts
3434 S.W. Water Avenue
Portland, Oregon 97201

Dear Mr. Watts:

Attached is a proposed set of rules relative to controlling VOC emissions from heating or holding equipment of hot materials used by the roofing industry. These rules were formulated, based on a review of existing rules and regulations in northern and southern California. In my opinion, the proposed rules insure pollution control from the indicated source. They do not impose unreasonable demands of the industry and assist the control agency by eliminating controversial aspects which have arisen at citation hearings.

You will note that temperature measurement and control is incorporated into the rules. Loading devices are recommended for use when necessary, but at the discretion of the user, and mandatory use is not incorporated into the rules. Emission eliminators are not recommended for use because of the inherent hazard of fire and explosion associated with this type of control equipment.

Very truly yours,



Jerome F. Thomas, Ph.D., P.E.
Professor, University of
California, Berkeley

JFT:jef
Enclosure

ASPHALTIC AND COOL TAR PITCH
USED FOR ROOFING COOLING

340-22-150

- (a) A person shall not operate or use equipment after April 1, 1980 for melting, heating or holding asphalt or coal tar pitch which causes a visual obscuration corresponding to that designated as No. 1 for black smoke on the Ringelmann Chart (United States Bureau of Mines Information Circular 7718) for more than three minutes in any hour. (A twenty percent visual obscuration due to white vapor resulting from the condensation of volatile organic material shall correspond to the value designated as a Ringelmann No. 1.)
- (1) The observation for the determination of such visual obscurations which do not originate from a conventional stack source shall exclude from observation the air space within five feet of the equipment; shall be made from a position such that the line of observation is at approximately a right angle to the line of travel of the emitted material; shall be against a uniform, contrasting background, if possible; shall be made with the observer generally facing away from the sun; shall be made by an observer trained to evaluate white plumes originating from conventional exhaust stacks.

- (2) Emissions which are not continuous will be observed on a cumulative basis.
 - (3) Emissions other than from conventional exhaust stacks shall be minimized by insuring: (i) that each opening in the equipment has a lid that operates and seats properly; (ii) the time any lid is opened to the atmosphere for any reason shall be kept as short as possible.
 - (4) Equipment shall be positioned with respect to prevailing winds and other pertaining factors to minimize public exposure to any emissions.
- (b) A person operating equipment subject to this rule shall provide, properly install and maintain in good working order, devices capable of correctly indicating operating temperatures.
- (1) The temperature of the hot material in the kettle shall not exceed 550°F or 30°F below the flash point, whichever is the lower temperature.
- (c) Any equipment installed for the purpose of meeting (a) above must be of a design approved by the designated organization having jurisdiction relative to fire and safety.
- (d) The provisions of this rule shall not apply to:
- (1) Equipment having a capacity of 100 liters (26,4 gallons) or less; or

- (2) Equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

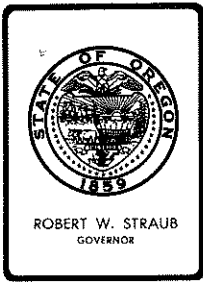
Rationale related to significant points

1. It must be noted that emissions from roofing equipment originate from openings which in no way resemble a smoke stack. To eliminate controversy which can result from this fact, sufficient criteria are presented in (a,1) to indicate the basis on which a citation may be issued.

2. Observations of conventional smoke stacks which are continuously open are generally recorded at fifteen second intervals. Emissions from roofing equipment may occur at intermittent intervals of one to three seconds duration as apertures are rapidly opened and closed. To eliminate controversy, observations are made as indicated in (a,2) on a cumulative basis only when emissions are actually observed.

3. Present emissions control equipment falls into three categories: temperature control, loading devices, and emission eliminators. Compliance can be accomplished in different ways, depending on specific roofing operations. The regulation puts the onus on industry to comply without prescribing how it must be accomplished. This offers advantages to both the industry as well as to the control agencies.

4. A maximum temperature is prescribed for equipment in (b,1). Operation at this temperature or preferably below insures that both emissions and hazards will be greatly reduced.



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. G, December 15, 1978, EQC Meeting

Volatile Organic Compound Rules: Consider Adoption of Additions to the Oregon Clean Air Act Implementation Plan to Include Rules for Volatile Organic Compounds

Background

At its September 22, 1978 meeting the Commission authorized a public hearing on the September 13, 1978 draft of proposed Volatile Organic Compound (VOC) rules, proposed OAR 340-22-100 to 340-22-201 (Attachment A). The hearing authorized on September 22, 1978, was held on October 16, 1978. The many comments received are reviewed in the Evaluation section of this report. This report is supplemental to the September 22, 1978 meeting report and it is suggested that a re-reading of the September 22 report (Attachment C) might be helpful in understanding this report. The October 16, Hearing Officer's report is also appended (Attachment B).

Statement of Need

The complete statement of need presented in the September 22, 1978 report is intended to apply to the action requested at this December 15, 1978 meeting, however. Two reliance documents of the twenty-one listed in that report have been updated and fourteen added as follows:

14. 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.
16. "Emission Standards and Controls for Sources Emitting VOC", draft of Washington State Rules, received November 13, 1978.
22. "Question and Answers Concerning the Basis for the Agency's Position on Controlling Hydrocarbons to Reduce Oxidant," September 28, 1978 letter from EPA's David G. Hawkins.



Contains
Recycled
Materials

23. "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. The eleven EPA guidance documents listed on page 2 of Attachment C.

The statement of need in Attachment C should have added to it the information that the rule is intended to meet the need by requiring 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.

Evaluation of Testimony

The Medford Chamber of Commerce addressed six questions to the Department in its October 27, 1978 letter which address the need for the VOC rules and not their content or form. The questions are repeated, verbatim, as follows, with the Department's answers.

Question 1: What is the ambient oxidant or ozone level that the DEQ hopes to attain in the Medford-Ashland AQMA through the implementation of these regulations? If additional reductions are required, what is the ultimate level of ambient oxidant or ozone that the DEQ plans to attain in this AQMA? What technical and medical data has the DEQ utilized in establishing either of these two ozone levels? If the U.S. EPA changes the National Ambient Air Quality Standard for ozone, will the DEQ also utilize the new level? If the DEQ does not utilize this level, what is the justification for the level that will be used?

Answer: These VOC regulations represent a reasonable first step toward attainment of either the current 160 ug/m³ standard or the proposed 200 ug/m³ federal standard. Additional rules and the process of new, cleaner cars replacing older ones will be required to attain the DEQ and EPA standard of 160 ug/m³ (OAR 340-31-030 and 40 CFR 50.9). The DEQ staff relied primarily upon EPA criteria documents in justifying the 160 ug/m³ level to the Commission when it was adopted as a state standard in 1972. The DEQ staff has followed the technical and medical data presented in the last several years in support of this level and in support of higher levels; see "Health Effects of Exposure to Low Levels of Regulated Air Pollutants", Journal of the Air Pollution Control Association, May 1978, pp. 485-487, and see Federal Register, June 22, 1978 (43 FR 26962-26985) where the 200 ug/m³ standard is proposed. If the U.S. EPA were to change the standard, it is expected that the Department would recommend adoption of the federal standard. EPA has proposed to create a 200 ug/m³ standard as a primary standard; then reclassify the 160 ug/m³ as a secondary standard. If this happens, the DEQ would attempt to meet the federal standards and time schedules as set forth in federal law.

Question 2: What percentage reductions will be required in ozone levels and what corresponding reductions in VOC emissions will be required in each nonattainment AQMA in Oregon? In each of these AQMA's, how will the reductions be apportioned between industry, transportation, and area sources? What is the rationale and justification for each of these apportionments?

Answer: The answers to Question 2 are being pursued by the lead agencies and their citizen's advisory committee in each area. It is suggested that the Chamber follow and participate in the actions of those committees. The answers to most of those questions have not been decided by the committees or calculated by the Department at this time. However, the

EPA has mandated controls on VOC sources covered by these proposed rules as minimum acceptable progress while detailed answers to these questions are being developed.

Question 3: What is the ultimate reductions in both ozone and VOC that will be required in each of the nonattainment AQMA's and how will this reduction be attained?

Answer: Reductions in ozone levels in the Medford area must ultimately be from present levels of approximately $250 \mu\text{u}/\text{m}^3$ to the federal/state standards (currently $160 \mu\text{g}/\text{m}^3$). As indicated in Answer 2 above, ultimate reductions of VOC's to meet the oxidant standard is still being calculated. The reductions obtained through these proposed VOC rules will not meet current or proposed ozone standards. Additional reductions could occur through the federal new car program, a local transportation control plan and control of other sources (such as 3M, Reichhold and vehicle filling at service stations).

Question 4: Has the DEQ made an assessment or monitored any of the rural areas of Oregon that are not heavily impacted by industry or transportation to determine a background level of ozone? If any monitoring has taken place, has it been during stagnation periods?

Answer: Yes. Continuous monitoring is being done for ozone at Gold Hill, and at Sauvies Island and Carus in the Portland air shed. Stagnation periods have been included. In addition some aircraft monitoring has been done in the Willamette and Rogue River valleys.

Question 5: Has the DEQ taken a position on the effect of transport of ozone and VOC into the Medford-Ashland AQMA? What is the technical justification and support for the position the DEQ has taken?

Answer: The DEQ is analyzing the effect of transport and is presenting it to the Medford citizen's advisory committee for their consideration. Transport does occur during non-stagnation conditions. The staff has noted that oxidant violations occur in stagnant air situations in Medford where transport ceases to have a significant effect. Analyses of recently acquired data is expected to provide a better understanding of the extent of ozone transport.

Question 6: Has the DEQ made any assessments of the economic impact or social implication of the regulations that are currently being proposed?

Answer: The economic impact is generally addressed in the guideline documents referenced September 22, 1978 in the Memorandum to the Commission. Also, this question is addressed in the Costs and Energy Requirements section of this report (page 9). The social implication is

believed to be minimal. Some smaller, marginal bulk plants may decide to close down or sell out to larger plants rather than install controls. Except for slightly higher prices, the citizen-on-the-street will not be inconvenienced by these proposed rules, but will benefit from the cleaner air.

The U.S. Environmental Protection Agency, Region X, comments were received by phone call and letter, October 31, 1978. They had two major requests:

1. Remove the permission for other types of capture systems (other than after-burners) to be turned off during the non-oxidant, winter season in 340-22-105. Only natural gas after-burners are allowed this turn-off capability in federal guideline documents. This requested change was made.
2. EPA document 450/2-77-008, pg. C10-C12, lists the oxidant season in Western Oregon as occurring in all months but two. Available data from the Department's "Monthly Graphic O_x" record were sent to Region X proving that November through March months are free of oxidant violations in Western Oregon. Therefore EPA's request to define the "oxidant season" to cover a ten-month period instead of a seven-month period was disallowed.
3. Five additional wording changes requested by EPA for clarification were made as requested. It was agreed that these changes did improve clarification and had no substantive impact on the proposed rules.

At the request of Shell Oil Company and others, a definition of "gasoline" was added to the rules so that other VOC's of low vapor pressure would not be included in the rules concerning gasoline.

Methylene chloride was added to the list of VOC's of negligible photochemical reactivity in 340-22-100(1) at the request of Dow Chemical U.S.A.

The request by Continental Can Company to make the Lowest Achievable Rate (LAER) rule in 340-22-104, which would apply to only new or modified sources, read exactly like the federal Clean Air Act was not done. The rule as proposed is not inconsistent with the Clean Air Act but, in the staff's opinion, reads better. LAER is a requisite part of the Federal Offset Interpretive Ruling and must be promulgated as a state rule in order for the state to receive deligation to review and approve new sources in non-attainment areas.

The request by Associated Oregon Industries to delete Salem from VOC rules was balanced against the staff's inclination to make the entire Willamette Valley into a non-attainment area for oxidant. Ozone violations are widespread throughout the Valley, however, EPA guidance requires control only in designated non-attainment areas and most of the VOC sources are located in the urban areas designated as non-attainment. Salem gasoline marketing contributes to the Valley oxidant problem, so the City of Salem was left in the rule.

The comments by Chevron and Shell concerning references to California-approved systems and test procedures in 340-22-107 are rejected. The reference to California agency approvals is advisory, not binding. The proposed rules require use of California test procedures but do not bind Oregon sources to a 95% control level as required in the California rule. Oregon's proposed rule would require 90% control.

The requests by Continental Can, A.O.I., and Shell to tie compliance schedules to EPA formal approval of the rules is considered unnecessary. EPA has already reviewed the rules and their comments were generally accepted; EPA wrote the Guidance documents which support these rules. The Oregon VOC rules are needed and can stand alone, with or without EPA's approval. While that approval is expected, it could be delayed for administrative reasons beyond Oregon's control. The compliance dates written into the VOC rules provide reasonable planning times; if schedule submittals are delayed for EPA approval, construction or installation times might become unreasonable if EPA approval were delayed very long.

Over half a dozen parties commented that gasoline vapor capture from filling barges and railroad tank cars should be deleted from 340-22-115 and -120. The Department accedes to this request recognizing that the guideline documents did not support this inclusion, that these sources are less than 5% of the filling vapors emitted at the terminals, and that the EPA guideline document is scheduled to be released later for barges.

The Independent Liquid Terminals Association wanted any truck equipped with a VOC capture system to be able to serve accounts with Stage I VOC controls whether or not they are being refilled at a bulk plant that is equipped to capture truck vapors. Section 340-22-115(4), third sentence, does not allow trucks to serve Stage I VOC accounts if the trucks are being refilled at an exempt bulk plant where the vapors will be expelled to the outside air. The objective of the rule is to capture the VOC's, not shift their emission points. Therefore, the requested change was not made.

Union Oil and Shell wanted the compliance date in 340-22-115(5)(b) for bulk plants changed from July 1, 1980 to April 1, 1981 to coincide with the compliance date for service stations and terminals that the bulk plants would serve. This change was made; it will also give the bulk plants more time to finance and accomplish the changes required.

Union Oil wanted a definition of bulk plant and bulk terminal to be included. The rules are believed to be sufficiently clear as written without specific definitions for the various types of facilities. Therefore, no definitions are proposed to be added.

Chevron wanted bulk plants under 20,000 gal/day exempted from the rules as provided in the California rules. This change would exempt all ten of the Medford bulk plants, rather than three. While these plants may serve many exempt accounts, it is proposed that the rule be left as is to at least capture the vapor emitted when the bulk plants' own tanks are filled.

Chevron wanted rule 340-22-120 changed, which requires treatment such that emissions not exceed 80 mg/liter for bulk facilities with throughput greater than 20,000 gal/day; but this rule is adopted directly from the Federal guideline document. Therefore, it is left as is.

GATX's request to delete this single word "tank" from 340-22-115(1) is made.

Multnomah County objected to the cutback asphalt rule as written. A new version of 340-22-125 was submitted to them, which is very close to the proposed Washington State rule. Letters from Multnomah County and the Asphalt Institute, both dated November 13, 1978, approved the new rule's language. The new rule is a clarification of but does not change the impact of the old rule.

The Asphalt Pavement Association of Oregon objected to the cutback asphalt prohibition rule as it has negligible impact on VOC emissions. The rules herein proposed are intended to impose reasonably available control technology over many small and many very small sources of VOC. Each rule applied to each small source is of negligible impact; but together, this body of rules will measurably lessen VOC emissions and oxidant violations in the non-attainment areas. Exemptions are given to allow use of cutback asphalt for patching and penetrating prime coats.

Chevron wanted exemption from covers on wastewater/oil separators in 340-22-130(2) which pertains only to refineries. This rule follows the guideline document and would have effect only if and when a refinery is built in a non-attainment area of Oregon. Therefore, the rule is left as is.

Union, Chevron, and GATX requested that the word 'covered' be deleted in 340-22-135(2) and (3). This change was made. Another Chevron proposed wording change would eliminate the requirement for double seals contained in 340-22-135(1). Therefore, it was not adopted.

Chevron's and Union's requests for relief from 340-22-106, which would require continuous seals on gasoline storage tanks, during gauging and sampling was granted, using the sentence offered by Chevron.

The comments by Continental Can, Crown Zellerbach, National Flexible Packaging Association, Boise Cascade, and 3-M Company concerning rules 340-22-140 pertaining to surface coating and 340-22-200 & -201 which would require 85% control for can and paper coating were very lengthy. There are currently no new plants of the type covered in 340-22-140 planned for Oregon. Only three large existing surface coating plants, two in North Portland and one in the Medford AQMA, exist now. All three plants have controls now, or have plans for controls to meet 340-22-140. Because 340-22-201(2) and (3) represented levels of control which would be technology forcing at this time, they are deleted. The levels set in 340-22-140 are based upon EPA guideline documents which represent average levels of control at plants across the country and can be adjusted for

different situations (such as average density of solvents). Therefore, the proposed 340-22-140 rule was left unchanged except for a requested extension of the compliance date which was changed from April 1, 1981 to December 31, 1982.

The sections on degreasers, 340-22-145, -146, and -147 were extensively revised. The re-written rule conforms to the re-written rule received from the State of Washington, November 13. The rule takes into account the comments from Branson Cleaning Equipment Company and Detrex Chemical Industries, Inc. The level of control is the same under both the previous and presently proposed versions.

The Roofing Contractors Association and Prof. J. F. Thomas presented extensive criticism and research concerning 340-22-150, Asphaltic and Coal Tar Pitch Used for Roofing Coating. The 9/13/78 draft of the rule was modeled after a Los Angeles rule which they claimed has not been complied with. Prof. Thomas' research showed that a tight lid and holding storage (and melt) temperature below 550 F. reduced emissions as much as practicable. The afterburning proposed by 340-22-150 introduced an intolerable explosion hazard. Therefore 340-22-150 was re-written to require only a tight lid and a 550° F. temperature limit. The 20% opacity requirement recommended by Thomas was not added as it exists already as 340-21-015(2).

The rule to require 85% reductions for miscellaneous sources 340-22-200 and -201 was deleted. The reasons are as follows:

1. If passed on December 15, 1978, it would prevent the building of the air-classified-refuse-fueled boiler at the Clackamas site near Oregon City, as that project has not been granted a permit nor begun construction. This project is needed to solve Portland's solid waste disposal problem.
2. The rule goes beyond the guideline documents for reasonable available control technology required by the Environmental Protection Agency.
3. Rules to provide offsets and Lowest Achievable Emission Rate (LAER) for new or modified sources over 100 tons/year of VOC in non-attainment areas are already on the federal books (Interpretive ruling, December 21, 1976). Section 340-22-104 and these proposed imposes Lowest Achievable Emission Rate (LAER) on new or modified VOC sources in non-attainment areas.
4. The more stringent 340-22-200 is technology forcing and is not consistent with these rules generally, which other than the LAER emissions, are based on Reasonable Available Control Technology (RACT)

Costs and Energy Requirements

The Department reviewed the costs and energy requirements for the proposed rules. A cost table is shown below. These costs, the energy required, and other environmental penalties and benefits, for the most part were taken from the EPA guideline documents. In some cases, costs more specific to Oregon plants and situations were used.

It is recognized that if the gas stations and bulk plants were segregated as to gallons-of-gas-handled (through-put), that the cost/ton VOC would be much larger for those with small through-put. Because a 20,000 gal/day through-put exemption point would have exempted all the Oregon bulk plants for which the Department has through-put data, that exemption point was not used. The figure selected of 2,375 gallons per day separated the medium size from the very small size. The proposed 2,000-gallon size gas service station tank exemption point is the same as is used in California. The requested higher exemption point of 5,000 gallons would have exempted 15% of the through-put for Portland (industry provided value) and 23% for Medford (staff calculated value) which the Department considers not stringent enough.

Costs for VOC Rules

<u>Rule</u>	<u>Party Affected</u>	<u>Range of Capital Cost/Source</u>	<u>Cost/Ton VOC/Yr</u>	<u>Source</u>
-110	Gas Station	\$500	\$7.90	DEQ 10/23/78 Memo
-110, -115, -120	Tank Truck	Highly variable	Unknown	-
-115	Bulk Plant	\$10,100 - \$18,800	\$145	EPA-450/3-78-017 Table 5-2
-115, -120	Bulk Terminal	\$140,000 - \$313,000	\$66	DEQ 10/23/78 Memo & EPA-450/3-78-017
-125	Paving Contractors	None	Savings,	EPA-450/2-77-037 but de- lay to winter months for some jobs
-130	Refineries	None	None	None in Oregon
-135	Gasoline Terminals	None, existing rules (i.e., 340-28-050)	requires same	
-140	Surface Coating	\$2,900,000	\$27	3-M Meeting 10/12/78
-145	Cold Cleaners	\$25 - \$65	Savings	EPA-450/2-77-022
-146	Open Top Small Degreasers	\$230 - \$570	Savings	EPA-450/2-77-022
-147	Conveyorized Degreasers	\$5,000 - \$17,600	Savings	EPA-450/2-77-022
-150	Roof Coating Contractors	\$100	\$32	DEQ 11/24/78 Memo

Summation

1. EPA, following the Clean Air Act Amendments of 1977, is requiring Oregon to pass rules to address 11 categories of VOC sources in designated oxidant non-attainment areas of the state.
2. After reviewing the need for these rules, and the authority to adopt them (contained in the September 22, 1978 memorandum, attached), the EQC authorized a hearing on the proposed VOC rules.
3. A public hearing was held October 16, 1978. The comments received were acted upon as outlined in the evaluation section above.
4. The rules proposed are based upon EPA guideline documents, and have undergone EPA review. Therefore, EPA approval of this change to our State Implementation Plan is expected.
5. VOC emissions in four urban areas of Oregon must be reduced to meet photochemical oxidant health standards.
6. These rules represent a needed and practicable first step to reduce VOC and toward ultimate attainment of federal/state oxidant standards.

Director's Recommendation

It is recommended that, based on the summation above, the Commission take action as follows:

- a) adopt as its final Statement of Need for Rulemaking the Statement commencing on page 2 of Attachment C, amended as suggested in this report.
- b) adopt proposed OAR 340-22-100 to 340-22-150 (Attachment A) as permanent rules to become effective upon their prompt filing (with the Statement of Need) with the Secretary of State.
- c) Instruct the Department to submit the newly adopted OAR 340-22-100 to OAR 340-22-150 to EPA for approval as an amendment to Oregon's Implementation Plan.



WILLIAM H. YOUNG

PBBosserman/kmm
229-6278
December 5, 1978

Attachments:

VOC Proposed Rules
Hearing Report
Agenda Item O, September 22, 1978 EQC Meeting

ATTACHMENT A

Additions to Oregon Administrative Rules Chapter 340 Division 22:

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.

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 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
- Bulk Gasoline Terminal Loading
- Cutback Asphalt
- Petroleum Refineries
- Petroleum Liquid Storage
- Surface Coating including paper coating
- Degreasers
- Asphaltic and Coal Tar Pitch

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, methyl chloroform, trichlorotrifluoroethane, and methylene chloride.
- (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 an 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 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.
- (5) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 pounds or greater.

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 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 taking into consideration the pollutant which must be controlled. In no event shall the proposed new or modified source emit any pollutant in excess of the amount allowable under applicable new source performance standards.

Exemptions

OAR 340-22-105 Natural gas-fired after-burners 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 after-burners 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
- 4) Salem City Limits as of January 1, 1979.

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 Air 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 the certification and test procedures used by the California Air Resources Board as of August 8, 1978.

Compliance Schedules

340-22-108 The person responsible for an existing emission source subject to 340-22-100 through 340-22-200 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. 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.

Transfer of Gasoline to Small Storage Tanks

340-22-110

- (1) (a) A person shall not transfer or permit the transfer of gasoline from any tank truck or trailer into any stationary storage container which has a capacity of more than 400 gallons unless such container is equipped with a permanent submerged fill pipe and unless 90 percent by weight of the gasoline vapors displaced during the filling of the stationary storage container are prevented from being released to the atmosphere.

(b) The provisions of this Rule shall not apply to:

(A) The transfer of gasoline into any stationary storage container having a capacity of 2000 gallons or less which was installed prior to January 1, 1979, if such container is equipped with a permanent submerged fill pipe by January 1, 1980.

(B) The transfer of gasoline into any 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 of any stationary storage container 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.

(3) The owner or operator of any existing stationary storage container subject to 340-22-110(1)(a) shall comply with the provisions of this Rule by April 1, 1981.

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

Transfer of Gasoline at Bulk Storage Facilities

340-22-115

- (1) A person shall not load gasoline into any truck cargo tank, or trailer, from any loading facility unless 90 percent by weight of the gasoline vapors displaced during the filling of the delivery vehicles are prevented from being released to the atmosphere.
- (2) Loading shall be accomplished in such a manner that displaced vapor 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.

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

- (a) 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 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 vessel unless such vessel is designed and maintained to retain returned vapors.

- (4) Loading facilities loading 10,000 liters (2,375 gallons) or less per day on an annual daily average 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 submerged fill pipe.

Delivery trucks being filled at 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 or 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 Loading at 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 (20,000 gallons) per day of gasoline.

Cutback Asphalt

340-22-125

- (1) 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 at 20°C:
- (a) Solely as a penetrating prime coat for aggregate bases prior to paving;
- (b) For the manufacture of patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance;
- (c) For all uses when the forecast of the high temperature during the 24-hour period following application is below 10°C (50°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 portion 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, 1980 all tanks storing volatile organic compound liquids with a true vapor pressure 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, 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 (1) above, or its equivalent.
- (3) Is fitted with a floating roof or internal floating cover meeting the manufacturers equipment specifications 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 Dec. 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.

<u>Process</u>	<u>Limitation Grams/liter</u>	<u>lb/Gal</u>
Can Coating		
Sheet basecoat (exterior and interior) and over-varnish; two-piece can exterior (basecoat and overvarnish)	340	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	660	5.5
End sealing compound	440	3.7
Coil Coating	310	2.6
Fabric Coating	350	2.9
Vinyl Coating	450	3.8
Paper Coating	350	2.9

<u>Process</u>	<u>Limitation Grams/liter</u>	<u>lb/Gal</u>
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

Degreasers

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 fill line.
- (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.

- (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.

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.²) 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 speed of conveyed parts to less than 3.35 meters per minute (11 feet/min.).

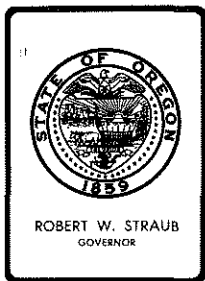
- (C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (D) Water shall not be visible 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.

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°C (550°F), as indicated by a continuous reading thermometer.



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

TO: Environmental Quality Commission DATE: November 27, 1978

FROM: Hearing Officer

SUBJECT: Hearing Report on October 16, 1978 Hearing
re: Volatile Organic Compound Rules
(OAR 340-22-100 through 340-22-201)

SUMMARY OF PROCEDURE

Pursuant to notice, two public hearings were convened in the State Office Building at 2:00 p.m. and at 7:00 p.m. on October 16, 1978. The purpose was to receive testimony regarding adoption of a Volatile Organic Compound Rule and amending the State Implementation Plan as required under the Clean Air Act Amendments of 1977, P.L. 95-95 dated August 7, 1977.

ABBREVIATED SUMMARY OF TESTIMONY

Numerous concerns were expressed in both written and oral testimony for the proposed Volatile Organic Compound rules. There were many suggested words which need to be defined and several definitions that should be clarified. Several strong objections were expressed regarding the inclusion of specific sources in the rules.

One objection was directed toward the inclusion of barge loading in these rules. Another was the reference to the California Air Resources Board's test and certification procedures for control equipment. A third objection was that some sources are included in one rule specifically for that source and also under "Miscellaneous". The fourth objection was that the technology is not available and the time limits too close for the flexible packaging industry. The fifth and final objection was regarding certain control equipment required for asphalt kettles.

Other comments included suggestions for including and excluding different chemicals used as solvents. It was suggested that two different dates in the gasoline loading and transfer rules be made the same--specifically, the later date. Regarding degreasing equipment, a suggestion was made that references and controls be placed on functions of equipment instead of on specific equipment.

Miscellaneous comments were in the form of questions raised by the Greater Medford Chamber of Commerce, which they would like answered before these



Contains
Recycled
Materials

rules are adopted; what was the economic impact of these rules on the various sources; and the suggestion that the Salem City Limits be excluded from these rules.

Because of the volume of testimony received, both oral and written, the statements have been grouped together and separated by rule number, for clarity.

340-22-100 DEFINITIONS

Detrex Chemical Industries, Inc. stated that the degreasing solvent Methyl Chloroform should be included in the rule instead of being given exempt status. See Attachment 1.

Union 76 Oil Company of California states that, when reviewing the rules in general, there is confusion as to the VOC definition, plus the terms "gasoline" and "volatile petroleum liquid". It is proposed that: the current VOC definition be clarified as applying only to Section 340-22-140 (Surface Coating); and the definitions for "gasoline" and "volatile petroleum liquids" be added to this section.

Chevron USA Inc. states that under the VOC definition, emissions from compounds with vapor pressures less than 1.5 pounds per square inch absolute are negligible and generally excluded from control. This includes the proposed Emission Standards and EPA new source performance standards for petroleum storage.

The regulations covering the handling of petroleum products refers to "Gasoline"; however, there is some confusion as to which petroleum products are to be controlled. Their suggested definition for "Gasoline" is:

"'Gasoline' means a Petroleum Distillate having a true vapor pressure greater than 200 mm Hg (4 PSIA) at 20 C."

Another definition should be added for "True Vapor Pressure", to differentiate from Reid Vapor Pressure, as follows:

"'True Vapor Pressure' means equilibrium Partial Pressure of a petroleum liquid as determined with methods described in American Petroleum Institute Bulletin 2517, 'Evaporation Loss From Floating Roof Tanks,' 1962."

Shell Oil Company testified that the definition of VOC states that any compound of carbon with a vapor pressure of 0.1 mm of Hg at standard conditions is included in these rules. 0.1 mm of Hg is equivalent to .0019 psi which, they believe, is an unrealistically low limit, because this limit includes fuel and industrial oils. According to Shell, these oils are considered to have no vapor emissions.

There are references to "gasoline" and "gasoline vapors" in other parts of the regulation, but these terms are not defined. According to Shell,

the method for describing a petroleum product on which vapor controls are required is to refer to a volatile organic compound having a vapor pressure in terms of pounds per square inch absolute, at actual storage conditions. The lower limits frequently stated are 1.5 or 4.0 psi.

Shell recommends that the 0.1 mm Hg definition be applied only to "organic compounds". For VOC, either definitions of specific products such as gasoline be given or a general definition such as the one above be added to the regulations.

Dow Chemical USA endorses the exclusion of 1,1,1-trichloroethane and trichlorotrifluoroethane from the VOC regulations.

They also feel that methylene chloride should be returned to the excluded list because considerable toxicity data has been completed. See Attachment 2, news releases. These materials have been shown to form essentially no ozone in the breathing atmosphere and, therefore, they deserve to be excluded from controls to attain the ozone primary air quality standard.

The substitution of one of these non-ozone producing solvents for a photochemical oxidant forming solvent is effective in removing that equivalent amount of ozone from the troposphere. Such a substitution often results in reducing emissions to the atmosphere.

The substitution of methylene chloride, 1,1,1-trichloroethane, or FC113 for a reactive solvent such as xylene will increase the cost some four to twelve times. Solvent losses can be controlled by good use practices. The added cost can be expected to be a "Technology Forcing" incentive in the development of emission control methods and devices.

The "non-ozone forming" solvents (excluding methane and ethane) have little or no flammability. Therefore, their application can be expected to reduce or eliminate the fire hazards which are associated with the commonly used solvents. The exempt solvents have less toxicity thereby reducing the risk of injury. Along with safety, these properties permit higher vapor concentrations which increases the feasibility of emission control. The engineering and economic practicality of vapor recovery increases with vapor concentration and value of the vapors.

Due to extremely high costs and energy demands, the practical recovery of control of most reactive solvents by certain absorption or incineration is doubtful. Finally, the exclusion of non-ozone producing solvents can be expected to reduce the burden of variance processing by providing users another option. See Attachment 3.

340-22-104 LOWEST ACHIEVABLE EMISSION RATE

Continental Can Company, USA would like the definition for lowest achievable emission rate (LAER) in this rule to be consistent with the Clean Air Act.

"The term 'lowest achievable emission rate' means for any source that rate of emission 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

(B) the most stringent emission limitation which is achieved in practice by such class or category or source, whichever is more stringent."

In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance. (Section 171(3))

340-22-105 EXEMPTIONS

Continental Can Company, USA states that to clarify this rule, they would like an addition made to the Exemptions section as follows (addition underlined):

"OAR 340-22-105 Natural gas-fired after-burners and other capture systems installed for the purpose of complying with these rules . . . the after-burners and other capture systems may be turned off, for hydrocarbon emission control purposes, with prior Departmental approval . . ."

The addition reflects EPA policy and latest scientific understanding of the "phenomenon of ozone formation".

Associated Oregon Industries states that, generally there is a high background of naturally occurring VOC, and auto emissions account for the majority of other VOC emissions (primarily hydrocarbons). Therefore, generally industrial-commercial VOC emissions are the smallest part of the total. They go on to state that since the reaction of VOC's in sunlight is the primary concern of this rule, they suggest the rule be rewritten to regulate VOC emissions on a day-to-day basis from April through October. The operation of VOC control systems should be required only on days when it would have a positive effect on reducing VOCs and only when it has a potential for harm.

Their reasons for the sporadic operation of this equipment are that they are "energy intensive", meaning these systems use a lot of natural gas and electricity while running. Another closely related reason is because both natural gas and electricity are expensive, plus the fact that there is a national conservation effort of energy.

340-22-106 SOURCES EXEMPTED FROM GENERAL EMISSION STANDARDS

See Attachment 4, Tom Donaca's letter dated October 26, 1978.

340-22-107 TESTING

Chevron USA Inc. testified that all references to the California Air Resources Board (CARB) test and/or certification procedures should be deleted. They suggest this action in case CARB's rules and/or procedures for 95% recovery are challenged. They do suggest requiring proof in the form of a certification from the manufacturer, a reliable independent testing company, or other agency, that the equipment design and test data will meet this regulation.

Shell Oil Company finds this rule very confusing. They also find the statement that applicants are encouraged to submit designs ". . . by the California Air Resources Board, The Bay Area Air Pollution District, and the South Coast Air Quality Management District . . ." redundant because the California Air Resources Board certification precludes those of the Bay Area Air Pollution District and South Coast Air Quality Management District. They also state that there is a major practicality question regarding the certification-of-systems approach versus the actual spot-performance-test approach; plus, there are indications of problems with California's certification system in that some local districts are implying they will not issue permits to operate for some service station recovery systems even though the State Board certified them.

Shell also states that, because of the time period and expense involved, some of the most effective and practical systems yet demonstrated have not, and may never, receive California's certification.

They recommend wording this rule as follows:

"Applicants are encouraged to submit designs which are supported by thorough test data or which have been tested and approved for use by other federal or state agencies."

340-22-108 COMPLIANCE SCHEDULES

Continental Can Company, USA would like the date of May 1, 1979 changed to September 1, 1979 because it is their understanding that the SIP won't be approved by EPA before July 1, 1979.

Shell Oil Company recommends the sentence giving May 1, 1979 for the submission of compliance schedules be changed to "no later than 180 days after EPA has approved the State Implementation Plan." This change is requested because May 1, 1979 will be before the State Implementation Plan will be approved by EPA.

Associated Oregon Industries would like the May 1, 1979 implementation date for compliance schedules changed to not less than 150 days after EPA has approved the State Implementation Plan. 180 days would be a better amount of time. This would give adequate time to meet the 1982 attainment date.

Because EPA will not be able to approve the State Implementation Plan by May 1, 1979, Continental Can Company would like the May 1, 1979 compliance schedule submission date changed to September 1, 1979; Shell Oil recommends the date be no later than 180 days after EPA approves the plan; and Associated Oregon Industries recommends 150 or 180 days after the plan is approved.

340-22-110 TRANSFER OF GASOLINE TO SMALL STORAGE TANKS

Independent Liquid Terminals Association states that, in their estimation, this rule is fair and equitable.

D & H Oil Company, Inc. would like Section (1)(a) of this rule to be qualified by adding "of more than 5,000 gallons" because it is not cost-effective for smaller tanks.

The rationale for the addition of "more than 5,000 gallons" is that there are two categories of deliveries: one is tank truck which delivers less than 5,000 gallons - usually 500-600 gallons, and the other is tank truck and trailer which delivers over 5,000 gallons -- averaging 8,500 gallons. The smaller deliveries cost three to five cents a gallon more than the large deliveries. Also, 98% of the gas stations have storage tanks of 5,000 gallons or more and take tank truck and trailer deliveries.

Because of the price difference for deliveries under 5,000 gallons, large volume gas stations would not install smaller tanks. The control device would cost less than having smaller deliveries made.

Even though there are three times as many customers with smaller tanks than bigger tanks, the total smaller customers only comprise 15% of the gasoline used in the Portland area. Even if they were exempted, 85% of the emissions would still be captured.

Union 76 Oil Company of California would like facilities with offset lines (parking garage inside a hotel or office building, etc.) exempted from this rule.

Chevron USA Inc. would like an exemption for all storage containers equipped with offset fill pipes which were in existence prior to the adoption of this rule.

340-22-111 (RESERVED FOR DEVELOPMENT IN 1979 FOR FILLING OF VEHICLE GASOLINE TANKS)

Chevron USA Inc. would like the following statement added to the end of the proposed sentence:

"if required in the future to meet minimum Federal Air Quality requirements."

340-22-115 TRANSFER OF GASOLINE AT BULK STORAGE FACILITIES AND
340-22-120 DELIVERY VESSEL LOADING AT BULK GASOLINE TERMINALS

Both of these rules reference barge loading, and because it received so much attention, a conglomerated statement is given incorporating related comments from all parties listed at the end.

These rules contain barge loading which should be deleted because, as yet, technology has not been developed for a safe and practical vapor control system for marine use.

EPA and the Coast Guard are just beginning studies regarding vapor recovery systems for marine use. EPA's study is of the feasibility of these systems. The Coast Guard is conducting a program focusing on flame and detonation arrestors. The completion of both studies is still two years away. After the Coast Guard has finished its study and knows whether or not they have come up with arrestors, it will be even longer before the research is evaluated for large vessels. Any system that may be developed will require Coast Guard evaluation and approval because they have the primary authority over construction and operations of all vessels.

Because of the Coast Guard's authority, until they approve the use of these systems, it is illegal for them to be installed. Two cases were cited as examples of the Coast Guard's primary jurisdiction. They are: Ray v. ARCO, decided March 6, 1978 in the US Supreme Court, and Chevron v. Hammond, decided in Alaska on June 30, 1978 by the District Court. These cases squarely address and severely limit the extent to which local authorities may impose regulatory controls on the design and operation of oil carrying vessels. In other words, even if the Coast Guard approves a system, the Commission doesn't have the authority to regulate vapor control systems on barges.

The above statements were made collectively by:

Tidewater Barge Lines, Inc.
Independent Liquid Terminals Association
Columbia Marine Lines, Inc.
Union 76 Oil Company of California
Chevron USA Inc.
Shell Oil Company
Western Oil and Gas Association
Western Oil and Gas Association's Attorney
GATX Terminals Corporation
State of California, Air Resources Board

Western Oil and Gas Association (WOGA) expanded their comments regarding barge loading, which includes the statement that, in their estimation, no system could be connected to a barge vapor space during loading unless the vapors were well out of the explosive range which would also require the installation of a system for inerting or making the vapors overrich.

WOGA also states that the inerting systems which have been developed are unreliable from a safety standpoint without the backup of effective flame

and detonation barriers between the barge and vapor control equipment. These flame and detonation barriers do not exist.

Aside from safety, another concern of both industry and the Coast Guard is that of damage to the vessels' structures and the risk of massive oil spills due to the fact that the totally closed loading of barges, as required for vapor recovery, could result in the overpressurization of tanks. Because of this, special safety equipment, beyond the standard pressure/vacuum relief valves, would have to be installed. Adding gauging, alarm systems and large volume liquid relief valves would be a minimum.

Liability for accidents and spills will also have to be determined prior to the operational beginning of a vapor control system because it will be difficult to determine whether the barge or the terminal is at fault in the event of a gasoline barge explosion.

The economic factors involved are probably much higher than the DEQ realizes. The South Coast Air Quality Management District of California's staff has recommended to their Board not to adopt a marine hydrocarbon control rule at this time because of the high cost estimate they arrived at.

The costs the South Coast Air Quality Management District obtained from shipyards and manufacturers are shown in Attachment 5. These costs are the minimum base line with the unknown costs listed at the bottom. Also, the installation cost of 30 percent of capital cost has been experienced by the shipping industry as substantially below the actual cost.

With regard to the cost of liability insurance, industry experience with attempting to insure vessels with new or risky technology is that if insurance can be obtained, it can be extremely expensive -- it can even cost as much as the vessel itself.

Attachment 6 shows the cost of recovering a pound of hydrocarbon for three cases representing Oregon terminals. These costs per pound do not include the unknown costs mentioned previously.

Current hydrocarbon control costs for other sources are about \$1 per pound or less with the value of the recovered product about 9 cents a pound. The hydrocarbon costs for this industry will run tens to hundreds of dollars per pound. This is totally unreasonable and cost-ineffective.

There is also a problem concerning the marine operators. They need to be satisfied that the operation is safe. Otherwise, WOGA believes, some operators would refuse to tie into a vapor control system.

Because DEQ has not calculated the reduction in hydrocarbon expected from this rule or compared this source to any other sources that might be controlled when finished, the EPA and oil industry studies being conducted now will be of use to the DEQ in making such an assessment.

Tidewater Barge Lines, Inc. also included a comment which expands on the cost factor. It is that they object to these rules in that the economic consequences will be disastrous because, at the moment, shipping gasoline by barge is far cheaper than any other mode of transport; however, if the rule is adopted, it will be far more expensive by barge. The cost will rise drastically no matter what mode of transport is used.

Other comments made regarding other aspects of these two rules are as follows:

Independent Liquid Terminals Association states that, with regard to Section 4, paragraph 3 of this rule, any truck equipped to balance at a VOC controlled delivery point should be allowed to deliver regardless of where it loads.

Union 76 Oil Company of California is concerned that the date of July 1, 1980 (Section 5b of 340-22-115) should be consistent with the April 1, 1981 date in rule 340-22-120 for installation of vapor control systems at both bulk storage terminals and service stations. As the rules are written now, there is a nine month gap. They would like both dates to be April 1, 1981.

Specifically regarding rule 340-22-120, they would like a definition of "Bulk Gasoline Terminal" included in this rule. A suggested definition is:

"Bulk gasoline terminal" means a gasoline storage and transfer facility which receives gasoline from refineries (primarily by pipeline or marine tanker); delivers gasoline (primarily by tank truck) to bulk plants and/or to commercial accounts or retail outlets.

Chevron USA Inc. would also like the reference to tank cars deleted for the reason of very low volume, i.e., Chevron's major terminal in Portland only loads about ten tank cars per year. This represents 0.1 percent of the terminal's total yearly volume.

They would also like the exempted volume raised from 10,000 liters (2,375 gallons) to 76,000 liters (20,000 gallons) to coincide with Federal regulations. Their reasoning is that "the majority of gasoline dispensed from bulk plants with throughput of 20,000 gallons per day are to exempt accounts, i.e., agriculture, etc. Thus, delivery trucks loading at bulk plants will normally not have collected vapors in their tanks. Retrofitting vapor recovery controls on these trucks serves no purpose."

Chevron feels that the rule contained in the third paragraph of 340-22-115 should be deleted or modified. They would recommend exemption of deliveries of 2,000 gallons, and under, when these deliveries are made in the event of an emergency caused by a disruption in normal supply and would create a hardship for the customer if the delivery were not made.

Specifically regarding rule 340-22-120, Chevron would like this rule either incorporated into 340-22-115 and the exempted volume raised to 20,000 gallons, or the allowable emission rate be changed to 90 percent to coincide with 340-22-115.

Shell Oil Company states that the date for control systems on loading facilities is July 1, 1980; however, the date for Stage 1 recovery at service stations is April 1, 1981. Shell is concerned with three aspects of these dates: 1) it appears both 340-22-115 and 340-22-120 cover the loading of gasoline. However, it is not clear as to whether or not there is a differentiation as to "bulk gasoline terminals" and other plants because the definitions do not cover these categories; 2) in 340-22-115 the required processing efficiency is 90 percent by weight, while in 340-22-120 the requirement is limited to vapor emission of 80 mg per liter of gasoline. This is confusing; and 3) even if "loading facilities" could have vapor recovery equipment installed by July 1, 1980, it would be impractical since service stations wouldn't have vapor collection systems installed until nine months later.

Shell would like appropriate definitions for categories of facilities and compliance dates made consistent, namely April 1, 1981.

GATX Terminals Corporation would like the wording in Section 1 of rule 340-22-115 changed to:

"A person shall not load gasoline into any truck cargo tank, trailer or railroad tank car from any loading facility unless . . ."

They believe the word "tank", in the proposed sentence, should be deleted because it is covered under 340-22-135.

340-22-125 CUTBACK ASPHALT

Multnomah County objects to proposed regulations concerning use of liquid asphalt. The County uses Multnomah County cut backs in cold patch materials and this rule would deny the use of these materials plus emulsions.

Asphalt Pavement Association of Oregon submitted a pointed letter. It is attached for your perusal as Attachment 7.

340-22-130 PETROLEUM REFINERIES

Chevron USA, Inc. states that, with regard to Section 2 of this rule, covering and sealing the wastewater separator affects the ability of keeping the separator clean and working properly -- a safety and pollution hazard. Until it is demonstrated that there are significant VOCs emitted and reduction is needed to meet emission reduction goals, these covers should not be required.

340-22-130 LIQUID STORAGE

Union 76 Oil Company of California would like the word "covered" deleted in the phrase: . . . "(covered) floating roof or internal floating cover."

Chevron USA, Inc. would like, for the sake of clarity and to avoid misunderstanding, the proposed wording replaced with the following:

"A floating roof, consisting of a pontoon-type or double-deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and tank wall, designed in accordance with accepted standards of the petroleum industry. The control equipment provided for in this paragraph shall not be used if the gasoline has a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions."

GATX Terminals Corporation states that the difference between an "internal floating cover" and a "floating roof", as given in Sections 2 and 3 of this rule, are not clear or defined. The proposed rules appear to allow retrofitting of existing fixed roof tanks but not of open top floating roofs as for covered floating roofs for those tanks built prior to adoption of the rule. This rule is not clear.

340-22-136 DEALS WITH ALL SEALS USED IN 340-22-135(2) AND (3)

Chevron USA, Inc. states that, with regard to the second paragraph of this rule, tanks containing petroleum products conform to accepted industrial and National Fire Protection Association Standards. Provisions for gauging and sampling must be provided. Therefore, they would like the following language substituted for the language in the proposed rule:

"All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place."

Union 76 Oil Company of California states that this rule requires all openings except subdrains and those related to safety are to be sealed with suitable closures. They recommend that the clause, "except when they are in use" be added. Certain closures such as gauging and sampling hatches must be open periodically. The proposed addition would allow this and still require them to be closed when not in use.

340-22-140 SURFACE COATING IN MANUFACTURING

Continental Can Company, USA states that the availability of low solvent coatings for can manufacturing will be about 75 percent by 1982; however, there will be no availability of low solvent can end sealing compounds until 1985. For these reasons, they have drafted a proposal for coating sources. Attachment 8 is for your information.

Crown Zellerbach Corporation states that the "2,000 gallons per year of coating" is not consistent with the ten gallons per hour rate. The 2,000 gallons per year of coating limit represents a source with a maximum

emission of seven tons per year which is not consistent with EPA cost data that was developed for 100 tons per year.

Also, the limits should not be set on a "gallons per year of coating" basis but on VOC emissions.

Two other problems are that low solvent coatings do not exist for most flexible packaging applications, and coating lines which do not require heating ovens, should be exempt.

Crown Zellerbach Corporation believes that flexibility in developing plant-wide emission plans should be provided within the regulation.

A list of definitions should be provided for each application process or a reference to the EPA document used.

For surface coating operations operating 24 hours per day, or reasonably continuously, the emission guideline can be satisfied with add-on controls. Capital costs for such systems will be about 30 percent of the capital cost of the coating line. The recovery and reuse of solvent should be encouraged and added compliance time should be allowed.

National Flexible Packaging Association recommends against including paper flexible packaging products under a proposal for paper coatings. They also recommend either of the following:

- (1) That a separate proposal be prepared that is exclusively applicable to all VOC emissions from flexible packaging products; or
- (2) That a proposal be prepared dealing with emissions from the graphic arts (printing) industries which would include a separate section on flexible packaging.

Their reason for the above are: paper flexible packaging is only a small portion of the total production of the flexible packaging industry. Production of packaging composed of plastic film and aluminum far exceeds that of paper. The emissions from printing, adhesives or coatings on plastic film or aluminum could be the greatest in any given operation depending on the application. Finally, the kind of paper generally used in paper coating is generally different from the paper used in the flexible packaging industry. For these reasons, many of the controls recommended for the paper coating industry may not be applicable to flexible packaging.

The National Flexible Packaging Association has a request pending with the EPA to cover flexible packaging under separate guidelines from those of paper coating. They are requesting Oregon do the same; however, if this request is denied, their specific comments regarding the proposed regulations are as follows: A major portion of the flexible packaging industry is consumed by food and drug packaging applications. For this reason, there are questions as to whether or not the Federal Drug Administration will approve low solvent coatings or 100 percent systems because of their low molecular weight, which makes them highly migratory.

These low solvent coatings and 100 percent systems are only now beginning in this industry which, therefore, makes the limits of 350 grams VOC per liter and 2.9 pounds per gallon impossible to achieve at this time.

The NFPA is concerned that the EPA is erroneous in concluding that water-borne materials are applicable to all paper items as well as plastic films and metal foils. In actual fact, the majority of solvent coatings in use today cannot be replaced by low solvent materials which comply with EPA's definition of 350 grams VOC per liter.

The same is true of hot melt coatings which are now in limited use; however, experience has shown that hot melts cannot replace all existing solvent coatings for each and every application. They are already being used in the applications where they are most effective.

The NFPA recognizes the need and is working with their material suppliers to accomplish the reduction of solvent emissions. They are also working with EPA to assess the economic and technical feasibility of controlling solvent emissions by carbon adsorption and fume incineration.

EPA's document titled "Control Techniques Guideline, Volume II, Surface Coating of Paper", which states that incineration, carbon adsorption or the use of low solvent coatings are a reality. The NFPA says this is not the case because incineration: 1) has never been successfully used by a flexible packaging converter in the US and 2) it is expensive in that it consumes natural gas or some oil derivative which, due to shortages, can be cut off for periods of time.

Carbon adsorption systems are still in the developmental stage. There is a problem proving the technical feasibility since the coatings used by flexible packaging converters are mixtures of blends of several solvent materials which are a technical necessity in obtaining the proper application and drying of the specialized coatings or inks currently in use.

Effects of the Implementation Plan as now written are as follows: For the flexible packaging industry, pollution control through the recommended summary of control technology is not economical. Many of the flexible packaging converters in Oregon could be forced out of business because of the additional expense.

Along with the expense incurred, there are more developments which are: EPA's guideline for the graphic arts industry expressly covers all flexible packaging products. However, there are far more flexible packaging products and operations than just paper. There are basic differences between the coating of paper and flexible packaging generally.

The first of these differences is that the converting business refers to paper coatings in two ways, both on-the-machine and off-the-machine ("machine" is paper forming equipment). The on-the-machine coatings are

largely water-based systems the main objective of which is to mask or hide the paper substrate and provide improved opacity and surface for printing. These papers are used for printing applications such as books, magazines, etc.

It is NFPA's opinion that EPA is primarily concerned with the off-machine type coatings. These coatings include: adhesives, moisture barriers, release agents, rust inhibitors, photographic paper, copying papers, frozen food stock, etc. Off-machine coatings can be applied from water, solvent and thermoplastic systems. In these structures, paper is used as a low-cost base material or substrate, the properties of which can be enhanced by coating, lamination, and extrusion operations for use in flexible packaging operations.

Flexible packaging is not limited to paper-containing constructions. Materials used range from use of such substrates as polyolefins, nylons, polyesters, regenerated celluloses (cellophanes), sarans, vinyls, foils, ethylene vinyl alcohol, ionomers, fluorocarbons, polystyrene, polycarbonates, etc. Not only are individual films used, but also combinations of films or coating the various film combinations and, because the materials vary widely in properties, a broad usage of materials is required to act as adhesives. Because of this, imposing the same coating vehicles on the flexible packaging converting operations as are used in paper coatings would severely restrict the combinations that can be manufactured and, therefore, the consuming public would suffer.

The Federal Drug Administration and Department of Agriculture do not approve of any flexible packaging material failure which means there must be guaranteed performance. To impose restrictions on flexible packaging of using only materials which can meet the paper coating guideline does not take into account the complexities, advancement, or needs of flexible packaging.

There is one very important aspect of the flexible packaging converting process which is the "job shop" or custom operation. These custom operations are for a specific material made to tailored specifications and require very short runs on the machinery. Since the nature of business calls for frequent changes of materials used and each material calls for its own blend of solvents, inks, and special substrate construction, adherence to one common standard for emissions is extremely difficult to obtain.

Finally, the time limitation of two years is not enough to develop the control technology needed for flexible packaging converters. The NFPA members have been working in cooperation with the material suppliers to develop low solvent materials. However, as yet, there has been no progress because of the problem of applying water-borne materials to water resistant substrates and the limitations imposed by trying to run new unproven materials on equipment designed to operate with high solvent materials. The NFPA is confident that acceptable materials will be found in the next few years as technology progresses. See Attachment 9.

Boise Cascade Paper Group states that in including paper coating under both 340-22-140 and 340-22-201, it implies that the paper coating process is a major emitter of VOC. The opposite is true.

Boise Cascade feels that there is a lack of understanding of the technology and operation of the surface coating of paper. First, it should be noted that, depending on the type of coating used, 90 to 99 percent is absorbed by the paper which is the main purpose of the operation. Secondly, coatings are dried by the use of steam heated rolls which operate in an open area -- not by heated ovens. Because of this, the use of an applied gallonage figure and a grams per liter or pounds per gallon figure would not necessarily be correlated to the mass amount of emissions released to the atmosphere. Since the main concern of the regulations should be the amount of emissions released to the atmosphere, they suggest that paper coating operations under 100 tons per year should be exempt.

Boise Cascade objects to the regulations making 85 percent reduction mandatory for everyone, when some paper coaters have already voluntarily changed from organic solvents to water soluble or miscible coatings to reduce their VOC emissions.

3M Company states that the RACT guidelines were intended to be applied as a minimum for "typical industrial plants." It allows the states to use stricter requirements; it also means that consideration must be given to those facilities, such as the 3M White City Plant, that have the desire and capability to control volatile organic compound emissions through the use of unique and innovative methods.

The RACT guideline reads in part:

" . . . the limits . . . are based on capabilities and characteristics which are general and therefore presumed normal . . . the limits may not be applicable to every plant . . . "

The RACT guideline also reads:

"before developing regulations, States should carefully evaluate the sources to be regulated within their jurisdiction to determine whether the emission limitations cited in this document truly reflect Reasonably Available Control Technology for them."

3M conducted extensive technical and economic comparisons of the various control strategies for the White City Plant. These strategies include carbon adsorption, thermal oxidation, and inert gas drying (see Attachment 10 for further details.).

Inert gas drying proved to be the best control system for the White City Plant. This method involves the evaporation of Volatile Organic Compounds and subsequent recovery of these VOCs by condensation which occurs in a sealed oven and an inert gas atmosphere. Petroleum resources are conserved because the recovered VOCs are additionally refined and then reused.

Inert gas drying has been used on one of two major coating lines at the White City Plant since 1969 and it has proved to be much better than thermal oxidation or carbon adsorption. To 3M's knowledge, 3M is the only company using this system. However, it is almost impossible to apply RACT guidelines to this system because of its uniqueness and method of operation.

Since volatile organic compounds are lost during purge, during startup and shutdown, through positive pressure that must be maintained to reduce oxygen infiltration, and the fact that there are no exhaust stacks to emit volatile organic compounds, 3M cannot determine by direct measurement the amount of VOCs that are emitted per gallon of coating applied. 3M can, however, determine the collection efficiency on an overall plant basis which includes mixing and milling, solution transfer, coating room, and other losses that are not included in the RACT guideline.

3M explains RACT guideline calculations as follows:

"The RACT guideline number of 2.9 pounds of volatile organic compound per gallon of coating was derived as equivalent to 81 percent control of 5.7 pounds of volatile organic compounds per gallon of coating solution."

3M's determination of the use of thermal oxidation on the coating line was that ten percent coating room losses would occur, leaving 90 percent of the VOCs. The overall coating line control would be 81 percent (90 percent times 90 percent equals 81 percent).

EPA stressed new technology in the RACT guideline and reasoned that if industry could develop high solids coating or other innovative technology that was equivalent to thermal oxidizer control, that would be acceptable. EPA then determined that the same control provided by the thermal oxidizer would be accomplished if a "typical" plant used 2.9 pounds of VOCs per gallon coating or its equivalent. However, the RACT guideline covers only the emissions that occur at the actual coater.

RACT guidelines cover only those emissions occurring at the coating line which is about 70 percent in a "typical" plant. The other 30 percent of a "typical" plant's emissions are from other sources and are not covered by RACT guidelines.

In other words, for every 100 pounds of VOCs used in a "typical" plant, 30 pounds would be emitted without control, and 70 pounds would be controlled by 81 percent, or 13.3 pounds would be emitted. The total emission of a "typical" plant would be 43.3 pounds if the plant followed RACT guidelines.

If 3M's White City Plant installs a second inert gas drying facility, overall plant efficiency would be 65 percent, or for every 100 pounds of VOCs used, 35 pounds would be emitted. This is 20 percent better than that which would be achievable under RACT guidelines.

Using the base of 65 percent control of all sources in the plant -- not merely the 70 percent base used for a "typical" plant at the coater --, a RACT guideline number can be calculated for 3M's White City Plant. The average coating being used at the White City Plant contains 6.0 pounds of volatile organic compounds per gallon (higher than the 5.7 pounds VOC per gallon in EPA's "typical" plant). With 65 percent control and the equivalency calculations (see Attachment 11), 3M arrives at 4.7 pounds of VOC per gallon of coating. Thus, even though the number is higher than the RACT number of 2.9, the resulting emissions are significantly less.

Regarding time schedules, 3M feels that, to install a second inert gas dryer at White City, they would have to completely redesign the oven and all air handling equipment which would include conducting engineering studies, running pilot tests, designing the equipment, ordering components, and, finally, installing the facility. The installation would require at least two three-month production shutdowns over a period of two years. 3M believes mid-1982 is the earliest that a second inert gas dryer can be operational.

If 3M could develop a new low solvent technology system applicable to their White City Plant, they would require a time extension beyond 1982 for development, design and installation; however, the end result would be a significantly reduced level of volatile organic compound emissions. At this time, 3M does not have a viable alternative to their present solvent systems, but because the EPA and DEQ are encouraging the use of innovative control technology, it would be desirable for the proposed rules to include a flexible time provision to cover such cases.

3M recommends the rules include a section indicating that if new low solvent technologies are to be installed, the completion date should be as expeditiously as possible but no later than December 31, 1987.

It is 3M's understanding that the DEQ staff agrees that the installation of an inert gas drying system on the second coating line would represent RACT for the White City Plant. However, because the total cost of this system is several million dollars, it would be imperative for 3M to know what further reductions of volatile organic compound emissions the State will expect at this plant over the next decade before they make a final decision.

On the basis of present knowledge, 3M believes the inert gas drying control system achieves RACT and it is the best control possible without reducing operations.

3M's recommendations are in Attachment 12.

Northwest Pulp and Paper Association would like to support the statements made by individual pulp and paper mills in Oregon. Their specific comments are: With regard to this rule and 340-22-200/201, these rules subject three or seven tons per year paper coating operations to different requirements under each section. Additionally, a source which changed its solvent

coating to comply with 340-22-140 would also have to meet 85 percent emission reduction on the remaining emissions. The NWPPA believes this "double jeopardy" is unnecessary and unreasonable.

Likewise, the requirement for all new or modified 100 tons per year sources to achieve 85 percent reduction does not recognize the differences between operations and solvent used. They recommend that emission reductions for new and/or modified sources be set by LAER numbers or on a case-by-case basis.

The regulations are not set at a reasonable lower limit for cut-off size applicability. The "2,000 gallons per year of coating" includes small sources which cannot afford the incineration control necessary to meet these levels.

It is their belief that exemption levels for existing sources be based on VOC emissions -- not coating used. The appropriate level for cut-off should be 100 tons per year.

Finally, the proposed regulations fail to recognize the environmental and energy impacts. It is their opinion that the lack of environmental impact associated with emissions from sources included in the regulations but discharging less than 100 tons per year of VOC does not justify the economic and energy impacts required to bring them within prescribed limits. The only demonstrated control measures for VOC for most sources in the pulp and paper industry are natural gas afterburners which require extensive maintenance and consume significant energy. These negative impacts are not justified given the lack of environmental impact from the small uncontrolled emissions.

340-22-145 DEGREASERS

Branson Cleaning Equipment Company thinks that, in Sections 2 and 3, the functions of equipment should be specified -- not actual equipment -- to allow for new, improved equipment to be covered also.

Small degreasers use "direct expansion refrigeration" rather than water to cool the condensing coil. A flow switch for these smaller machines is impractical if not impossible.

Regarding open top degreasers, the rules should specify the function of the safety valves instead of specifying the type of device.

Branson suggests that Section 2 read "A device to prevent heat input unless there is adequate coolant", and Section 3 read "The spray shall be equipped with a method that will prevent spraying unless the degreaser is operating normally."

Also points out that EPA's July 21, 1978 draft (40 CFR Part 60) on "Standards of Performance for New Stationary Sources for Solvent Metal Cleaning" does not refer to safety devices.

Section 4(A), (freeboard ratio) is inconsistent with the EPA description for freeboard ratio and height.

Detrex Chemical Industries, Inc. states with regard to Section 2, "A condenser coolant flow switch is sufficient to monitor the coolant flow. The vapor level control which is thermostatically activated, should be mounted independent of the condenser cooling medium and the condenser flow switch.

340-22-146 DEALS WITH OPEN TOP DEGREASERS

Detrex Chemical Industries, Inc. states that, in Section 5, they would prefer the existing paragraph be replaced with:

"The degreaser shall normally not be overloaded to cause the vapor-air interface to drop more than 10 cm (four inches) when the work is lowered into it. However, for certain specific solvent vapor degreasing operations, where of necessity very large masses are required to be degreased at one time, such as large castings and fabricated assemblies, a drop of the vapor-air interface of more than four inches, may unavoidably take place. In such situations, the manufacturer of the equipment and the user of the equipment will attempt to ameliorate as much of this problem as possible through equipment design, rate of work introduction and withdrawal and other operating practice modifications."

Detrex would also like regulations regarding conveyORIZED degreasing equipment using guidelines proposed by EPA in the RACT document.

L. Schlossberg, President, Detrex Corporation, wrote a letter and sent documentation on August 8, 1979. Detrex would like this letter, etc. entered in the testimony. Because of the highly technical nature of Mr. Schlossberg's letter, we are submitting the entire letter as Attachment 13.

340-22-147 DEALS WITH OPERATING REQUIREMENTS FOR ALL OPEN TOP DEGREASERS WITH AN OPENING GREATER THAN ONE SQUARE INCH

No comments were submitted.

340-22-150 ASPHALTIC AND COAL TAR PITCH USED FOR ROOFING COATING

Roofing Contractors Association of Portland's comments are directed at those portions of the rules concerned with emissions originating from asphaltic and coal tar pitch during roofing and waterproofing operations.

Because coal tar pitch is expensive on the Pacific Coast coupled with the availability of asphaltic material, more than 95 percent of the bituminous material used in Oregon is asphaltic material. The two materials are not compatible, and thus the majority of equipment is used for asphalt.

Hot asphalt emissions correspond to gasoline vapors within normal operating temperatures; however, at excessive temperatures the relative concentration of saturated hydrocarbons increases. The emissions from coal tar pitch correspond to creosote oils (phenolic materials) containing trace amounts of condensed polynuclear aromatic hydrocarbons (arenes) at normal operating temperatures. A misconception exists that arenes are present in higher concentrations relating coke oven emissions at 2,000°F to tar kettles operating at temperatures of approximately 350°F.

California's emissions regulations from roofing equipment restrict VOC to mass per unit volume per hour, and visible emissions not to exceed a Ringlemann number 1 (20 percent opacity) for more than three minutes in any hour. Only visible emissions from kettles are currently measured and used for enforcement purposes because it isn't possible to measure mass per unit volume per hour.

The average kettle size is 500 gallons with the largest being slightly in excess of 800 gallons and the smallest, which is exempt because of its small size, is 100 gallons.

For the average kettle (500 gallons) without control equipment, VOC emissions is less than six pounds per hour. This is a maximum value obtained by condensing all vapors outside the kettle during a test period. In normal operation, vapors are only released to the atmosphere when the kettle lid is open -- less than 20 minutes in any hour for uncontrolled equipment and three minutes in any hour for controlled equipment. The total emissions for a working day in non-controlled equipment is 39.6 pounds over a maximum period of less than seven hours (not including the initial melting and preparation period).

Based on the above, 340-22-200(2) average equipment would be excluded.

In controlled equipment, emissions condense back into the kettle and remain there reducing emissions more than 90 percent over uncontrolled equipment.

Only when a properly operating kettle is being loaded are emissions visible. A 500 gallon kettle can melt and deliver approximately 350 gallons per hour in new roofing operations under maximum use conditions. This requires 25 to 30 100 pound plugs of solid replacement material be added to the kettle per hour. In the large uncontrolled kettle, the lid would have to remain open for more than three minutes per hour to allow the introduction of the maximum number of plugs. This would be a violation. However, in a reroofing operation where a smaller amount of replacement solid material is needed and could be added within the three minute period, the kettle would be meeting regulations.

There are three categories of control equipment for kettles. They are temperature control, loading devices, and emission eliminators.

Concerning temperature control, the temperature should be no higher than needed to maintain working viscosities. The hazard of fire and explosions becomes greater with the rise of the temperature of the molten material.

Fire and explosions occur because of higher concentrations of produced gasoline vapors. Likewise, the higher the temperature, the more emissions are visible due to condensed vapors.

With respect to loading devices, there are various types of rapid open and close apertures which can be used to load replacement asphalt instead of opening the entire lid of the kettle. This greatly reduces the open time, and emissions even for kettles operating at maximum capacity, to less than three minutes in any hour.

Lastly, the purpose of emission eliminators is to reduce kettle pressure to slightly below atmospheric pressure so that atmospheric pressure will flow into the kettle instead of emissions being released when the lid is opened. Afterburners, reburners, condensers with and without blowers, and filters with and without blowers are types of emission eliminators.

Temperature control and loading devices are control devices which have been approved in California and the San Diego area. For the last three years, between 500 and 1,000 kettles have been in operation and complying with air pollution regulations in these areas.

Regulations in the Los Angeles area require the use of filter type emission eliminators, in addition to temperature and loading devices. Dr. Thomas will not recommend the use of any type of emission eliminators because they greatly enhance the possibility of fire and explosions occurring in the kettle, and they are not necessary to meet regulations. It is Dr. Thomas' opinion that the Los Angeles Control District is leaving itself open to litigation if a fire or explosion results in property damage, personal injury or loss of life. It must be noted that there are only one or two pieces of equipment available in Los Angeles which incorporate all three categories of control equipment.

Approximately four years ago one piece of equipment with an emission eliminator was tested and shortly after the initial evaluation test had started, there was an explosion which destroyed the equipment. Because of this, roofing equipment manufacturers in California refuse to design or manufacture equipment in this category.

Dr. Thomas' recommendations are based on the roofing industry's being cognizant of facts related to air pollution concerns, exercising diligence in control aspects and, in his opinion, using the best technical knowledge in designing equipment and operations for use. These recommendations are:

1. Due to the relatively short period each year required by air pollution regulations in Oregon, and due to the small amount of total emissions originating from single asphalt kettle sources along with the total small number of asphalt kettles in Oregon, Dr. Thomas recommends that asphalt kettles be excluded from control regulations.

2. If the Commission adopts regulations for asphalt kettles in Oregon, Dr. Thomas recommends they be modeled after the Bay Area Air Pollution Control District's and the San Diego area's (they are the same). This is because the proposed regulations are now modeled after the Los Angeles regulations under which there is essentially no operating equipment in compliance.

For further information regarding the operation of and emissions from asphalt roofing kettles, see Attachment 14.

340-22-200 AND 340-22-201 MISCELLANEOUS SOURCES

Continental Can Company, USA would like Attachment 15 to replace the current proposed regulation.

Crown Zellerbach Corporation states that surface coating of cans and paper are in these regulations, and they are also included in 340-22-140. They should not be in 200 and 201. Also, if a source developed a low solvent coating in 340-22-140, in 340-22-200 and 201 it would still have to reduce those remaining emissions by 85 percent. The basis for this emission reduction should be defined.

The requirement to achieve 85 percent reduction for all new or modified 100 tons per year sources is unreasonable. LAER is required in non-attainment areas. The 85 percent reduction would probably prohibit modification or construction of incinerators and wood fired boilers.

The comments listed for Crown Zellerbach under 340-22-140 also apply for these rules.

Believes DEQ should delete these regulations and wait for EPA guidelines. Instead, he recommends the following be included to cover paper surface coatings:

1. Other emission reduction methods may be employed if the source owner demonstrates to the department that they are at least as effective as the required methods. 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 coating line would be compensated for elsewhere in the source.
2. A final compliance date may be extended by the department if the owner demonstrates that technological problems exist and the source proceeds as expediently as practicable toward compliance. Control methods which would use new low solvent coatings, recover solvents, or use new processes should be given additional time for compliance.
3. Coating lines which do not use heated ovens are exempted from these regulations.

Boise Cascade Paper Group states that the addition of 340-22-201 is redundant in that a new or modified source with VOC emissions of over 100 tons per year would automatically come under review and be required to meet LAER in a non-attainment area or, in other areas, require a Prevention of Significant Deterioration review and RACT controls.

Associated Oregon Industries does not understand the need for these rules. They state that of the three rules listed, surface coating of cans and paper are already specified in 340-22-140 and they are unaware of any substantial reason such sources should be required to meet two different standards in the same set of rules. The effect is to subject these sources to the most stringent of the two rules.

With regard to 340-22-201(1), in view of the agency's lack of experience in the VOC area, AOI would like to suggest that all other major VOC sources be covered in the second round of the proposed rules to be undertaken in mid-1979 (see VOC RACT schedule; Attachment 16). Because implementing this rule will be a major undertaking by DEQ, AOI suggests this proposed rule be deleted; and notify those other sources that, even though they are not subject to this round, they will be subject to the second round of VOC rules.

Additionally, because of the unavailability of control technology for combustion sources, they should not be included in these rules.

ADDITIONAL COMMENTS WHICH ARE NOT CATEGORIZED

Greater Medford Chamber of Commerce has the following questions to which they would like answers before adoption of the Volatile Organic Compound Rules:

- "1. To what oxidant level is the DEQ intending control?
2. Why will industry in the Medford-Ashland AQMA be required to make a reduction of 31% (through straight rollback) to attain NAAQS of 0.08 ppm, when industry in the Portland AQMA will only be required to provide for 11%, and only 2% in the Salem AQMA?
3. What corresponding reduction in the oxidant readings in the Medford-Ashland AQMA does the DEQ expect by an 85% reduction of hydrocarbon emissions from those sources covered by the proposed VOC rules?
4. Has the DEQ collected any monitoring data from the rural areas in Southwest Oregon?
5. Has the DEQ excluded the possibility that the transport of ozone into the Medford-Ashland AQMA could be the major cause of our oxidant problem?
6. Why is the DEQ recommending the adoption of more stringent regulations than required by the federal rules?"

The Chamber of Commerce has a task force doing a study on all of the above issues. A later submission is attached for your review. (See Attachment 17.)

The Chamber of Commerce would like the Commission to hold further hearings in all individual non-attainment areas where the rules will apply.

Hawk Oil Company (Exxon) would like gasoline vapor recovery regulations withheld until after EPA concludes its study and decides whether or not to create a National Vapor Recovery Regulation. They would also like Benzene vapor control regulations withheld for the same reason. See Attachment 18 for further information.

Hawk Oil would also like bulk plants handling less than 20,000 gallons per day exempted as EPA allows because as much as 35 to 40 percent of the smaller plants will have to shut down if the regulations are adopted as is.

Chevron USA Inc. would like to urge the EQC not to adopt regulations more stringent than federal requirements. According to him, meeting federal requirements gives the State maximum control and planning flexibility while protecting public health with an adequate margin for safety.

In their estimation, the state requirements should be more stringent only if a "detailed Emission Inventory is developed and required emission reductions quantified as part of the SIP revision process" which, to their knowledge has not yet been completed.

Another factor in adopting Emission Standards is the cost-effectiveness when considering the implementation deadlines.

Crown Zellerbach Corporation believes that graphic arts (printing), and the preparation of paper and film should be consolidated into one category; and processes or related equipment should also be consolidated into one category.

Specifically, they believe all flexible packaging applications should be considered with the Graphic Arts guideline; and since EPA is currently studying the flexible packaging industry, it would be appropriate to include flexible packaging coating operations in a future guideline.

Attachment 19 gives comments about the Portland Plant's energy and cost impacts. The Attachment also gives some general comments about the industry.

Crown Zellerbach objects to the lack of flexibility in the proposed regulations. The proposed regulations are based on RACT for some stationary sources of VOC. They maintain that the provisions in the EPA guidelines allowing for additional time for compliance for specific sources, an emission cut-off limit for smaller sources, a plant-wide emission reduction plan, and solvent substitution as an interim control are not in the proposed VOC regulations.

Boise Cascade Paper Group endorses both the Northwest Pulp and Paper Association's and the Association of Oregon Industries' statements.

It is Boise Cascade's belief that the VOC regulations will not accomplish eliminating Oregon's non-attainment status in the four areas listed, but it will put an economic hardship on the smallest emitters of VOC.

3M Company gives a little background of their company as follows: the basic 3M technology is precision coating with most of their products requiring coating at some stage. 3M has installed 20 thermal oxidizers, where heat recovery is possible, and ten carbon adsorption control systems. However, both these systems have exhibited operational and maintenance problems. 3M has substantially reduced volatile organic emissions in various manufacturing operations through innovative technologies which supplement certain existing solvent coating and volatile organic compound emitting facilities.

3M would like to increase production and employment in their White City Plant over the next decade; however, the plant will be limited to not more than, and possibly less than, its present production and employment level unless the new rules include a workable formula which provides for growth.

Associated Oregon Industries attached a "Discussion" of the Health Effects Research Laboratory, EPA, by Robert S. Chapman, M.D. In this discussion, Dr. Chapman points out the dangers of using early information on health effects when the information is not substantiated by more complete research and analysis. AOI, therefore, suggests that the evaluation part of the staff report relating to "medical effects" be stated in more tentative terms. See Attachment 20.

AOI also submitted a report written by the Council on Wage and Price Stability. This report is being submitted as Attachment 21.

Western Oil and Gas Association has a membership which includes more than 90 percent of the companies that produce, refine and market crude oil and refined products in the seven western states.

State of California, Air Resources Board states that pressure/vacuum relief valves for above-ground storage containers can reduce breathing losses from these containers. The Air Resources Board Suggested Vapor Recovery Rules, see Attachment 22, require pressure/vacuum relief valves with a minimum pressure setting of 8 ounces provided that such setting will not exceed the containers' maximum pressure setting (Rule A(3)(c)(B)). Some thought might be given to adding this to Oregon's proposed rules.

To ensure that effective submerged fill pipes are installed, the proposed regulations should include minimum requirements. The Air Resources Board Suggested Vapor Recovery Rules specify that the discharge opening be entirely submerged when the liquid level is six inches above the bottom of the container, and for offset fill pipes (side entry) when the liquid level is 18 inches above the bottom of the container (Rule A(6)(C)).

Oregon Environment Council submitted a statement upholding the proposed Volatile Organic Compound Rules. See Attachment 23.

RECOMMENDATIONS

Your Hearing Officer has no recommendations.

Respectfully submitted,



Wayne Cordes
Hearing Officer

TS:kmm

Attachments

NOTE: Copies of attachments to this hearing report are available for review in the DEQ Air Quality Division offices, 522 S.W. Fifth Avenue, Portland, Oregon.

Witnesses submitting both oral and written testimony:

Jerome F. Thomas, PhD, P.E., University of California at Berkeley
(Introduced by Mr. Arnie Schmautz, Roofing Contractors Association of
Portland. Mr. Thomas' written material was submitted prior to the hearing
by James R. Watts, Attorney for RCA of Portland.)

Richard A. Lillquist, President, National Flexible Packaging Association.

James E. Walther, Supervisor, Air Programs, Environmental Services
Division, Crown Zellerbach Corporation.

Byron Stoddard, Shell Oil Company, Houston, Texas. (Written material
signed by A.B. Molton, Manager, Plant Environmental Engineering, Marketing
Engineering.)

Gordon Dotson, Greater Medford Chamber of Commerce. (Written material
signed by Stuart Foster, President and Bill Parrett, Council Chairman)

Thomas C. Donaca, Associated Oregon Industries Counsel (Also submitted
two other letters after the hearing)

John D. Burns, Attorney for Western Oil and Gas Association.

Robert Freeman, Western Oil and Gas Association.

Kenneth C. Faris, Crowley Maritime Corporation and Operation Manager for
Columbia Marine Lines, Inc.

John D. Hartup, Terminal Manager, Willbridge, Marketing Operations,
Chevron, USA Inc., Portland

J.C. Michelson, Manager, 3M Graphic Systems Plant, White City, Oregon.

Roy B. Dowd, President, D & H Oil Company, Inc., Portland.

Michael J. Dougherty, Coordinator Environmental Control, Union 76 Oil
Company of California, Los Angeles, California.

Leo F. Raymer, Tidewater Barge Lines, Vancouver, Washington. (Written
material signed by Raymond Hickey, General Manager)

Oral Testimony Only Was Given By:

Gordon Henjum, Shell Jobber, Silverton, Oregon.

William Cornitius, Petroleum Jobber, Medford, Oregon.

Written Testimony Was Submitted By:

Ferd J. Chmielnicki, Secretary, and L. Schlossberg, President, Detrex Chemical Industries, Inc., Detroit, Michigan.

David R. Spencer, Chlorinated Solvents Section Inorganic Chemicals Department, Dow Chemical USA.

Tor Lyshaug, Director, Multnomah County, Division of Operations and Maintenance.

B.D. Enright, Plant Manager, Continental Can Company, USA, Northwest Division, Portland, Oregon.

Mike C. Hawkins, President, Hawk Oil Company, Medford, Oregon.

Joseph Kolberg, Regional Environmental Engineer - West, Boise Cascade Paper Group, Portland, Oregon.

R.W. Bogan, Vice President, International Operations, GATX Terminals Corporation, Chicago, Illinois.

Lawrence E. Birke, Jr., Executive Director, Northwest Pulp and Paper Association, Bellevue, Washington.

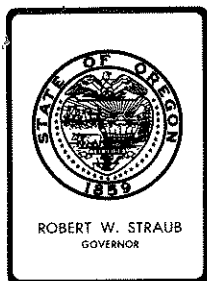
Mike Huddleston, P.E., Executive Director, Asphalt Pavement Association of Oregon, Salem, Oregon.

Dean C. Simeroth, Manager, Testing Section, State of California, Air Resources Board, Sacramento, California.

Robert D. Abendroth, Time Oil Company and Western Regional Vice President, Independent Liquid Terminals Association.

Peter Maltby, Project Engineer, Branson Cleaning Equipment Company, Shelton, Connecticut.

John Platt, Executive Director, Oregon Environmental Council, Portland, Oregon.



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
 From: Director
 Subject: Agenda Item No. 0, September 22, 1978, EQC Meeting

Authorization to Hold a Hearing on Proposed Volatile Organic Compound Rules and Amending the State Implementation Plan

Background

The Federal Clean Air Act Amendments of 1977 (CAAA) require that reasonably available control measures be added to State Implementation Plans (SIP) if the photochemical oxidant standard is not predicted to be attained by December 31, 1982. EPA guidelines require that in order to avoid sanctions (such as withholding of highway and sewage treatment plant grants) the SIP revision, due January 1, 1979, must contain Volatile Organic Compound (VOC) emission limits for 11 stationary source categories for which EPA has issued emission limit guidelines.

VOC rules have been developed for the 11 source categories following the EPA guidelines for Oregon's four oxidant nonattainment areas. Air quality projections due to be completed in October 1978 may show that an extension of compliance with the oxidant standard is not needed for the Salem and Eugene areas hence VOC rules would not be required. If this is the case, they will be deleted before the October public hearing or before final passage by the Commission in December. The CAAA also requires application of Lowest Achievable Emission Rate (LAER) to all major new and modified sources in nonattainment areas.

Oxidant nonattainment areas in the State and the number of days the standard was violated in 1977, are:

<u>Oxidant Nonattainment Area</u>	<u>Days Exceeding Oxidant Standard in 1977</u>
Medford-Ashland Air Quality Maintenance Area (AQMA)	39
Portland-Vancouver AQMA	41
Eugene-Springfield AQMA	3
Salem, City of	16



Contains
Recycled
Materials

These areas are experiencing levels of photochemical oxidant which exceed Federal and state ambient air standards. Volatile organic compounds, together with nitrogen oxides and strong sunlight, are the cause of photochemical oxidant.

The sources for which emission control guideline documents were prepared are:

<u>Source</u>	<u>Document</u>
Service Stations, Stage 1 Degreasing ("Solvent Metal Cleaning")	No EPA document number EPA-450/2-77-022
Bulk Gasoline Terminals	EPA-450/2-77-026
Three Petroleum Refinery Processes	EPA-450/2-77-025
Cutback Asphalt Paving	EPA-450/2-77-037
Surface Coating, Vol. II 5 Categories	EPA-450/2-77-008
Large Appliance Manufacture	EPA-450/2-77-034
Magnet Wire Insulation	EPA-450/2-77-033
Gasoline Bulk Plants	EPA-450/2-77-035
Metal Furniture Manufacture	EPA-450/2-77-032
Petroleum Liquid Storage	EPA-450/2-77-036

An August 4, 1978, draft of the proposed rules was mailed in August to 70 parties affected by the rules. The current draft, which incorporates many of the changes recommended by these parties, is attached to this memorandum. A public hearing is being scheduled for these VOC rules at: Portland, Monday, October 16, 2 and 7 p.m., State Office Building, basement auditorium. See the attached Notice of Public Hearing.

The staff will evaluate the public comments and offer a VOC rule to the Commission for passage at the December EQC meeting. This will meet EPA's schedule for passage of rules to control these VOC sources.

Statement of Need

The Environmental Quality Commission is requested to consider adoption of the attached, proposed VOC rules (OAR, Chapter 340, Sections 22-100 to 22-201).

- 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:
 1. 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 340-31-030) ambient air quality standards.
 2. 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:
1. "Design Criteria for Stage I 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.
 4. "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.
 6. "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.
 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.
 10. "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 24, 1978.
 13. South Coast Air Quality Management District (Los Angeles), current rules, received May 25, 1978.
 14. State of California Air Resources Board, "Certification and Test Procedures for Vapor Recovery Systems at Gasoline Service Stations and Bulk Plants," received July 5, 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 Volatile Organic Compounds," draft of Washington State rules, received July 26, 1978, from Washington State Department of Ecology.
17. Letter from G. J. Beuker, The Asphalt Institute, received August 1, 1978, draft of liquid asphalt rule, proposed OAR 340-22-125.
18. "Oregon Air Quality Report 1977," State of Oregon, Department of Environmental Quality, Air Quality Division, Appendix IC, Photochemical Oxidant Summary.
19. "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.

Evaluation

Medical Effects of Oxidants and VOC

A surprising amount of studies have been found which describe the carcinogenic and toxic effects of VOC. Besides their effects on humans, oxidants and VOC have effects on plants also.

Transport of Oxidant

Since oxidant takes time to form, rural places like Canby are experiencing higher oxidant levels than places where the precursors are released, such as the northwest industrial area of Portland.

History of Strategies

The practice of substituting less photochemically reactive VOC for more reactive has not been very successful elsewhere. Therefore, Oregon's proposed rules, as suggested by EPA, will require control of all reactive organics.

Cost Effectiveness and Energy Considerations

The cost per ton/year of VOC captured is being explored for each of the rules proposed. The energy expended to capture the VOC will also be investigated.

Overall Oxidant Control Strategy

The total VOC emission reduction needed to achieve compliance with Air Quality Standards will be addressed in the Transportation Control Strategy (TCS) Development Program which is the responsibility of local lead agencies. The VOC emission reductions required by these stationary source rules will be a part of the TCS.

VOC Reduction from Rule

The following table indicates the staff's best estimates of reductions from passage of the rules.

Rule OAR 340-22-	<u>VOC Reductions, Tons/Year</u>			
	Portland	Medford	Salem	Eugene
-110 Gasoline Stations	2,800	200	200	500
-115 & -120 Bulk Gasoline Plants & Terminals	4,200	100	small	small
-125 Liquid Asphalts	unknown	unknown	unknown	unknown
-130 Petroleum Refineries	none	none	none	none
-135 Organic Liquid Storage	small	small	none	small
-140 Surface Coating in Manufacturing (and -201)	unknown	3,400	none	none
-145 Degreasers	unknown	unknown	unknown	unknown
-150 Roofing Tars	unknown	unknown	unknown	unknown
Total Reductions	7,000	3,700	200	500
Present Estimated VOC Emissions	65,000	12,000	10,000	22,500
% Reduction	11%	31%	2%	2%

Conclusions

1. EPA, following the Clean Air Act Amendments of 1977, is requiring Oregon to pass rules to control certain VOC sources.
2. VOC emissions in four urban areas of Oregon must be reduced to meet photochemical oxidant health standards.
3. VOC rules, developed from EPA guidelines and coordinated with the State of Washington, must be reviewed in a public hearing, and adopted by the EQC to assure continuance of certain grants from the Federal Government to Oregon's highways and sewage treatment plants.

Director's Recommendation

Having found the foregoing facts to be true, I recommend that the Commission authorize a public hearing for the attached VOC rules for October 16, 1978, in Portland and consider the rules for adoption at the Commission's December 1978 meeting.



WILLIAM H. YOUNG

PBBosserman/kz

229-6278

September 12, 1978

Attachments:

VOC Proposed Rules

Hearing Notice

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

of the

STATE OF OREGON

NOTICE OF PUBLIC HEARINGS ON A PROPOSED RULE GOVERNING THE EMISSION OF VOLATILE ORGANIC COMPOUNDS IN NON-ATTAINMENT AREAS OF OREGON AND APPLICATION OF LOWEST ACHIEVABLE EMISSION RATES

NOTICE is hereby given that public hearings will be conducted before a hearing officer of the Environmental Quality Commission on proposed permanent rule OAR Chapter 340, Sections 20-002 and 22-100 through 22-201 pertaining to Volatile Organic Compound General Emission Standards. Application of lowest achievable emission rates for major new and modified particulate emission sources, as regulated by the Clean Air Act Amendments of 1977 is also addressed. Adoption of this rule would constitute an amendment by adding new sections to the State's Clean Air Act Implementation Plan.

PURPOSE: The hearing will be to receive testimony on the Department's proposed Volatile Organic Compound (VOC) General Emission Standards. These standards would regulate certain sources of VOC which contribute to the formation of photochemical oxidants, commonly known as smog.

Non-attainment areas where the rules would apply are:

1. Medford-Ashland Air Quality Maintenance Area
2. Portland Air Quality Maintenance Area
3. Eugene-Springfield Air Quality Maintenance Area
4. Salem City Limits

Since oxidant standards are not violated in Oregon from November through March (because of insufficient solar energy), the rules allow a limited exemption for control device operation during the winter months. Since much of the state is considered in attainment with oxidant standards, sources in "clean" areas are exempted from these rules.

Sources regulated by these rules are:

- Gasoline Stations, underground tank filling
(customer vehicle tank filling to be regulated later)
- Bulk Gasoline Plants

- Bulk Gasoline Terminal Loading
 - Cutback Asphalt
 - Petroleum Refineries
 - Petroleum Liquid Storage
 - Surface Coating including paper coating
 - Degreasers
 - Asphaltic and Coal Tar Pitch
 - Miscellaneous
 - Resin Plants
 - Surface Coating of Cans
- Any new sources exceeding emissions of 100 tons VOC/year.

LAND USE COORDINATION: The proposed rule does not affect land use.

TIME AND PLACE of the hearings will be at 2:00 p.m. and 7:00 p.m. on Monday, October 16, 1978 in the basement, room 36, of the State Office Building at 1400 S. W. 5th Avenue, Portland, Oregon.

TESTIMONY regarding these proposals may be offered by any persons either orally or in writing. Written testimony may be offered by mailing the same prior to October 15, 1978 to the Department of Environmental Quality, Post Office Box 1760, Portland, Oregon 97207, or bringing same to the offices at 522 S. W. 5th Avenue, Portland, Oregon.

COPIES of the proposed regulations, background material, and definitions of affected areas may be obtained from the Department's Air Quality Division at its Portland address.

INQUIRY regarding the hearing and the proposals may be addressed to Mr. Peter Bosserman (229-6278) at the same Portland address. Please inform those persons you feel would have an interest in this matter.

Additions to Oregon Administrative Rules Chapter 340 Division 22:

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.

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 standards, sources in "clean" areas are exempted from these rules.

Sources regulated by these rules are:

- Gasoline Stations, underground tank filling
(customer vehicle tank filling to be regulated later)
- Bulk Gasoline Plants
- Bulk Gasoline Terminal Loading
- Cutback Asphalt
- Petroleum Refineries
- Petroleum Liquid Storage
- Surface Coating including paper coating
- Degreasers
- Asphaltic and Coal Tar Pitch
- Miscellaneous
 - Surface Coating of Cans
 - Any new source exceeding emissions of 100 tons VOC/year

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, methyl chloroform, 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 approved 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.

(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 an 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 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.

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 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 in practice or can reasonably be expected to occur in practice 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 pollutant in excess of the amount allowable under applicable new source performance standards.

Exemptions

OAR 340-22-105 Natural gas-fired after-burners and other capture systems 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 after-burners and other capture systems 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.

0AR 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
- 4) Salem City Limits as of January 1, 1979.

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 and test data approved by the California Air Resources Board, the Bay Area Air Pollution Control District, and the South Coast Air Quality Management District where VOC control equipment has been developed. Certification and Test Procedures are on file with the Department and are the certification and test procedures used by the California Air Resources Board as of August 1977.

Compliance Schedules

340-22-108 The person responsible for an existing emission source subject to 340-22-100 through 340-22-200 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. 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.

Transfer of Gasoline to Small Storage Tanks

340-22-110

- (1) (a) A person shall not transfer or permit the transfer of gasoline from any tank truck or trailer into any stationary storage container which has a capacity of more than 400 gallons unless such container is equipped with a permanent submerged fill pipe and unless 90 percent by weight of the gasoline vapors displaced during the filling of the stationary storage container are prevented from being released to the atmosphere.

- (b) The provisions of this Rule shall not apply to:
- (A) The transfer of gasoline into any stationary storage container having a capacity of 2000 gallons or less which was installed prior to January 1, 1979, if such container is equipped with a permanent submerged fill pipe by January 1, 1980.
 - (B) The transfer of gasoline into any 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 of any stationary storage container 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.
- (3) The owner or operator of any existing stationary storage container subject to 340-22-110(1)(a) shall comply with the provisions of this Rule by April 1, 1981.

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

Transfer of Gasoline at Bulk Storage Facilities

340-22-115

- (1) A person shall not load gasoline into any tank, truck cargo tank, trailer, barge, or railroad tank car from any loading facility unless 90 percent by weight of the gasoline vapors displaced during the filling of the delivery vehicles are prevented from being released to the atmosphere.
- (2) Loading shall be accomplished in such a manner that displaced vapor 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.

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

- (a) 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 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 vessel unless such vessel is designed and maintained to retain returned vapors.

- (4) Loading facilities loading 10,000 liters (2,375 gallons) or less per day on an annual daily average 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 submerged fill pipe.

Delivery trucks being filled at 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 or 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 July 1, 1980.

Delivery Vessel Loading at 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, truck trailers, rail tank cars, and barges at bulk gasoline terminals with daily throughputs of greater than 76,000 liters (20,000 gallons) per day of gasoline.

Cutback Asphalt

340-22-125 After April 1, 1979, the use of SC, MC and RC liquid asphalts is prohibited in all pavement construction and maintenance operations and in soil stabilization, mulching and dust control. The only exceptions to this rule will be the use of MC liquid asphalt as a prime coat for aggregate bases, prior to paving, and for the manufacture of stockpile patching mixes used in pavement maintenance.

The liquid asphalt materials referred to are identified in ASTM Specification D-2026-72, D-2027-72 and D-2028-72.

Petroleum Refineries

340-22-130 After April 1, 1979, these regulations shall apply to all petroleum refineries with a through-put capacity greater than 1500 cubic meters (9400 bbl) per day.

(1) Vacuum Producing Systems

- (a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or compressed and added to the refinery fuel gas.

- (b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC incinerated.

(2) Wastewater Separators

- (a) Wastewater separators shall incorporate fixed solid covers 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) During process unit turnaround all VOC shall be added to the refinery fuel gas, combusted by a flare or vented to a disposal system.
- (b) Depressurization of process units to the fuel gas system or flare shall include additional depressurizing to a disposal system when the pressure remaining in the process unit is greater than 5.0 psig.
- (c) The pressure drop of a disposal system shall be less than 5.0 psig.
- (d) The vapors in a process unit during turnaround may be vented to the atmosphere at a higher pressure (greater than 5.0 psig) if the concentration of VOC has first been reduced such that the actual emission of VOC to the atmosphere is less than that which would have been released to the atmosphere by the other depressurization procedures. The VOC purged during dilution shall be disposed of by combustion.

(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, 1980 all tanks storing volatile organic compound liquids with a true vapor pressure 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, as amended by proposed rule change, Federal Register, May 18, 1978, pages 21616 through 21625.

- (2) Be retrofitted with a covered 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 (1) above, or its equivalent.
- (3) Is fitted with a covered floating roof or internal floating cover meeting the manufacturers equipment specifications 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.

Surface Coating In Manufacturing

340-22-140 After April 1, 1981, 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 values as applied excluding water.

<u>Process</u>	<u>Limitation Grams/liter</u>	<u>lb/Gal</u>
Can Coating		
Sheet basecoat (exterior and interior) and over-varnish; two-piece can exterior (basecoat and overvarnish)	340	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	660	5.5
End sealing compound	440	3.7
Coil Coating	310	2.6
Fabric Coating	350	2.9
Vinyl Coating	450	3.8
Paper Coating	350	2.9

<u>Process</u>	<u>Limitation Grams/liter</u>	<u>lb/Gal</u>
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

Degreasers

340-22-145 After April 1, 1979, all open top vapor degreasers with an opening greater than 1 square meter (10 square feet) shall be equipped with:

- (1) A powered cover that can be opened and closed easily without disturbing the vapor zone.
- (2) Condenser flow switch and thermostat.
- (3) Spray safety switch.
- (4) One of the following:
 - (A) The freeboard ratio must be greater than or equal to 0.75 times the maximum horizontal dimension.
 - (B) Refrigerated chiller.
 - (C) Enclosed design so that the cover or door opens only when the dry part is entering or exiting the degreaser.

340-22-146 After April 1, 1979, all open top vapor degreasers with an opening greater than 1 square meter (10 square feet) shall have a permanent, conspicuous label summarizing the operating procedures. These procedures shall include:

- (1) Keep cover closed at all times except when processing work loads through the degreaser.
- (2) Minimize solvent carry-out by the following measures:

- (A) Rack parts to allow full drainage.
 - (B) Move parts in and out of the degreaser at less than 3.3 m/sec (11 feet per minute).
 - (C) Degrease the work load in the vapor zone at least 30 seconds or until condensation ceases.
 - (D) Allow parts to dry within the degreaser for at least 15 seconds or until visually dry.
- (3) Do not degrease porous or absorbent materials, such as cloth, leather, wood or rope.
 - (4) Work loads should not occupy more than half of the degreaser's open top area.
 - (5) The vapor level should not drop more than 10 cm (4 inches) when the work load enters the vapor zone.
 - (6) Never spray above the vapor level.

340-22-147 After April 1, 1979, all the following operating requirements apply to all open top vapor degreasers with an opening greater than 1 square meter.

- (1) Repair solvent leaks immediately, or shut down the degreaser.
- (2) Do not dispose of waste solvent or transfer it to another party such that greater than 20 percent of the waste (by weight) will evaporate into the atmosphere. Store waste solvent only in closed containers.
- (3) Exhaust ventilation should not exceed 20 m³/min per m² (65 cubic feet per minute per square foot) of degreaser open area, unless necessary to meet safety or insurance requirements. Ventilation fans should not be used near the degreaser opening.
- (4) Water should not be visually detectable in solvent exiting the water separator.

Asphaltic and Coal Tar Pitch Used for Roofing Coating

340-22-150

- (a) 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:
 - (1) Incinerated at temperatures of not less than 790°C (1454°F) for a period of not less than 0.3 second, or

- (2) Filtered in such a manner determined by the Department of Environmental Quality to be equally or more effective for the purpose of air pollution control than (1) above, or
 - (3) Processed in such a manner determined by the Department of Environmental Quality to be equally or more effective for the purpose of air pollution control than (1) above.
- (b) A person operating equipment subject to this rule shall provide, properly install and maintain in good working order, devices capable of correctly indicating and controlling operating temperatures.
- (1) Incinerated at temperatures of not less than 790° C (1454°F) for a period of not less than 0.3 second, or
 - (2) Filtered in such a manner determined by the Department of Environmental Quality to be equally or more effective for the purpose of air pollution control than (1) above, or
 - (3) Processed in such a manner determined by the Department of Environmental Quality to be equally or more effective for the purpose of air pollution control than (1) above.
- (b) A person operating equipment subject to this rule shall provide, properly install and maintain in good working order, devices capable of correctly indicating and controlling operating temperatures.
- (c) Any equipment installed for the purposes of meeting (a) above, must be of a design approved for the purpose by a fire and safety testing organization recognized by the fire department having jurisdiction.
- (d) The provisions of this rule shall not apply to:
- (1) Equipment having a capacity of 100 liters (26.4 gallons) or less; or
 - (2) Equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

Miscellaneous Sources

340-22-200 After April 1, 1982, no person operating sources listed in 340-22-201 shall discharge Volatile Organic Compounds into the atmosphere unless such emissions have been reduced by at least 85% or to the following:

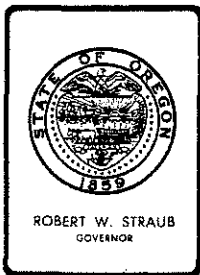
- 1) Volatile Organic Compounds that come into contact with flame or are baked, heat cured or heat polymerized, are limited to 1.4 kilograms (3.1 pounds) per hour not to exceed 6.5 kilograms (14.3 pounds) per day.

- 2) Volatile Organic Compounds that are emitted into the atmosphere that do not qualify as (1) above are limited to 3.6 kilograms (7.9 pounds) per hour, not to exceed 18 kilograms (39.6 pounds) per day. All Volatile Organic Compounds emitted for a drying period of 12 hours following their application shall be included in this limit.

340-22-201 Sources covered by Section 340-22-200:

- 1) Any new or modified source, not covered elsewhere in section 340-22-100 through 340-22-200, that increases actual emissions more than 100 tons of VOC per year, after emission controls, shall be bound by Rule 340-22-200.
- 2) Surface coating of cans
- 3) Surface coating of paper

DRAFT
9/13/78
PBB/kz



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. H December 15, 1978, EQC Meeting

Proposed Modification of the Chem-Nuclear License for Operation of the Arlington Hazardous Waste Disposal Site

Background

On August 25, 1978, the Department received Commission approval to conduct public hearings on its proposal to modify the Chem-Nuclear license. The present license was issued March 2, 1976, but it has since become evident that certain license modifications were necessary for better oversight of the disposal operation.

Public hearings were held in Arlington on October 16, 1978 (attendance: 1) and in Portland on October 24, 1978 (attendance: 5). The only testimony offered was by a Chem-Nuclear representative at the latter hearing who concurred with the proposed modifications.

The modifications were submitted for Commission approval on November 17, 1978, however, the Department was asked to reevaluate the proposed deletion of license Condition C7. As a result, C7 has been reinserted in the license, albeit in a modified form as noted in 1B below.

The authority for the license modifications is OAR 340-62-040(2). Public hearings were not specifically required but were felt to be advantageous in view of the general public interest in hazardous waste disposal sites.

Evaluation

The major proposed areas of change from the old license are listed below. All except the revised 1B were presented to the Commission on November 17, 1978.

- 1A. Condition A8 changed. The cost to the State (should we desire to purchase the property) is based upon a calculated "present value" rather than the book value; i.e., it considers inflation. A calculation (attached) shows the present value to be about \$714,000 compared to a book value (excluding depreciation) of about \$571,000.



Contains
Recycled
Materials

- 1B. Condition C7 changed. Part (c) has been modified so that the finding of default leading to the State's assumption of the site is determined by arbitration rather than the Department.
2. New A9 added; deleted old Section F.
3. B7 changed.
4. B12 changed
5. New B13 added.
6. B15 (old B14) changed. Note the incinerator need not be on-site.
7. B17 (old B16) changed.
8. B19 added.
9. C3 changed. The annual license fee has been changed to reflect current monitoring costs. The \$4,324 fixed fee will be raised to \$7,175 for FY 1980 with subsequent increases to reflect the cost of inflation.
10. C4 changed.
11. C5 changed. Note last statement on pollution insurance.
12. Section E changed to allow the Department flexibility to design a monitoring program pertinent to the wastes being disposed.
13. New B20 - B23 added.
14. D1 changed. Old D2 included in D1.
15. New D2 added and old D4 included in Section E.

A copy of the present license is attached for reference.

Summation

The proposed license modifications more closely reflect the current site operation which has evolved over the past 2 1/2 years. Most of the changes involve only a clarification of language or licensee responsibility; but there is a significant change in the manner of calculating the site value should the State desire to purchase it.

The only applicable public comment received was Chem-Nuclear's concurrence in the proposed modifications.

Director's Recommendation

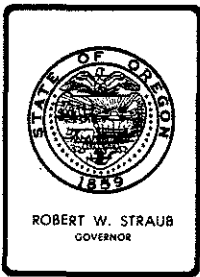
Based upon the Summation, it is recommended that the Commission issue the modified Chem-Nuclear license.

Bill

WILLIAM H. YOUNG

Fred Bromfeld:mm
229-5913
December 4, 1978
Attachments: (4)

Proposed License
Present License
Site "present value" calculation
Hearing Officer Report



Department of Environmental Quality

522 S.W. 5th AVENUE, P.O. BOX 1760, PORTLAND, OREGON 97207

October 30, 1978

To: Environmental Quality Commission
From: Hearing Officer
Subject: Hearings Report: Public Hearings to Consider Modifications to the Chem-Nuclear License for Operation of the Arlington Hazardous Waste Disposal Site

Summary

Pursuant to public notice, hearings were held before the undersigned at 2:00 p.m. on October 16, 1978 in the cafetorium of Arlington Elementary School, Arlington, and at 1:00 p.m. on October 24, 1978 in the Department's conference room 511, Portland.

Over 100 hearings notices were mailed with a special effort made to include all Gilliam County people who had previously expressed interest in the site.

One person, a representative of Chem-Nuclear, was present at the Arlington hearing. No testimony was offered.

Five people were present at the Portland hearing: two from Chem-Nuclear, two from Chempro (a Portland waste recovery outfit), and one from the Oregon Department of Geology and Mineral Industries.

Summary of Testimony

The only testimony was offered by Mr. Patrick Wicks of Chem-Nuclear. He concurred with the proposed modifications and noted that the lack of attendance at the hearings indicated that the public has no fear of the site operation and is generally satisfied with it. He pledged that Chem-Nuclear would remain a good neighbor and operate in a responsible manner.

Recommendation

Based upon the hearings testimony, it is recommended that the Commission issue the modified Chem-Nuclear license.

Respectfully submitted

Fred S. Bromfeld
Hearing Officer

FSB:mm



Contains
Recycled
Materials

HAZARDOUS WASTE DISPOSAL SITE LICENSE

Department of Environmental Quality
522 S.W. 5th Ave. P.O. Box 1760
Portland, Oregon 97207
Telephone: (503) 229-5913

Issued in Accordance with the Provisions of

ORS CHAPTER 459

ISSUED TO:	REFERENCE INFORMATION
(licensee) Chem-Nuclear Systems, Inc. P.O. Box 1866 Bellevue, Washington 98009	Facility Name: <u>Oregon Pollution Control Center and Hazardous Waste Repository</u>
LOCATION: (PROPERTY DESCRIPTION) S1/2 of NE1/4, SE1/4, of Section 25 and N1/2 of NE1/4 of Section 36, T2N, R20E, W.M.	County: <u>Gilliam</u>
ISSUED BY THE ENVIRONMENTAL QUALITY COMMISSION	Operator: <u>Chem-Nuclear Systems, Inc. P. O. Box 1866 Bellevue, Washington 98009</u>
<hr/> WILLIAM H. YOUNG	
Director, Department of Environmental Quality	Effective Date

Until such time as this license expires or is modified or revoked, Chem-Nuclear Systems, Inc. is herewith authorized to establish and operate a site for the treatment, storage, and disposal of hazardous wastes as now or hereafter defined by ORS 459.410 and rules of the Department of Environmental Quality. Such activities must be carried out in conformance with the conditions which follow. This license is personal to the licensee and non-transferable.

L I C E N S E C O N D I T I O N S

A. GENERAL CONDITIONS

- A1. Authorized representatives of the Department of Environmental Quality (hereinafter referred to as the Department) shall have access to the site at all reasonable times for the purpose of inspecting the site and its facilities, the records which are required by this license, or environmental monitoring.
- A2. The Department, its officers, agents and employees shall not have any liability on account of the issuance of this license or on account of the construction, operation or maintenance of facilities permitted by this license.
- A3. The issuance of this license does not convey any property right or exclusive privilege, except pursuant to the lease for the State owned portion of the site, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of Federal, State or local laws or regulations.
- A4. The Department may revise any of the conditions of this license or may amend the license on its own motion in accordance with applicable rules of the Department.
- A5. Transportation of wastes to the site by or for the licensee shall comply with rules of the Public Utility Commissioner of Oregon, the State Health Division and any other local, State or Federal agency having jurisdiction.
- A6. A complete copy of this license and approved plans and procedures shall be maintained at the site at all times.
- A7. The licensee shall not conduct, or allow to be conducted, any activities that are not directly associated with the construction, operation or maintenance of the waste management facilities at the site as authorized by this license, without prior written approval from the Department for such other activities.
- A8. The licensee shall not sell or otherwise dispose of any portion of the site without prior written approval from the Department. This condition shall survive the expiration, revocation, suspension or termination of the license for any reason other than those specified in condition C7 for a period of two years during which time the Department shall have exclusive right and option to purchase all of the site and improvements thereon, not theretofore deeded to the State. Purchase from licensee shall be in accordance with Appendix I to this license which sets forth the basis and conditions for such purchase.
- A9. The plans and procedures approved under Section F of the superseded license (dated March 2, 1976) are hereby approved.

L I C E N S E C O N D I T I O N S

B. SPECIAL CONDITIONS

Management of the site, including all activities related to treatment, storage and disposal of wastes at the site, construction and maintenance of facilities at the site, and monitoring and maintenance of records concerning operation of the site shall conform with the following conditions:

- B1. No construction activities related to waste management at the site may be undertaken by the licensee until the Department has approved in writing final plans for facilities proposed by the licensee.
- B2. Following written approval by the Department of final detailed engineering plans, the licensee shall proceed expeditiously with construction of the approved facilities.
- B3. No waste management facility may be used by the licensee until the Department has inspected the site and certified in writing that the facility is satisfactory and complies with the approved final detailed engineering plans.
- B4. Operation of the site shall not be discontinued without the approval of the Department, except for temporary work suspension caused by conditions beyond the control of the licensee such as, but not limited to, labor disputes, weather conditions, equipment failure, shortages of materials or unavailability of qualified personnel. In the case of a temporary discontinuance of disposal activities which exceed 5 working days, the licensee will notify the Department in writing, giving the reason for the shut down and the estimated duration of the temporary closure. During any temporary discontinuance of disposal activities, the licensee shall maintain the security and integrity of the site.
- B5. Conditions B1, B2, B3, and B4 and other conditions of this license shall apply to present facilities and operations and to any subsequent facilities and operations proposed by the licensee.
- B6. Waste handling, storage, disposal, treatment, monitoring and other waste management activities at the site shall comply with procedures and plans approved by the Department and other conditions of this license.
- B7. The licensee shall assume all liability for containment, clean-up, and rectification of the conditions caused by any spill, fire, accident, emergency or other unusual condition that may occur:
 - (a) At the site;
 - (b) During the transportation of waste by the licensee to the site;
 - (c) During the authorized transportation of waste by others to the site, if:
 - (1) The licensee is made aware of the incident; and,
 - (2) The incident occurs on the following access routes to the site:
 - (i) State 19 from Olex to its junction with I-80 (including all of Arlington South of I-80 but excluding the flood diversion canal or the Columbia River.)
 - (ii) Blalock Canyon Road
 - (iii) Cedar Spring Road from Rock Creek to its Junction with State 19.

L I C E N S E C O N D I T I O N S

- B8. Before use of the site for disposal is terminated, the licensee shall restore the site to its original condition, to the extent reasonably practicable. No less than one year prior to intended closure of the site the licensee shall submit detailed plans for the Department's approval indicating steps to be taken to properly close and restore the site. No action toward closure shall be taken without prior written approval from the Department.
- B9. Upon completion of each burial trench, a granite or concrete marker shall be erected at the end of the trench. To such trench markers shall be attached a bronze or stainless steel plate which shall contain the following information: a trench identification number; dimension of the trench and its location relative to the marker; volume of waste buried; and dates of beginning and completion of burial operations.
- B10. The licensee may at any time propose in writing for the Department's consideration changes in previously approved facilities or procedures, or the addition of new facilities or procedures.
- B11. The licensee is authorized to accept and dispose at the site only those wastes for which specific treatment and disposal procedures or research programs have received prior approval by the Department. This authorization may be revoked if the Department finds the acceptance or disposal of such wastes to constitute a threat to the public health or welfare or the environment. The storage, treatment or disposal of wastes at the site shall be conducted only in facilities approved by the Department.
- B12. Except as provided in Condition B13, all requests for waste treatment, storage or disposal must be submitted in writing to the Department and include the following information (if applicable):
- (a) Name, location and business of the waste generator and contact person at the generator.
 - (b) Process in which waste was generated and/or marketable products arising from that process.
 - (c) Volume, chemical and physical nature of the waste.
 - (d) Manner in which waste is packaged for shipment.
 - (e) Proposed treatment and/or disposal procedure.

The Department may require written confirmation of (a) to (d) from the waste generator. A separate request must be made for each waste source and for each waste whose annual volume increases by more than 50 percent over that receiving prior approval from the Department. The Department will submit a written response to the licensee no later than 14 days following receipt of a request, however, a request is not complete until the Department has received all information necessary to arrive at an informed decision.

L I C E N S E C O N D I T I O N S

- B13. The Department may give verbal approval for the treatment, storage or disposal of certain wastes including, but not limited to, the following:
- (a) Wastes generated within the Pacific Northwest that do not exceed 2000 lbs./250 gallons from a single source within a single year.
 - (b) Wastes resulting from an accident or spill for which storage may not be feasible or may pose an unusual hazard.
 - (c) Wastes that have been given prior approval, but are received in a different form or package or for which a different but equivalent disposal procedure is requested.
- B14. If the Department determines that any specific waste originating in Oregon should be disposed at the site, based on unavailability or infeasibility of alternative disposal methods or other factors, the licensee shall provide disposal for such waste under treatment or disposal procedures directed by the Department utilizing existing site facilities and equipment. In the event that treatment or disposal procedures directed by the Department require additional facilities or equipment, the obligation of the licensee shall depend upon financial commitments by the waste generator satisfactory to licensee.
- B15. By March 1, 1979, the licensee shall submit a report to the Department which outlines the feasibility of adding incineration facilities to its operation. This report shall include an analysis of: the types and volumes of organic wastes that would be amenable to incineration; volumes of such wastes that have been disposed at the site by other means; conceptual design for appropriate incineration facilities including capital and operating costs, method of feed, hourly feed rate, and hours of operation; quantity and character of air contaminants to be emitted and proposed monitoring equipment, if any; and other information pertinent to the incineration facilities.
- B16. The licensee shall designate a site superintendent and shall advise the Department of the name and qualifications of the superintendent. The superintendent shall be in charge of all activities at the site within his qualifications. The licensee shall also advise the Department of the individual to be contacted on any problem not within the site superintendent's qualifications. The licensee shall immediately notify the Department if any change is made in these designated individuals.
- B17. The licensee shall not open burn any wastes or materials at the site, except for uncontaminated refuse and scrap and in compliance with State and local open burning rules, without prior written approval by the Department.
- B18. As provided in agreements or contract between the licensee, the Department, and other persons, ownership may be retained by other persons over certain wastes disposed at the site by the licensee. Such agreements shall further provide that the Department shall not be liable for any expenses associated with future recovery or re-disposal of such wastes and that following any future recovery or re-disposal operations, the site shall be returned to a condition satisfactory to the Department.

L I C E N S E C O N D I T I O N S

- B19. Wastes shall be managed on the site in a manner so as to prevent the reaction of incompatible materials which may cause a fire or explosion, the release of noxious gases, or otherwise endangering public health or the environment.
- B20. Wastes shall be consigned to treatment or disposal as rapidly as practicable.
- B21. The licensee shall designate a specific area(s) for the storage of wastes. Wastes shall not be stored in other than a storage area.
- B22. All containers of waste on site shall be identified sufficiently to assure rapid positive identification of their contents.
- B23. The licensee shall participate in the manifest system when it is implemented.

L I C E N S E C O N D I T I O N S

C. FINANCIAL

- C1. On March 15, 1976, the licensee posted a surety bond executed in favor of the State of Oregon in the amount of \$75,000 and for a term ending April 15, 1977. Each year thereafter, for 11 years on or before April 15, the surety bond shall be renewed or a new surety bond filed with the State of Oregon in the amount of \$75,000 less the amount of the cash bond posted with the Department (condition C2). Each such surety bond shall be posted concurrently with the cash bond.
The surety bond shall be forfeited to the State of Oregon by a failure of the licensee to perform as required by this license, to the extent necessary to secure compliance with the requirements of this license, and shall indemnify the State of Oregon for any cost of closing the site and monitoring it and providing for its security after closure.
- C2. On June 27, 1977, the licensee posted a cash bond, as provided by ORS 459.590(2)(f), with the Department in the amount of \$18,750. Thereafter, annual additions to the cash bond shall be posted by the licensee in the amount of \$5,625, for 10 years on or before April 15. Bills, certificates, notes, bonds or other obligations of the United States or its agencies shall be eligible securities deemed equivalent to cash. The cash value at the time of posting shall not be less than the required bond amount. Interest earnings on the cash bond shall be paid annually to the licensee, except for the amount necessary to offset inflationary increase in monitoring, security and other costs to be funded by the cash bond. Such inflation is to be measured by changes in the consumer price index with 1977 as the base year, and is to be computed upon the entire amount deposited in the cash bond.
- C3. The licensee shall pay the Department an annual license fee within 30 days after July 1 each year. The amount of such fee shall be adequate for the Department to maintain an adequate monitoring and surveillance program for the disposal site; and will be determined by the Department as part of its biennial budgeting process.
- C4. Prior to disposal, treatment or permanent storage of any wastes thereon, the licensee shall deed land used specifically for such purpose to the State. Within 60 days after completion of any new on-site roads, the licensee shall deed such roads to the State.
Within 30 days after deeding of these properties to the State, a lease between the licensee and the Department for these properties shall be executed. The lease shall be maintained for the duration of this license.

C E N S E C O N D I T I O N S

05. The licensee shall maintain ordinary liability insurance for operation of the site, with respect to all types of wastes, in the amount of not less than \$1,000,000. Such insurance shall also be maintained by the licensee in the amount of not less than \$1,000,000 to cover transportation by the licensee of all types of wastes to the site. The licensee shall notify the Department by a Certificate of Insurance within 7 days of any new policy or policy change and shall provide a certified copy of such policy or change within 90 days. All such insurance policies shall provide that such insurance shall not be cancelled or released except upon 30 days prior written notice to the Department. Environmental impairment liability insurance in a like amount shall be required when the Department determines that it is practicably available.
06. The licensee shall submit copies of audited annual reports, Form 10-K reports to the S.E.C., and unaudited quarterly management reports for the Arlington operation, within 30 days after completion by the licensee. These reports and, except as specifically provided in this license, other reports required by the license or requested by the Department shall be treated as confidential to the extent permitted by Oregon laws and rules.
07. The licensee shall convey title for the entire site to the State, except for those portions previously owned by the State, in the event of any one of the following circumstances:
- (a) Expiration of the license due to failure of the licensee to seek renewal.
 - (b) Termination or expiration of the license due to utilization of the site to its full capacity, as determined by the Department.
 - (c) Default by the licensee of any provision of this license that remains uncorrected after 30 days written notice.
- If, at the end of said 30 days, the Department determines that such fault remains uncorrected, it shall notify the licensee of the continued default and of its intent to enforce this license condition.
- If the licensee contests the enforcement action, within 10 days after the notification both parties shall appoint an arbitrator and the two arbitrators so appointed shall, within 5 days after their appointment, choose a third arbitrator. The written decision of a majority of the arbitrators shall be final and binding upon both parties, except that, in the event of a decision favorable to the Department, the licensee shall have an additional 30 days to correct the fault. (The Department or the arbitrators may extend this period if the fault cannot be reasonably corrected within 30 days). At the end of this period, the Department may accept the licensee's efforts or again remand the dispute to arbitration. The written decision of a majority of the arbitrators at this second arbitration shall be final and binding upon both parties.
- In the event that either party shall fail to choose an arbitrator within said 10 day period, or the two arbitrators shall fail to choose a third arbitrator within the 5 day period allotted to them, then either party may request the presiding judge of the Circuit Court of the State of Oregon for Multnomah County to choose the required arbitrator.
- The arbitrators, at their discretion, shall assess either or both parties for payment of the cost of arbitration.
- This condition shall survive the expiration or termination of the license.

L I C E N S E C O N D I T I O N S

D. RECORDKEEPING AND REPORTING

- D1. The licensee shall maintain records and submit monthly reports to the Department including but not limited to: quantity and type of waste received; generator; request number; date of waste receipt; name of carrier; fee collected; and the applicable of: storage location; date of waste treatment; date of placing in pond and pond number; date of burial, burial trench number, and location coordinates in trench.
Every shipment of waste received must be clearly traceable from its time of receipt to its placement in a pond or a burial trench.
The licensee shall also submit a monthly public information report on a form approved by the Department which will be available for public inspection.
- D2. All site records pertaining to the receipt, treatment, storage, and disposal of wastes are to be kept for at least 3 years and turned over to the Department at (or before) the termination of site operation. Such records shall be treated as confidential to the extent permitted by Oregon laws and rules.
- D3. The licensee shall maintain survey records for each burial trench, referenced to the nearest U. S. Coast Guard bench mark, to define the exact location and boundaries of each trench. Within 60 days after completion of a trench, the licensee shall forward the required marker information and a copy of the survey records to the Department.

L I C E N S E C O N D I T I O N S

E. ENVIRONMENTAL MONITORING

The licensee shall conduct chemical and biological environmental monitoring in accordance with a program designed jointly with the Department. This program will be reviewed annually by both parties and is to include at least the following:

- E1. On-site deep wells (Nos. B-1, B-2, B-3, B-4, B-5, and B-6) will be checked for the presence of water annually about May 1. A water sample will be obtained by a mutually agreed procedure from each well in which water is observed.
- E2. Monitoring wells in the pond and burial area will be checked monthly (or as otherwise determined by the Department) for the presence of water. A water sample will be obtained by a mutually agreed procedure from each well in which water is observed.
- E3. A sampling of the resident vertebrate population and of vegetation will be performed annually.
- E4. All samples required above will be analyzed in accordance with the jointly designed program and for wastes relative to those that were disposed. Such analysis may include but not be limited to total organic carbon, pH, specific conductance, heavy metals, chlorinated hydrocarbons, phenolics, cyanide, or other chemical species.
- E5. The monitoring program in effect at any time preceding or during the period of this license shall remain in effect until a new program has been jointly agreed upon.
- E6. All findings and results from the licensee's environmental monitoring program shall be reported to the Department within 15 days of their availability.
- E7. The Department may require special monitoring when it is deemed that conditions may exist to threaten the public health or welfare or the environment. The cost of such monitoring will be determined by both parties on a case-by-case basis.

LICENSE HW-1

APPENDIX 1

CONDITIONS FOR PURCHASE OF

CHEM-NUCLEAR POLLUTION CONTROL CENTER

Pursuant to License HW-1 condition A8, the following specifies the basis and conditions under which the Department may purchase the Chem-Nuclear Pollution Control Center:

1. In the event of expiration, revocation, suspension or termination of License HW-1 issued by the Department for Chem-Nuclear's Pollution Control Center (site) near Arlington, Oregon, except for reason specified in license condition C7, the Department shall have exclusive right and option to purchase from Chem-Nuclear all of the site and improvements thereon not theretofore deeded to the State.
2. "Site", hereunder shall include all real property within the legal description noted on License HW-1.
3. "Improvements", hereunder shall include trenches, ponds, fencing, signs, roads, water supply, monitoring wells and devices, and any other items specially designated in Exhibit A attached hereto and hereby made a part hereof. Improvements shall not include any rented or leased equipment, furniture, tools, mobile firefighting equipment, vehicles, tractors, graders, dozers, loaders, forklift trucks, trucks and other mobile equipment and their accessories.
4. Purchase of said site and improvements shall be at the adjusted price shown in Exhibit A attached hereto. Full cash payment shall be due on closing. Closing costs shall be shared equally, except that Chem-Nuclear shall not pay in excess of \$2000 of such costs.
5. If the Department determines that it will not purchase the site and improvements, it shall advise Chem-Nuclear in writing as soon as possible of such determination and shall release Chem-Nuclear from the Department's exclusive right and option under License HW-1 condition A8.
6. Additions to, or deletions from, the foregoing and Exhibit A attached hereto may be made at any time for the purpose of adding new facilities or deleting obsolete or retired facilities or for other mutually agreeable purpose. Said addition or deletion shall be executed by submission of a written response from the other party agreeing to the requested change. Said additions or deletions may be executed only by the President of Chem-Nuclear and the Director of the Department.
7. The foregoing provisions and conditions shall survive the expiration, revocation, suspension, or termination of License HW-1 for a period of two years.

EXHIBIT A to APPENDIX 1 of LICENSE HW-1

<u>Category</u>	<u>Item</u>	<u>Base Cost (C), \$</u>	<u>Base Year</u>	<u>Adjusted Price, \$</u>	
Site	Site Real.	1,800	1970	C x F1 x F3	
	Property	63,924	1972	C x F1 x F3	
	Site	93,080	1970	C x F1 x F3	
	Development	81,943	1971	C x F1 x F3	
		65,348	1972	C x F1 x F3	
		10,953	1973	C x F1 x F3	
		13,291	1974	C x F1 x F3	
Improvements	Burial Trenches	112,616	1976	C x F1 x F2a x F3	
	Evaporation Ponds	8,500	1976	C x F1 x F2b x F3	
	Evaporation Ponds Liners	16,374	1976	C x F1 x F2c x F3	
	Fencing, Signs & Roads		3,721	1970	C x F1 x F3
			4,430	1972	C x F1 x F3
			2,844	1973	C x F1 x F3
			60,854	1976	C x F1 x F3
			7,528	1978	C x F1 x F3
	Water Wells & Systems		1,693	1972	C x F1 x F2b x F3
			2,622	1975	C x F1 x F2b x F3
			4,908	1976	C x F1 x F2b x F3
	Septic Systems		1,320	1975	C x F1 x F2d x F3
			1,068	1976	C x F1 x F2d x F3
Monitoring Devices		299	1976	C x F1 x F2d x F3	
		1,026	1977	C x F1 x F2d x F3	
Miscellaneous		388	1975	C x F1 x F3	
		3,665	1976	C x F1 x F3	

Adjustment Factor

F1 = The consumer price index for the purchase agreement month divided by the consumer price index for the base year. Consumer price indexes to be used are those for urban wage earners and clerical workers in Portland, Oregon.

F2 = A variable factor as follows:

F2a = Fraction of capacity unused

F2b = 1 if serviceable; 0 if not

F2c = $1 - (\text{years in use} \div 5)$ if serviceable; 0 if not

F2d = $1 - (\text{years in use} \div 10)$ if serviceable; 0 if not


F3 = Fraction of land not deeded to Oregon

ENVIRONMENTALLY HAZARDOUS WASTE DISPOSAL SITE LICENSE

Department of Environmental Quality
1234 S.W. Morrison Street
Portland, Oregon 97205
Telephone: (503) 229-5913

Issued in Accordance with the Provisions of

ORS CHAPTER 459

ISSUED TO:	REFERENCE INFORMATION
(Licensee) Chem-Nuclear System, Inc. P.O. Box 1866 13401 Bellevue-Redmond Road Bellevue, Washington 98009	Facility Name: <u>Oregon Pollution Control Center and Hazardous Waste Repository</u>
LOCATION: S 1/2 of NE 1/4 of Section 25 and N 1/2 of NE 1/4 of Section 36, T2N, R20E, W.M.	County: <u>Gilliam</u>
ISSUED BY THE ENVIRONMENTAL QUALITY COMMISSION	Operator: <u>Chem-Nuclear Systems, Inc. P.O. Box 1866 Bellevue, Washington 98009</u>
 LOREN KRAMER	<u>MAR 2 1976</u>
Director, Department of Environmental Quality	Effective Date

Until such time as this license expires or is modified or revoked, Chem-Nuclear Systems, Inc. is herewith authorized to establish, operate and maintain a site for the disposal and handling of environmentally hazardous wastes as defined by ORS 459.410 and rules of the Department of Environmental Quality, except any radioactive material. Such activities must be carried out in conformance with the requirements, limitations, and conditions which follow. This license is personal to the licensee and non-transferable.

LICENSE CONDITIONS

A. GENERAL CONDITIONS

- x A1. Authorized representatives of the Department of Environmental Quality (hereinafter referred to as the Department) shall have access to the site at all reasonable times for the purpose of inspecting the site and its facilities and the records which are required by this license.
- x A2. The Department, its officers, agents and employees shall not have any liability on account of the issuance of this license or on account of the construction, operation or maintenance of facilities permitted by this license.
- A3. The issuance of this license does not convey any property right or exclusive privilege, except pursuant to the lease for the State owned portion of the site, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of Federal, State or local laws or regulations.
- x A4. The Department may revise any of the conditions of this license or may amend the license on its own motion in accordance with applicable rules of the Department.
- x A5. Transportation of wastes to the site by or for the licensee shall comply with rules of the Public Utility Commissioner of Oregon, the State Health Division and any other local, State or Federal Agency having jurisdiction.
- A6. A complete copy of this license and approved plans and procedures shall be maintained at the site at all times.
- A7. The licensee shall not conduct, or allow to be conducted, any activities that are not directly associated with the construction, operation or maintenance of the disposal facilities at the site as authorized by this license, without written approval from the Department for such other activities.
- A8. The licensee shall not sell or otherwise dispose of any portion of the site without prior written approval from the Department. This condition shall survive the expiration, revocation, suspension or termination of the license for any reason other than those specified in condition C7 for a period of two years during which time the Department shall have exclusive right and option to purchase all of the site and improvements thereon not theretofor deeded to the State at book value of the site and improvements on the books of the licensee, net of depreciation and depletion.

LICENSE CONDITIONS

B. SPECIAL CONDITIONS

Management of the site, including all activities related to processing, treatment handling of storage and disposal of wastes at the site, construction and maintenance of facilities at the site, and monitoring and maintenance of records concerning operation of the site shall conform with the following conditions, limitations and provisions:

- B1. No construction activities related to waste disposal facilities at the site may be undertaken by the licensee until the Department has approved in writing ~~final plans for facilities proposed by the licensee.~~
- B2. Following written approval by the Department of final detailed engineering plans, the licensee shall proceed expeditiously with construction of the approved facilities.
- B3. No disposal activity may be undertaken by the licensee until the Department has inspected the site and certified in writing that the facilities provided for disposal activities are satisfactory and comply with approved final detailed engineering plans.
- B4. Following certification of the site and facilities (condition B3), the licensee shall commence operation of the site and facilities as soon as possible thereafter. Operation shall not be discontinued without the approval of the Department, except for temporary work suspension caused by conditions beyond the control of the licensee such as, but not limited to, labor disputes, weather conditions, equipment failure, shortages of materials or unavailability of qualified personnel. In the case of a temporary discontinuance of disposal activities which exceed 5 working days, the licensee will notify the Department in writing, giving the reason for the shut down and the estimated time of the temporary closure. During any temporary discontinuance of disposal activities, the licensee shall maintain the security and integrity of the site.
- B5. Conditions B1, B2, B3, and B4 and other conditions of this license shall apply to initial facilities and operations and to any subsequent facilities and operations proposed by the licensee.
- B6. Transportation, handling, disposal, treatment, monitoring and other activities at the site shall comply with procedures and plans approved by the Department and other conditions of this license.
- B7. In the event of fires, accidents or emergencies that occur at the site, or during transportation of wastes to the site, the licensee shall employ ~~an~~ emergency procedures approved by the Department. The occurrence of any fires, accidents, emergencies or other unusual conditions at the site, or in connection with transportation of wastes to the site, shall be reported, to the Department as soon as possible such that the Department can monitor or direct clean up or other activities necessary to rectify conditions resulting from the incident. If deemed necessary, the Department may require special precautions to be taken during or as the result of fires, accidents or emergencies.

LICENSE CONDITIONS

- B8. Before use of the site for disposal is terminated, the licensee shall restore the site to its original conditions, to the extent reasonably practicable. No less than one year prior to intended closure of the site the licensee shall submit detailed plans for the Department's approval indicating steps to be taken to properly close and restore the site.
- B9. Upon completion of each burial trench, a granite or concrete marker shall be erected at the end of the trench. To such trench markers shall be attached a bronze or stainless steel plate which shall contain the following information: a trench identification number; dimension of the trench and its location relative to the marker; volume of waste buried; and dates of beginning and completion of burial operations.
- B10. The licensee may at any time propose in writing for the Department's consideration changes in previously approved facilities or procedures, or the addition of new facilities or procedures.
- B11. The licensee is authorized to accept and dispose at the site only those chemical wastes for which specific treatment and disposal procedures or research programs have been approved by the Department. Treatment and disposal of chemical wastes at the site shall be conducted only in facilities approved by the Department.
- B12. Within 14 days after receipt of a written request for service from a waste generator or source specifying the volumes and chemical and physical composition of wastes requiring disposal, if treatment and disposal procedures have not been previously approved by the Department, the licensee shall forward a copy of such request to the Department together with either:
- A. Proposed treatment and disposal procedures; or
 - B. A proposed research program for development of disposal procedures and the time required for completion; or
 - C. A determination that the wastes should not be accepted at the site and the reasons therefor.

The Department shall review such requests in a timely fashion and shall submit a written response to the licensee no later than 14 days following receipt of a request.

Any treatment or disposal procedures or research programs which are approved by the Department pursuant to such requests shall be undertaken by the licensee as soon as practicable.

LICENSE CONDITIONS

- B13. Notwithstanding the provisions of condition B12., item c., if the Department determines that any specific waste, other than radioactive waste, originating in Oregon should be disposed at the site, based on unavailability or unfeasibility of alternative disposal methods or other factors, the licensee shall provide disposal for such waste under treatment or disposal procedures directed by the Department utilizing existing site facilities and equipment. In the event the treatment or disposal procedures directed by the Department require additional facilities or equipment, the obligation of licensee shall depend upon financial commitments by the waste generators satisfactory to licensee.
- B14. No less than 24 months and no more than 36 months after the effective date of this license, the licensee shall submit a report to the Department which outlines the feasibility of adding incineration facilities at the site. This report shall include an analysis of: the types and volumes of organic wastes that would be amenable to incineration; volumes of such wastes that have been disposed at the site by other means; conceptual design for appropriate incineration facilities including capital and operating costs; method of feed, hourly feed rate, hours of operation, quantity and character of air contaminants to be emitted and proposed monitoring equipment, if any; and other information pertinent to incineration.
- B15. The licensee shall designate a site superintendent. The licensee shall advise the Department of the name and qualifications of the superintendent. The superintendent shall be in charge of all activities at the site within his qualifications. The licensee shall also advise the Department of the individual to be contacted on any problem not within the site superintendent's qualifications. The licensee shall immediately notify the Department if any change is made in these designated individuals.
- B16. The licensee shall not open burn any wastes or materials at the site, without prior written approval by the Department.
- B17. The licensee shall not receive, store or dispose of any radioactive wastes at the site.
- B18. As provided in agreements or contract between the licensee, the Department and other persons, ownership may be retained by other persons over certain wastes disposed at the site by the licensee. Such agreements shall further provide that the Department shall not be liable for any expenses associated with future recovery or re-disposal of such wastes and that following any future recovery or re-disposal operations, the site shall be returned to a condition satisfactory to the Department.

LICENSE CONDITIONS

C. BONDING, FEE, LEASE AND INSURANCE CONDITIONS

C1. On or before April 15, 1976, the licensee shall file a surety bond executed in favor of the State of Oregon in the amount of \$75,000 and for a term no longer than April 15, 1977. Each year thereafter on or before April 15, for eleven years, the surety bond shall be renewed or a new surety bond filed with the State of Oregon, in the amount of \$75,000 less the amount of cash bond posted with the Department, in accordance with condition C2 of this license, as of the date of renewal or filing of such surety bond. Each such surety bond shall be approved in writing by the Department prior to its execution. Such surety bond shall be forfeited to the State of Oregon by a failure of licensee to perform as required by this license, to the extent necessary to secure compliance with the requirements of this license, and shall indemnify the State of Oregon for any cost of closing the site and monitoring it and providing for its security after closure.

C2. On or before April 15, 1977, the licensee shall post a cash bond, as provided by ORS 459.590(2)(f), with the Department in the amount of \$18,750. Thereafter, annual additions to the cash bond shall be posted by the licensee in the amount of \$5,625, for each of the next 10 years, on or before April 15. The following shall be eligible securities deemed equivalent to cash: bills, certificates, notes, bonds or other obligations of the United States or its agencies. The cash value at the time of posting shall not be less than the required bond amount.

Interest earnings on the cash bond shall be paid annually by the Department to the licensee, except for the amount necessary to offset inflationary increases in monitoring, security and other costs to be funded by the cash bond.

C3. The licensee shall pay a license fee to the Department in the amount of \$1,081 within 30 days after the effective date of this license. Thereafter, the licensee shall pay the Department an annual license fee of \$4,324 within 30 days after July 1 each year.

C4. Within 30 days after the effective date of the license, and prior to disposing any wastes thereon, the licensee shall deed the following properties at the site to the State: chemical disposal area, potliner resource recovery area and chemical evaporation ponds. Within 60 days after completion of on-site roads, the licensee shall deed such roads to the State.

Within 30 days after deeding of these properties to the State, a lease between the licensee and the Department for these properties shall be executed. The lease shall be maintained for the duration of this license.

LICENSE CONDITIONS

- C5. The licensee shall maintain liability insurance for operation of the site, with respect to all types of wastes, in the amount of not less than \$1,000,000. Liability insurance shall also be maintained by the licensee in the amount of not less than \$1,000,000 to cover transportation of all types of wastes to the site. The licensee shall provide the Department with certified copies of such insurance policies within 30 days after the effective date of this license and of all policy changes within 30 days after each such change. All such insurance policies shall provide that such insurance shall not be cancelled or released except upon 30 days prior written notice to the Department.
- C6. The licensee shall submit copies of: Audited Annual Report, Form IO-K Report to the S.E.C., and unaudited quarterly management reports for the Arlington operation. Any reports shall be treated as confidential to the extent permitted by Oregon laws and rules. These reports shall be submitted to the Department within 30 days after completion by the licensee.
- C7. The licensee shall convey title for the entire site to the State, except for those portions previously owned by the State, in the event of any one of the following circumstances:
- a. Expiration of the license due to failure of the licensee to seek renewal.
 - b. Termination or expiration of the license due to utilization of the site to its full capacity, as determined by the Department.
 - c. Default by the licensee of any provision of this license that remains uncorrected after 30 days written notice.

This condition shall survive the expiration or termination of the license.

LICENSE CONDITIONS

D. RECORDS AND REPORTING CONDITIONS

- D1. The licensee shall maintain records and submit monthly reports to the Department indicating quantities and types of wastes received, stored and disposed at the site and fees collected therefor. Such reports shall be on forms approved by the Department.
- D2. The licensee shall maintain records, on forms approved by the Department, indicating the type, quantity and location of wastes which have been buried in burial trenches at the site. Such records shall be submitted to the Department biannually.
- D3. The licensee shall maintain survey records for each burial trench, referenced to the nearest U.S.G.S. bench mark to define the exact location and boundaries of each trench. Within 60 days after completion of trenches, the licensee shall forward the required marker information and a copy of survey records to the Department.
- D4. All findings and results from the licensee's environmental monitoring program shall be recorded on appropriate forms and shall be reported to the Department quarterly.

LICENSE CONDITIONS

E. ENVIRONMENTAL MONITORING CONDITIONS

The licensee shall conduct a chemical and biological environmental monitoring program approved by the Department, including but not limited to:

- E1. On-site dry test wells (wells number B-1, B-2, B-3, B-4, B-5, and B-6) will be checked annually when the water table in the area is at its highest level. Water samples will be obtained from each well in which water is observed.
- E2. Monitoring wells in each chemical burial trench will be checked quarterly for the presence of water. If water is observed, a water sample will be taken and the Department will be notified immediately. If no water is observed, a sample of sediment (soil) from the monitoring well will be obtained biannually. Once per year, a sample of soil from trench monitoring wells will be sent to the Department.
- E3. All water and soil samples required by items a. and b. above will be analyzed for zinc, copper, arsenic, cadmium, chromium, lead, mercury, cyanides, chemical oxygen demand, total organic carbon, chlorides, specific conductance, chlorinated hydrocarbons and phenols using procedures approved by the Department.
- E4. A sample of the resident vertebrate population and of vegetation will be obtained annually. These samples will be analyzed for zinc, copper, arsenic, cadmium, chromium, lead, mercury, cyanides, chlorinated hydrocarbons and phenols.

LICENSE CONDITIONS

F. APPROVED PLANS AND PROCEDURES

As referred to in conditions F1., F2. and F3., the licensee's management plans shall mean the licensee's June 14, 1974 Program for Management of Hazardous Materials and revisions and additions thereto submitted to the Department by letters of September 24, 1974, December 31, 1975 and January 8, 1976.

F1. The following general plans and procedures are approved:

- a. Location of facilities at the site as described on Licensee's Plot Plan (Drawing No. 1), dated December 29, 1975.
- b. Security plans as described on pages 4 and 5 of the licensee's management plans, except that a three strand barb wire fence shall be maintained around the perimeter of the site.
- c. Firefighting procedures as described on pages 6 and 7 of the licensee's management plans, except that the requirements of condition B7 shall also apply.
- d. Fire and water systems as described on page 2 and Figure G-5 of the licensee's management plans as amended January 8, 1976.
- e. Operations center as described on page 2 and Figure G-4 of the licensee's management plans.
- f. Machine and storage building as described on page 1 and Figure G-2 of the licensee's management plans.

F2. The following plans and procedures for transportation, handling, disposal and treatment of chemical wastes are approved:

- a. Chemical staging area (drum storage pad) and tank farm as described on pages 2 and 3 and Figure C-1 of the licensee's management plans.
- b. Chemical process building as described on page 1 and Figures G-3 and C-4 of the licensee's management plan, except that only facilities for office, laboratory, sanitary facilities and emergency shower are approved.
- c. Evaporation ponds, 3 only, as described on page 17 item 1, and Figure C-5 of the licensee's management plans.

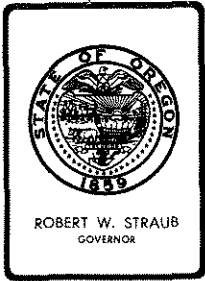
LICENSE CONDITIONS

- d. Chemical burial trench, 3 only, as described on page 14, item 1, and Figure C-2 of the licensee's management plans, with the following additions and exceptions:
- (1) Trench floor and gravel ditch to be sloped at 1 foot per 100 feet toward trench entrance. Trench floor also to be sloped toward gravel ditch at 1 foot per 100 feet and gravel ditch to be placed at trench edge rather than trench center.
 - (2) 3 sample pipes (monitoring wells) shall be placed in each trench. Location and design of such wells shall be approved by the Department and shall be in place before disposal of wastes in trench is begun.
 - (3) An earthen berm of 2 feet minimum height or ditch of 2 feet minimum depth, shall be maintained along the uphill edge of an active trench (stockpiling of excavated soil along the uphill edge will satisfy this requirement). A drainage ditch of 2 feet minimum depth shall be maintained adjacent to each end of the trench.
 - (4) Equipment operating in a trench shall not travel on or across the gravel ditch.
 - (5) Final mounding of completed trenches is to extend 2 feet beyond the trench edge. Suitable vegetation is to be established and maintained on completed and mounded trenches.
- e. Procedures for the pickup and transportation of chemical wastes as described on pages 55 and 56 of the licensee's management plans.

SITE PRESENT VALUE CALCULATION

The following calculations show the present site purchase cost according to Appendix I. They are based on the May 1978, consumer price index and the assumption that all the site improvements are serviceable.

Item	Base Cost (C), \$	Base Year	Adjusted Price, \$	EST 7/78 COST	
Site Real Property	1,800	1970	$C \times F1 \times F3$	$(1800)(1.732)(.9169) =$	2859
	63,924	1972	$C \times F1 \times F3$	$(63924)(1.641)(.9169) =$	96182
Site Development	93,090	1970	$C \times F1 \times F3$	$(93090)(1.732)(.9169) =$	147818
	81,943	1971	$C \times F1 \times F3$	$(81943)(1.659)(.9169) =$	126901
	65,348	1972	$C \times F1 \times F3$	$(65348)(1.641)(.9169) =$	98325
	10,953	1973	$C \times F1 \times F3$	$(10953)(1.540)(.9169) =$	15466
	13,291	1974	$C \times F1 \times F3$	$(13291)(1.373)(.9169) =$	16732
	6,628	1976	$C \times F1 \times F3$	$(6628)(1.174)(.9169) =$	7135
Gravel trenches	112,616	1976	$C \times F1 \times F2a \times F3$	$(112616)(1.174)(.625)(.9169) =$	75765
Vaporization ponds	8,500	1976	$C \times F1 \times F2b \times F3$	$(8500)(1.174)(1)(.9169) =$	9150
Vaporization ponds Liners	16,374	1976	$C \times F1 \times F2c \times F3$	$(16374)(1.174)(.6)(.9169) =$	10575
Fencing, Signs & Roads	3,721	1970	$C \times F1 \times F3$	$(3721)(1.732)(.9169) =$	5909
	4,430	1972	$C \times F1 \times F3$	$(4430)(1.641)(.9169) =$	6666
	2,844	1973	$C \times F1 \times F3$	$(2844)(1.540)(.9169) =$	4016
	60,854	1976	$C \times F1 \times F3$	$(60854)(1.174)(.9169) =$	65506
	7,528	1978	$C \times F1 \times F3$	$(7528)(1.000)(.9169) =$	6902
Water Wells Systems	1,693	1972	$C \times F1 \times F2b \times F3$	$(1693)(1.641)(1)(.9169) =$	2547
	2,622	1975	$C \times F1 \times F2b \times F3$	$(2622)(1.253)(1)(.9169) =$	3012
	4,903	1976	$C \times F1 \times F2b \times F3$	$(4903)(1.174)(1)(.9169) =$	5283
Optic Systems	1,320	1975	$C \times F1 \times F2d \times F3$	$(1320)(1.253)(.7)(.9169) =$	1061
	1,063	1976	$C \times F1 \times F2d \times F3$	$(1063)(1.174)(.8)(.9169) =$	920
Monitoring Devices	299	1976	$C \times F1 \times F2d \times F3$	$(299)(1.174)(.8)(.9169) =$	253
	1,026	1977	$C \times F1 \times F2d \times F3$	$(1026)(1.088)(.9)(.9169) =$	921
Miscellaneous	389	1975	$C \times F1 \times F3$	$(389)(1.253)(.9169) =$	446
	3,665	1976	$C \times F1 \times F3$	$(3665)(1.174)(.9169) =$	3945
	<u>\$ 570,823</u>				<u>\$ 714,300</u>



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item K, December 15, 1978, EQC Meeting

Staff Report - Proposed Adoption of Amendments to Noise Control Regulations for the Sale of New Snowmobiles, OAR 340-35-025

Background

In 1974 the Environmental Quality Commission set noise emission levels for new snowmobiles to be sold within the State of Oregon. This regulation, OAR 340-35-025, set maximum noise levels of 82 dBA for 1975 models, 78 dBA for 1976 through 1978 models and 75 dBA for 1979 and subsequent models. These noise levels were to be measured using a standard procedure designated SAE J192a. This procedure provides for measurements to be taken 50 feet from the snowmobile path while the snowmobile is accelerating. The procedure allows a 2 dBA tolerance to be applied to the above standards as a tolerance for measurement error.

In September 1977 the Commission extended application of the 78 dBA standard to 1979 snowmobile models as a result of a petition submitted by the Oregon State Snowmobile Association (OSSA) and public hearings held pursuant to that petition. On July 20, 1978 the International Snowmobile Industry Association (ISIA) petitioned the Commission for a further amendment to the standard. While the rule amendment proposed by the ISIA varies somewhat from the amendment proposed by OSSA in 1977, the basic goal and justifications of the two petitioners are identical. At the October 31, 1978 public hearing on ISIA's proposed amendment, petitioner asked that the record and testimony of the previous year's hearings be included in this matter. Staff has considered testimony received in the two matters cumulative and inseparable.

ISIA's petition requests that the 75 dBA standard that is to apply to model years 1980 and after be deleted entirely, and that the 78 dBA standard be substituted therefor. In addition the ISIA petition recommends that a second test, SAE J1161, and a 73 dBA standard apply to snowmobiles manufactured after June 30, 1976. The SAE J1161 test is a "cruise-mode" passby test, during which measurements are taken 50 feet from the snowmobile path, while the snowmobile is operated at a constant speed of 15 mph. A 2 dBA tolerance is applied.

Although the wording of the petition suggests that no in-use standard would apply to snowmobiles manufactured before February 1, 1975, Mr. W. T. Jobe,



Contains
Recycled
Materials

representative of petitioner, stated in testimony at the public hearing that ISIA intended the Department to apply reasonable in-use standards in any case.

The effect of the petition would be:

- 1) To require all snowmobiles manufactured after February 1, 1975 to meet a 78 dBA standard (plus 2 dBA tolerance) pursuant to SAE J192a.
- 2) To require all snowmobiles manufactured after June 30, 1976, in addition to the above requirement, to meet a 73 dBA standard (plus 2 dBA) pursuant to SAE J1161.

As with the existing rule, competitive-type snowmobiles would be exempt.

Statement of Need for Rule Making

- 1) The proposed rule may be promulgated by the EQC under authority granted in ORS 467.030.
- 2) The present rule will not significantly reduce noise pollution and may keep some new snowmobiles off the market. The rule change will allow more snowmobiles on the Oregon market without a significant increase in noise.
- 3) Principle documents relied upon in considering the need for this rule include:
 - a) Petition for Rule Amendment, submitted by International Snowmobile Industry Association dated July 20, 1978.
 - b) Hearing Report: October 31, 1978. Hearing Regarding Proposed Amendments to Rule Governing Noise Emissions from Snowmobiles.
 - c) Statement of the International Snowmobile Industry Association, presented to the EQC October 31, 1978, Portland, Oregon.
 - d) Other material entered into the record of the October 31, 1978 public hearing and the record on the same subject of June 16-17, 1977.

Summary of Testimony

Testimony of petitioner, snowmobile manufacturers, and local snowmobile dealers and enthusiasts has stressed the following points:

- 1) Within less than a decade the snowmobile manufacturers have lowered sound emissions of new snowmobiles by about 20 dBA. Present sound emissions represent state-of-the-art technology, and further sound reduction within the constraints of economics, marketing capabilities and safety is not possible.

- 2) Consumer preference for quiet snowmobiles dictates continued research by manufacturers to reduce noise. As workable methodologies are developed they will be incorporated.
- 3) Although some snowmobiles would meet a 75 dBA standard as presently manufactured, economies of scale would prevent many manufacturers from selling any snowmobiles within Oregon. As a consequence many dealers would be forced to reduce inventory to an extent that snowmobile sales would no longer justify a wintertime staff. Snowmobiles are ridden on primarily federal (Forest Service) lands many miles from the nearest human habitation. Conflicts between snowmobilers and other outdoor users are uncommon, and seldom noise related. In any event, active land use planning by the Forest Service has helped to minimize conflicts further.

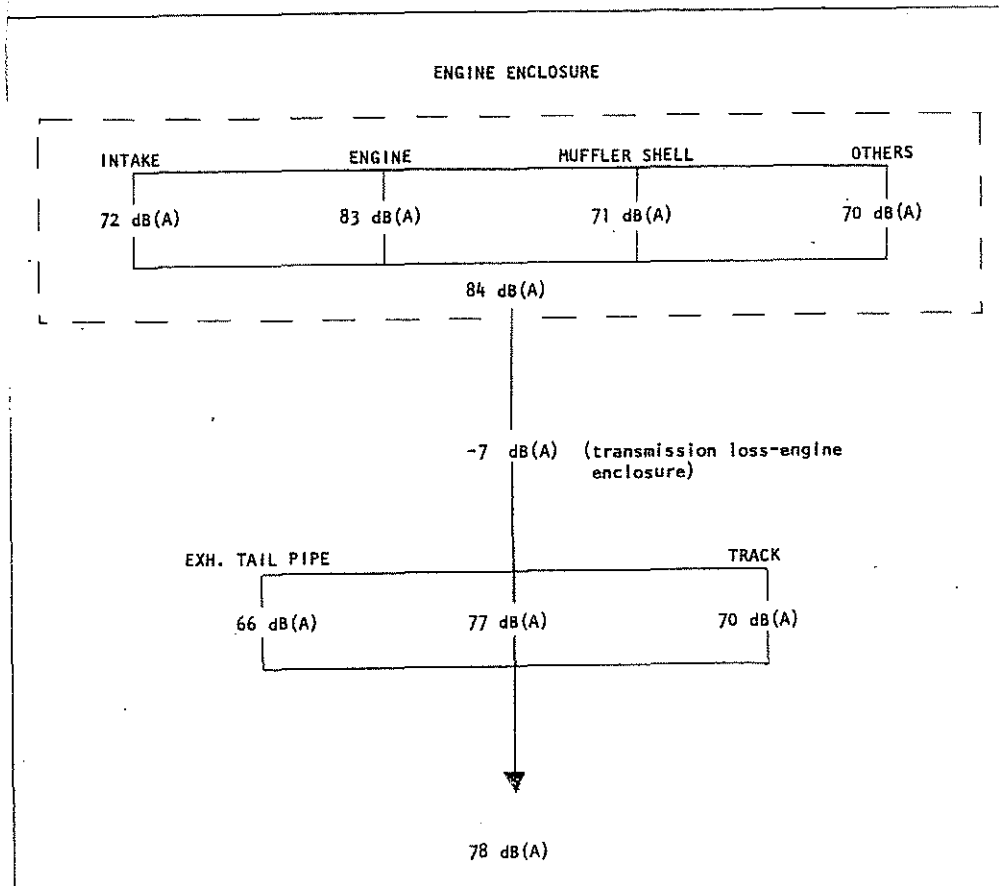
Those who offered testimony in opposition to the proposed amendment discussed fundamentally two issues:

- 1) The number of conflicts among outdoor user groups is significant and indicative of a problem.
- 2) Snowmobile-generated noise is a primary cause of the conflicts.

Evaluation

In a letter dated June 16, 1977, Kawasaki Motors Corp. presented a chart explaining relative contribution of discrete noise sources within a snowmobile. The chart is found in Exhibit B of the Hearing Report and is reproduced below.

SNOWMOBILE NOISE SOURCES



The chart indicates that engine radiated noise is by far the predominant source, and that the collective noise emissions of sources within the engine enclosure are lessened 7 dBA by the enclosure itself. Exhaust and track noise make a minimal contribution to overall sound levels. Kawasaki testified that further reduction of noise levels without engine redesign would result in a much heavier, less powerful, less salable snowmobile. Other manufacturers did not necessarily agree with Kawasaki's noise source breakdown, but agreed that further noise reduction, if possible at all, would result in the design problems Kawasaki enumerated.

No satisfactory explanation has been given for the fact that at least a few snowmobiles in each size category could now meet the 75 dBA standard. The variation in noise output that might be expected from different models, sizes, and styles of snowmobiles notwithstanding, a 3 dBA reduction requirement does not seem burdensome. It should be noted that the snowmobiles that do meet the 75 dBA standard are all air cooled. The liquid-cooled machines, with their capacity to tolerate greater engine insulation, will not meet the lower standard.

Testimony submitted by petitioner suggests that active enforcement of the 78 dBA standard will eventually result in a population of snowmobiles with an average SAE J192a sound level of 76 or 77 dBA. Over half of the snowmobiles presently sold in Oregon do not literally meet a 78 dBA standard. These machines may be sold within the state only by virtue of the 2 dBA tolerance of the test procedure. While staff agrees that the population of snowmobiles within the state may become slightly quieter as the pre-1975 machines are replaced, an average sound level below 78 dBA is unlikely as long as snowmobiles as loud as 80 dBA are added to the population.

Implementation of a second test, the SAE J1161 could not be expected to contribute to reduced noise levels by limiting the kinds of snowmobiles sold in Oregon. A stringent "cruise-mode" passby test might identify snowmobiles comparatively noisy while cruising that nonetheless pass the acceleration test. The SAE J1161 with a 73 dBA standard does not so discriminate, however, and would not justify the administrative burden of implementation.

Testimony from Forest Service personnel and from many snowmobilers who ride thousands of miles each year suggests that conflicts between outdoor users occur infrequently, and even then are not noise related. Mr. Gary Gilbertson, for instance, stated that snowmobile tracks are often used by cross-country skiers, and that confrontations between individuals are based on misunderstandings, not noise. Other testimony indicated that many cross-country skiers are annoyed by noise. Mr. Klindt Vielbig presented oral and written testimony indicating that of over 100 "quiet users" in the Trillium Lake area, nearly all regarded snowmobile noise offensive.

Mr. Talbot Bielefeldt noted that a direct result of noise impacts is an overcrowding of recreation areas off limits to snowmobiles by those who object to the noise.

Summation

Drawing from the background and evaluation presented in this report, the following facts and conclusions are offered:

- 1) Testimony concerning the noise impact of snowmobiles was conflicting, but representation from "quiet users" was limited, despite specific efforts to elicit testimony from groups who participate in non-motorized winter recreation. Undoubtedly some conflicts between users exist, and will continue to develop. The role that snowmobile noise plays in these conflicts is probably small.
- 2) Information presented to show that a 75 dBA standard could not be reasonably met by the snowmobile industry was not convincing. Undoubtedly some models now sold in Oregon would not meet that standard and could not be easily modified to comply. The extent of the noise reduction problem as portrayed by the snowmobile industry is open to dispute.
- 3) It is probable, however, that implementation of a 75 dBA standard in 1980 would exclude some manufacturers from the snowmobile market in Oregon. Given the uncertainty of the noise impact of present snowmobiles and the unresolved questions concerning noise reduction capabilities, the 75 dBA standard may not be justified at this time.

Director's Recommendation

Based on the summation above, it is recommended that the Commission take action as follows:

- 1) Adopt as its final Statement of Need for Rulemaking the Statement of Need commencing on page 2 herein.
- 2) Adopt Attachment A hereto as a permanent rule amendment to become effective upon its prompt filing, along with the Statement of Need, with the Secretary of State.

Bill

WILLIAM H. YOUNG

John Hector:dro
229-5989
12/4/78

Attachments (2)

1. Attachment A - Proposed Amended Table A of OAR 340-35-025
2. Attachment B - Hearing Officer Report

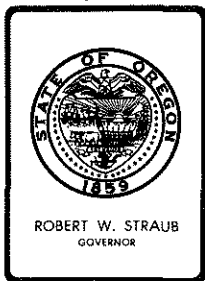
Note: New matter underlined, deleted matter in brackets. TABLE A of OAR 340-35-025 is hereby amended to read as follows:

TABLE A

New Motor Vehicle Standards

Moving Test At 50 Feet (15.2 meters)

<u>Vehicle Type</u>	<u>Effective For</u>	<u>Maximum Noise Level, dBA</u>
Motorcycles	1975 Model	86
	1976 Model	83
	1977-1982 Models	81
	1983-1987 Models	78
	Models after 1987	75
Snowmobiles as defined in ORS 481.048	1975 Model	82
	[1976-1979-Models <u>Models after 1975</u>	78
	Models after 1979]	[75]
Truck in excess of 10,000 pounds (4536 kg) GVWR	1975 Model	86
	1976-1981 Models or Models manufactured after Jan. 1, 1978 and before Jan. 1, 1982	83
	Models manufactured after Jan. 1, 1982 and before Jan. 1, 1985	80
	Models manufactured after Jan. 1, 1985	(Reserved)
Automobiles, light trucks, and all other road vehicles	1975 Model	83
	1976-1980 Models	80
	Models after 1980	75
Bus as defined under ORS 481.030	1975 Model	86
	1976-1978 Models	83
	Models after 1978	80



12/15/78
Item K
Attachment B

Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

To: Environmental Quality Commission
From: Hearing Officer
Subject: Hearing Report: Hearing Regarding Proposed Amendments to Rule Governing Noise Emissions from Snowmobiles

Background

DEQ Noise Regulations, OAR 340-35-025 Table A, specify in part that new snowmobiles of model years 1976-79 shall not exceed 78 dBA when measured according to the SAE J192a test. Model years subsequent to 1979 shall not exceed 75 dBA.

The 75 dBA requirement initially was to apply to model years after 1978. In March 1977, the Oregon State Snowmobile Association petitioned the Commission to amend the rule so that a 78 dBA standard would be retained for all future snowmobile models. The Commission postponed the 75 dBA standard for one year by amending the rule to its present form.

The petition presently before the Commission was submitted by the International Snowmobile Industry Association. The petition seeks amendment of the snowmobile noise standard such that all snowmobiles manufactured after February 1, 1975 shall not exceed 78 dBA according to SAE J192a and in addition snowmobiles manufactured after June 30, 1976 shall not exceed 73 dBA in accordance with SAE recommended practice J1161.

Pursuant to Commission authority, a public hearing on the proposed amendment was held on October 31, 1978 in Portland. Approximately 25 persons attended that hearing. A summary of the oral testimony received at that hearing and of written testimony received within ten working days subsequent to the hearing follows.

W. T. Jobe, I.S.I.A.

If the 75 dBA rule had been in effect last year:

1. The wide open throttle sound level for machines sold in Oregon would have decreased 1.23 dBA and the average sound emission level at 15 miles per hour would have increased .21 dBA. These changes cannot be perceived and are within the tolerance of the instruments used for measurement.



Contains
Recycled
Materials

2. Two companies of six would have been excluded from the market in Oregon.
3. Sixty-one percent of the units sold would not have been offered for sale, and 72% of the 46 models available could not have been sold.
4. People would have gone elsewhere to purchase new machines, and there would be no parts available for old machines.
5. Forty-one percent of the machines sold cost less than \$1800. With the rule in effect only five percent of those would have been available.
6. Forty percent of the machines sold were less than 431 cc, but with the rule only six percent of the available machines would have been in that size category.
7. None of the six liquid cooled machines presently available could have been sold.

All jurisdictions in the U.S. and Canada either have a 78 dBA standard or are in the process of revision, except New Hampshire, which is expected to seek legislative change. The EPA has not completed its studies on snowmobile noise and is not expected to identify snowmobile noise as a significant noise source.

Virtually all riding is on Forest Service land, and the Service has a management plan for off-road vehicles. Noise of current production models is not a major problem for the Forest Service, and because little riding occurs on State or private land, over-concern by the Commission about older machines may not be necessary.

During the period of April 1, 1975 to March 31, 1978 3,507 snowmobiles were sold in Oregon. The total number registered in Oregon is 7,520, so a substantial portion of the registered machines are the quiet, 78 dBA kind.

Mr. Jobe has been assured by Oregon snowmobile leaders that there are no complaints of noise and that there is not a noise problem.

Mr. Jobe would expect an appropriate reconciliation of the in-use standard with the language given in the petition, which was intended only to modify the new snowmobile standard. If past practice has been to allow a 2 dBA tolerance over the new standard for in-use machines, it is appropriate to continue.

The snowmobile companies cannot and will not try to redesign vehicles to conform with a more restrictive Oregon standard.

L. W. "Buck" Hermann, OSSA President; owner of recreational vehicle business in La Grande

As of spring 1978, 7,529 snowmobiles were registered in the state. This represents over \$4,000,000 in sales, accessories, trips, and outings. Until the past few years, Mr. Hermann's business was seasonal and some employees were laid off during the winter. Now the entire sales and repair staff can be kept on during the winter because of the snowmobile business. If the 75 dBA requirement were left in effect, sales would decrease to the point that he would quit the snowmobile business.

Most riding is on Federal lands. Conflicts with other winter recreationists and wildlife have disappeared because of quieter snowmobiles and land use planning efforts by the Forest Service.

Mr. Hermann expressed concern that the in-use standard would be made more restrictive so that used machines in stock could not be sold.

Mr. Hermann submitted letters or petition signatures from users of Oregon National Forest Lands who oppose a more stringent noise standard (Exhibit H). Included is a letter from Gary Flanik, District Ranger of Walla Walla Ranger District, stating no complaints of excessive snowmobile noise in the Tollgate-Spout Springs area have been received. Mr. Hermann also included maps and other documents for the record.

Roland Emetaz, Forest Service

Mr. Emetaz personally prefers cross-country skiing, climbing and backpacking over motorized recreation. He stated, however, that Forest Service policy is that off-road recreational vehicle use is a legitimate form of recreation. Mr. Emetaz is personally involved in the analysis of proposed Forest Service regulations regarding off-road vehicles. At one time the managers didn't think snowmobiling was acceptable, but opinions have changed, and that use is now pretty much o.k. The solution to many problems is management. Each forest in Oregon has on file an off-road vehicle management plan designating trails and areas where snowmobile use is allowed.

Many kinds of criteria are used to determine these areas to provide a balance of experiences for mechanized travel. The plans have pretty well eliminated conflicts of the past, concerning both wildlife and other recreationists. Not all conflicts are gone, but there are no significant, unresolved conflicts or major problems at this time.

The Oregon National Forest Lands have 2,556 miles of snowmobile trails; 45% groomed by machine-towed graders. Users pretty well stick to trails so grooming is a superb management tool. Management has helped reduce conflict, as has discussion between conflicting use groups.

Mr. Emetaz stated that there are no sound measurement programs for snowmobiles conducted by the Forest Service.

Mike Schmitt, Legislative Counsel for Yamaha Motor Corporation U.S.A.

Yamaha has conducted extensive research and development in noise control and has been able to reduce noise emission levels of its snowmobiles to 78 dBA for the SAE J192(A) test.

Add-on technology is not a viable method of further reducing noise levels; a complete design change would be needed. Redesign might result in reduced emissions of 1 or 2 decibels but it would cause severe performance drawbacks and would be expensive. No "magical combination" has been found; that is why some snowmobiles would meet a 75 dBA standard and some would not.

It is not feasible to design a machine solely for the Oregon market. Unless the standard is amended to 78 dBA, no 1980 model year Yamaha snowmobiles will be marketed in Oregon.

Consumer preference for quiet snowmobiles makes continuing research by manufacturers to produce quieter machines necessary.

Jules Perreault, Bombardier Ltee/Ltd.

The 78 dBA standard is new to the industry and meeting it has posed a very real challenge, forcing major systems redesign. This has been costly and even today the 78 dBA standard is difficult to obtain on any snowmobile. Systems that were not critical to the attainment of 78 dBA would become a factor with a 75 dBA standard.

Studies show that full throttle operation occurs less than 10% of the time. Average noise levels at 50 feet during normal operation are about 73 dBA, which is well below the average street traffic at 82 dBA.

The most stringent regulation for off-road motorcycles is 86 dBA (California). In this context, 78 dBA is reasonable, and further lowering might be considered discrimination against snowmobilers.

Ray Brandt, Western Power Sports, Regional Distributor for Polaris

Some criticism concerning noise was justifiably leveled against snowmobiles in the past. The snowmobile manufacturers did not possess adequate sound reduction technology and snowmobile owners would alter the machine's exhaust in search of added performance. Modifications are no longer a problem because riders are more aware of noise.

Snowmobile manufacturers in the past several years have developed effective sound reduction equipment. Mr. Brandt is interested in snowmobile public relations, and people with whom he has spoken do not find snowmobile noise objectionable. Mr. Brandt agreed with Mr. Hermann's statement on the economic impact of keeping a 75 dBA standard.

Jerry Sorensen, Kawasaki Snowmobile Distributor

No statement; opposes 75 dBA rule.

Michael Vaughan, Marketing Manager, Kawasaki Snowmobiles

Kawasaki has prototyped a number of snowmobiles in an effort to lower overall sound emissions. The prototypes have been heavy, expensive, low performance machines not worthy of consideration for mass production. Extensive research

has allowed us to accurately identify individual noise sources, and to achieve an idea of the astronomical cost of further sound reduction. A result of extensive work has been the reduction in intake and exhaust noise from 95 dBA to 72 dBA and 66 dBA, respectively. Additional reduction of these sources would accomplish little because they are already 10 dBA below engine mechanical and combustion noise.

Reduction of engine noise would involve fundamental research on the characteristics of two-cycle engines, or an enclosure about the engine. This latter solution would create cooling problems. Water cooled machines are quieter, but won't meet the 75 dBA standard.

If the 75 dBA rule remains in effect, Kawasaki couldn't sell snowmobiles in Oregon.

Klindt Vielbig

Conflicts between snowmobiles and "quiet users" are primarily noise related, and are not resolved. A Quiet Trails survey conducted near Trillium Lake Basin indicated nearly all of the approximately 125 people surveyed felt snowmobiles affected the user's enjoyment of the environment in a negative way.

There are far more cross-country skiers than snowmobilers, and the numbers are growing, so conflicts will increase.

Don R. Stonehill, Klamath County Snowmobile Dealer

A 75 dBA standard would cause a business loss too great to accomodate continuing operation.

A number of government bodies and businesses use snowmobiles in Klamath County, and replace machines every two to three years. If new machines cannot be purchased, very serious economic effects would result. Snowmobiles are also indispensable for search and rescue operations and to cattle ranching. Those activities primarily occur a long way from residences.

In Klamath County alone there are 150 miles of trails with 200 miles more planned for the next two years. In the five years Mr. Stonehill has been a member of the Klamath County Club, no noise complaints have been received. Robert Chadwick, Supervisor of Winema National Forest Service stated in a letter to Mr. Stonehill that he didn't think lowering of the standard would make much difference to the public.

During fiscal year 77-78 \$182,000 was generated by snowmobile registration, and snowmobilers donated \$10,000 to the Oregon Cancer Society.

Snowmobiling is a family activity, many times bringing family together in a way no other opportunity would.

The State of Oregon, outside the metropolitan area, where the bulk of riding occurs, has a population of only 1.18 people/square mile, so areas where riding occurs is sparsely populated.

The 75 dBA standard would cost many jobs, hurt businesses and would represent the interests of a gross minority. Even if quiet machines could be built, no one could afford them; the proposed rule is inflationary.

Stephen Koch, Diamond Lake Resort

Diamond Lake receives use from about 2,000 people every winter weekend, and the resort's snowmobile tours covered over 80,000 miles last year with new and up-to-date machines. The only noise complaints come from people trying to sleep with an older machine operated nearby.

There are complaints from some that the machines are too quiet and they sneak up on people like a bicycle in the night.

Mr. Koch submitted a letter from the Southern Oregon Sled Dog Club expressing concern over safety should noise levels be further lowered (Exhibit J).

Thomas Zenalik, District Sales Manager, Kawasaki Snow Machines

Mr. Zenalik expressed concern of many dealers that lowering of the standard will reduce wintertime income. There will be indirect economic impacts on restaurants, and other businesses.

Snowmobile use is primarily on Federal land, where no other winter use occurs.

Snowmobiling is a family-oriented sport, often with more than one machine per family participating.

If the standard is kept at 75 dBA, Kawasaki would not sell any machines in the State of Oregon.

Robert Mayson, Arctic Enterprises

Arctic is not prepared to meet the 75 dBA standard for the following reasons:

1. There is no evidence to suggest that sound emissions should be lowered.
2. Compliance would increase the retail price of snowmobiles and neither users nor those near usage areas would receive benefits equal to the added cost. Arctic strongly resists any cost increase.
3. Further sound reduction would increase the machine weight and reduce its attractiveness to the consumer.

All members of the industry have worked hard to decrease sound emissions to the current levels. Before industry is forced to do further work, strong evidence must be seen of the need to further reduce sound levels.

Robert Church, Mt. Hood Snowmobile Club

A 3 dBA decrease is a small amount. It might not be worth looking at at all. Sound decreases 6 dBA when distance from the source is doubled, and snowmobiles in Oregon are not operated in residential areas, so annoyance of

residents within homes is unlikely.

People that complain of snowmobile noise aren't aware that many winter recreational areas wouldn't be open without snowmobile support. Resorts seem to encourage patronage by snowmobiles.

Lowering of standards would stop new snowmobiles from coming into the state, and dealers would not be able to stay in business with repairs and other services.

Many people complain of snowmobile noise, but there are no reasons for the complaints. Wildlife is primarily at lower levels, not in deeper snow where riding goes on.

Snowmobilers in Oregon should consider maintenance of the 75 dBA standard a slap in the face; something that is not taken too well.

Robert Honzik, John Deere Co.

Product noise levels should be tied to demonstrated need, and not an estimated future state of art of product design. Snowmobiles which comply with 78 dBA with SAE J192a and 73 dBA with SAE J1161 are responsive to a careful consideration of environmental need.

Reasons why the 75 dBA standard should be revised:

1. There are virtually no noise complaints now, and as older machines are replaced the possibility of environmental impact should be further diminished.
2. U.S. Forest Service and Oregon Department of Transportation control the bulk of snowmobile activities through land use.
3. Even though it may be possible for John Deere to manufacture snowmobiles to meet 75 dBA, it is not feasible to manufacture and distribute these snowmobiles for Oregon customers. The only alternative would be to discontinue sale of snowmobiles in Oregon.

Brent Younker, Mt. Hood Snowmobile Club

The places where the club operates usually are not close to buildings. The parking lots that are paved were paid for by snowmobile funds and all users can park there.

Larry Traxler

Noted opposition to the 75 dBA standard. Did not testify at the public hearing.

Frank Ellis

Noise is not an issue with new machines among outdoor enthusiasts. While grooming a trail for a cross-country ski race, Mr. Ellis could hear skiers

above the snowmobile noise. Some of the older machines are used by cross-country skiers for trail grooming. Mr. Ellis has found snowmobiling to be a weekend sport that his entire family enjoys.

Mr. Ellis suggested that older, noisier machines might be more quickly retired if dealers were prevented from reselling the old machines by 1982.

There are some conflicts among outdoor users around Bachelor. The problem doesn't come from Nordic Clubs (nor from snowmobile clubs). No one will spend \$2,000 to go out and harrass someone; they spend that kind of money to go out and have fun.

Mr. Ellis stated that the average speed on a groomed trail is about 15 to 20 mph, and somewhat less without a trail.

Sig Raethke, Portland Dealer

Mr. Raethke rides with his family about 2,000 miles per year. He rides mainly in the Mt. Hood area, a long way from residences.

Mr. Raethke also owns lots in Trillium Lake area and thinks the problem of conflicts there will be resolved. He hasn't had problems with skiers himself.

Gary Gilbertson, Mt. Hood Snowmobile Club

There is a need for variety in snow machines. Handling characteristics, size of track, engine size must be suited to the rider for safe operation.

Dealer service is very important, and without good dealers to service equipment, riders cannot participate in the sport. The 75 dBA standard will reduce the number of dealers.

Financial impact will reach to associated businesses.

Mr. Gilbertson's riding is confined almost exclusively to fire roads or groomed trails.

The vast majority of the problems are misunderstandings among user groups. Cross-country skiers like to ski in snowmobile tracks, and do not understand that the snowmobile cannot move out of the track and out of the skier's way. It is a minor problem that could be solved with more understanding, and is not related to noise.

Snowmobiling is the coming family sport in Oregon. It is the only sport in Oregon where minors can operate motorized vehicles legally in public. On the whole, snowmobilers are serious people, and don't go into freezing weather to harass people, but to participate.

Tor Rollem

Mr. Rollem has a cabin right by a snowmobile trail and does not consider noise from snowmobiles offensive. Mr. Rollem is a cross country skier and does not snowmobile.

Talbot Bielefeldt

Mr. Bielefeldt is a salesman of cross-country ski equipment. Snowmobile noise is a major consideration when skiers plan a tour. There is a shortage of trails in the Mt. Hood region suitable for novice skiers. Snowmobiles use some of these trails which forces skiers to crowd into existing snowmobile closure areas. Dispersal of cross-country skiers is becoming a major winter recreation management goal of the Forest Service. Lower snowmobile noise levels will make snowmobiles more tolerable, and will encourage skiers to use trails that are shared with snowmobiles.

Attachments


Attached are:

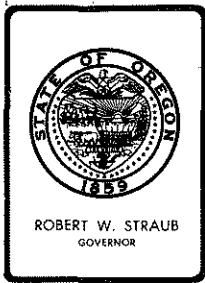
- Exhibits A-F - Testimony submitted by petitioner I.S.I.A.
- Exhibit G - I.S.I.A. petition
- Exhibit H - Letters and petitions opposing the existing rule, submitted by L. W. Hermann
- Exhibit I - Sample Quiet Trails survey and cover letter, submitted by Klindt Vielbig
- Exhibit J - Letter from Southern Oregon Sled Dog Club

Recommendation

Your Hearing Officer makes no recommendations in this matter.

Respectfully Submitted,


Wayne Cordes



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. L , December 15, 1978 EQC Meeting

Variance Request from Ochoco Pellet Plant - Prineville;
Request For Variance From Particulate Emission Limita-
tions, Oregon Administrative Rules 340-21-015(2)(b),
21-030(a) and 21-040.

Introduction

James L. (James Zimmerlee, Sr.) and Vivian Zimmerlee, present owners of Ochoco Pellet Plant, have requested an extension of a variance granted Ochoco Pellet Plant by the Commission in June 1977. The owners have requested an extension to January 1, 1980. The existing variance expires January 1, 1979.

The variance granted by the Commission in June 1977 limits visible emissions from the pellet plant to 60% opacity (see Attachment A, the Director's Memorandum for the June 24, 1977 meeting, and Attachment B, the minutes of that meeting that pertain to Ochoco Pellet Plant). Air Quality Standards for this type of facility call for a maximum opacity of 20%. The variance also allows emissions to exceed the state's process weight and grain loading standards.

Background

Ochoco Pellet Plant is a relatively small (3,200 tons/year) animal feed pelletizing plant located near the edge of industrial area in Prineville. One of four cyclones at the plant causes the main particulate emission problem. A source test done by the Department in 1973 showed that the plant was not capable of meeting emission limits for particulates.

Mr. and Mrs. James Zimmerlee, Sr. originally purchased Ochoco Pellet Plant in 1973, reportedly to keep it in Prineville. James L. (James Zimmerlee, Jr.) and Dolores Zimmerlee purchased the plant in February 1975. The Department has intensified its efforts since 1975 to work with plant owners toward attaining compliance. No significant improvements were made and James Zimmerlee, Jr. applied for a variance in 1977.



Contains
Recycled
Materials

The Director's recommendation to the Commission on June 24, 1977 was adopted with one amendment. The Commission set June 1, 1978, not October 1, 1978, as the date for Ochoco Pellet Plant to submit a control strategy and compliance schedule to the Department (see Attachments A and B).

The Department issued an updated Air Contaminant Discharge Permit for Ochoco Pellet Plant on September 26, 1977 (see Attachment C). Department personnel inspected Ochoco Pellet Plant on January 10 and March 21, 1978. On both dates, the plant was operating within the limits set by the variance and permit (less than 60% opacity). On January 10, 1978, Mr. James Zimmerlee, Jr. the owner of the plant, discussed the June 1, 1978 compliance date with Department personnel.

On May 26, 1978, Department personnel again inspected Ochoco Pellet Plant. Emissions from one cyclone were recorded in violation of permit limits (above 60% opacity) for 18 minutes. During this inspection, Department personnel visited with James Zimmerlee, Jr. about the June 1, 1978 compliance date. Following this inspection, a letter was sent to James Zimmerlee, Jr. reminding him of the June 1, 1978 compliance date (see Attachment D). On June 23, 1978 another reminder letter was sent (see Attachment E).

On July 18, 1978 Department personnel telephoned Ochoco Pellet Plant and learned:

1. James Zimmerlee, Jr. had "walked away" from the plant and the owners were now Mr. and Mrs. James Zimmerlee, Sr., the owners from 1973 to 1975.
2. The plant had a significant amount of unpaid bills.
3. The new owners needed some time to understand the existing situation at the plant before they could address the compliance date of June 1, 1978.

Following the telephone conversation of July 18, 1978, Department personnel requested official notification of the existing circumstances at Ochoco Pellet Plant with specific attention to the June 1, 1978 compliance date. Mr. and Mrs. James Zimmerlee, Sr. replied on July 22, 1978 (see Attachment F).

On October 11, 1978 Department personnel visited with Mr. and Mrs. James Zimmerlee, Sr. and then corresponded with them via a letter of October 16, 1978 (see Attachment G). Also, on October 16, 1978 the Department learned that the Zimmerlees were negotiating to sell the plant.

Evaluation

The Department has attempted to secure voluntary compliance from the owners of Ochoco Pellet Plant since 1973. Since the variance was issued by the Commission in June 1977, Department personnel have offered assistance

numerous times through conversations and letters. Emissions from Ochoco Pellet Plant have not changed substantially since issuance of the variance. However, maintenance and minor corrective measures have reduced fugitive emissions from the plant.

The former owners failed to submit a control strategy and compliance schedule as called for in Condition 2 of Ochoco Pellet Plant's Air Contaminant Discharge Permit. The present owners submitted a general strategy and schedule on November 15, 1978 with its variance request (see Attachment H).

The financial position of Ochoco Pellet Plant remains questionable. The cover letter of the financial statements which accompanied the variance request states that no opinion on the statements can be made due to the limited scope of the financial examination (see Attachment I). It appears that the financial position of the plant is no better than in June 1977.

The present owners have requested a variance for one year. Information supplied with the request indicates that a baghouse system could be installed in seven months from the time of contract approval. However, the variance request states that installation time depends upon long-term, low interest loan availability.

Mr. Jerry Parker is negotiating to purchase Ochoco Pellet Plant. Mr. Parker is aware of the need to control emissions and expresses a willingness to do what is necessary. Mr. Parker should take control of the plant on January 1, 1979. He is now applying for a Small Business Administration loan to correct the emission problems. While Mr. Parker will be purchasing a plant in a questionable financial position, he is confident that good management and monetary investment will make the plant show a profit. This position is generally supported by Mr. James Curtis, Central Oregon representative of the Department of Economic Development.

Finally, the Department has received no complaints directed at Ochoco Pellet Plant since the variance was approved in June 1977. Casual conversations with Prineville citizens and local officials indicate total support for Ochoco Pellet Plant's position.

Summation

1. The Department has been attempting to improve emissions from Ochoco Pellet Plant since 1973.
2. No significant improvements have been made to date.
3. No complaints have been received since the Environmental Quality Commission issued a variance for Ochoco Pellet Plant on June 24, 1977.

4. The financial position of Ochoco Pellet Plant remains questionable.
5. The new owner should take control of Ochoco Pellet Plant January 1, 1979.
6. The new owner is ready to install pollution control equipment upon receiving a Small Business Administration loan for the equipment.
7. The present owners have requested a variance for one year, from January 1, 1979 to January 1, 1980. The new owner supports this request.

Director's Recommendation

Based upon the summation, the Director recommends that the Environmental Quality Commission:

1. Enter a finding that strict compliance remains inappropriate due to the physical and financial condition, and the new ownership of Ochoco Pellet Plant.
2. Extend the variance for Ochoco Pellet Plant to operate in excess of emission standards described in Oregon Administrative Rules, Chapter 340, Section 21-015(2)(b), 21-030(a) and 21-040 until October 1, 1979, subject to the following conditions:
 - a. Visible emissions shall not exceed 60%.
 - b. Emissions shall be maintained at the lowest practical levels.
 - c. By March 1, 1979, the permittee shall submit proper plans and specifications for approval for construction of pollution control equipment.
 - d. By July 1, 1979, the permittee shall begin installation of pollution control equipment.
 - e. By September 1, 1979, the permittee shall complete installation and schedule an appointment for Department personnel to verify that this facility is capable of operating in continuous compliance with State Air Quality Standards.

Bill

WILLIAM H. YOUNG

Richard J. Nichols:dmc
382-6446
November 29, 1979

Attachments:

- A - Director's memorandum for June 24, 1977 EQC meeting
- B - Partial Minutes of EQC Meeting of June 24, 1977
- C - Air Contaminant Discharge Permit for Ochoco Pellet Plant dated 9/26/77
- D - May 26, 1978 Letter from DEQ to James Zimmerlee, Jr.
- E - June 23, 1978 Letter from DEQ to James Zimmerlee, Jr.
- F - July 22, 1978 Letter from Mr. and Mrs. Zimmerlee, Sr. to DEQ
- G - October 16, 1978 Letter from DEQ to Mr. and Mrs. Zimmerlee, Sr.
- H - General Strategy and Schedule dated 11/15/78 from Mr. and Mrs. Zimmerlee, Sr.
- I - Ochoco Pellet Plant Financial Statements dated October 1978



ENVIRONMENTAL QUALITY COMMISSION

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

ROBERT W. STRAUB
GOVERNOR

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item E, EQC Meeting June 24, 1977.
Variance Request From Ochoco Pellet Plant; Request For
Variance From Emission Standards And Regulations, Sections
21-015(2)(b) and 21-030(a) and Particulate From Process
Equipment 21-040

Introduction

The Ochoco Pellet Plant is a relatively small (3,200 tons/year) animal feed pelletizing plant located near the edge of an industrial area in Prineville. The facility is considered to be in violation of OAR 340-21-015(2)(b), 21-030(a) and 21-040 based on Department source tests and observations. The owners of the plant have requested a variance from these regulations until 1982.

Background

The facility makes pellets by rough chopping, grinding and extruding baled hay. After chopping, the hay is conveyed by air to a hammermill through a cyclone which separates the hay from the air. The hammermill grinds the hay. (It can also grind grain.) The ground material is again conveyed by air to the pelletizer through two cyclones in series. Only one of the cyclones emits to the atmosphere and it is this cyclone that is the main particulate emission problem. The pellets are air cooled and there is a cyclone on this air stream to remove dust. A flow diagram of the plant is attached as Attachment J.

A source test done by the Department in 1973 showed that the plant was not capable of meeting emission limits for particulates OAR 340-21-030(a) and 21-040. The plant was purchased in 1973 by the father of the current owner because the plant was to be sold and to be moved out of the Prineville area. An Air Contaminant Discharge Permit was issued which contained a schedule for achieving compliance by May 1, 1975 (see Attachment D, page 2, condition 3).

When the current owners purchased the plant in February of 1975 the emission control upgrading called for in the Permit was not in progress. The Department was not notified of the change in ownership.



Contains
Recycled
Materials

The Department has intensified its efforts since 1975 to work with plant owners toward attaining compliance (see summary list in Attachment C). To date, no significant improvements have been made in the emission control system.

A new Permit has been requested by the current owners but has not been issued because the Department and the plant owners have not been able to reach an agreement on a new compliance schedule.

A public hearing was held in Prineville on June 6, 1977 to receive testimony concerning the variance request of Ochoco Pellet Plant. At this hearing, seventeen people testified in favor and two testified in opposition to granting a variance. The Hearing Officer's report is provided herein as Attachment A.

Evaluation

1. Many components of this plant, particularly cyclones and air conveyance systems, are old and in need of repair. One cyclone on the hammermill system is scheduled to be replaced in 1978. It is anticipated that this will not significantly change emissions or ambient air conditions.
2. The owners of the plant have claimed that upgrading the emission control system to meet current standards would create an economic hardship. Although the owners continue to claim economic hardship, only limited financial data has been made available to the staff. Plant owners claim only that if controls are installed they must raise their prices (Attachments F, G, H, I). The cost for the necessary improvements to bring the plant into compliance with Department rules has been estimated by the company at between \$12,000 and \$20,000. The Department is of the opinion that this estimate is accurate when compared with other similar plants. A plant that is more than twice the size of Ochoco Pellet recently installed a baghouse at a cost of \$30,000.
3. The Department is not certain that it is economically impractical for the company to install the controls as soon as possible particularly if inflation, interest, tax credit, depreciation, material recovered and all other economic factors are considered. This could be better evaluated after the company submits additional economic data.
4. The Department staff has tried to assist the plant owners by suggesting ways for improving emissions from the existing operation (such as combining the hammermill exhaust and the pellet mill cooler exhaust) and conducting a technical evaluation to examine feasibility of different control systems. This work would normally be done by an outside consultant.

5. The hammermill cyclone has been observed repeatedly to be in violation of the 20% opacity standard. Maximum emissions (60-100% opacity) usually occur when the plant is processing rain damaged hay. Owners say they have little if any control on when this material is processed. The Department believes that the requested 60% opacity limit will be fairly rigid and will require some change in operation.
6. Department staff have observed other cyclones in the area (mainly wood products sources) to be in visual compliance. In addition, of the approximately 30 pellet plants located in Oregon, all are on approved compliance schedules or have been certified to be in compliance by Department staff. Three of these plants do not require regular permits because they are not in special control areas.
7. Ochoco Pellet is located within a block of a residential area (see Attachment B). Because of this close proximity to residences, the Department feels it is necessary to eventually reduce emissions to within regulatory limits. Three complaints regarding the dust emissions were received by the Department prior to the public hearing from residents in the vicinity of the plant. The Department considers these complaints to be valid.
8. The plant owners have been notified on several occasions verbally and by mail that violations were occurring.
9. The plant is utilized by agricultural interests in Central Oregon and in the Willamette Valley as substantiated by the Hearing Officer's Report.
10. There have been indications (Attachment A) that production may increase (possibly double) in the future and thereby improve economic conditions. Plant owners have indicated, in meetings with Department staff, a reluctance to take any emission control action that may cause a price increase or adversely affect production.
11. Because the Department and the owners of the Ochoco Pellet Plant could not reach an agreement on a schedule to achieve compliance, the plant owners have requested a variance from OAR Chapter 340-21-015(2)(b). They specifically requested a 60% opacity limit until the year 1982 in lieu of the regulatory 20% opacity limit.
12. Any variance consideration must include, in addition to the visible limitations, a provision for a variance from Oregon Administrative Rules Chapter 340-21-030(a) and 21-040 concerning grain loading and process weight respectively.
13. The Commission can grant a variance under ORS 468.345 which states... "The Environmental Quality Commission may grant specific variances which may be limited in time from the particular requirements of any rule, regulation or order...if it finds that...special circumstances render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause; or strict compliance would result in substantial curtailment or closing down of the business, plant or operation".

Conclusions

1. The Department has been attempting to improve the emissions from the Ochoco Pellet Plant since 1973.
2. No significant emission improvements have been made to date.
3. The plant on occasion has been the subject of complaints.
4. Evidence has been presented (Attachment A) that indicates current economic conditions could change favorably prior to 1982.
5. Inplant improvements and scheduled future equipment replacement may improve emissions from the hammermill cyclones from the 60% limit being requested.
6. Limited financial information has been made available for support of a variance from the opacity rule to allow 60% opacity until 1982 based on economic conditions. It is anticipated that the company will provide additional financial data at the Commission's meeting.
7. Input from the community and other sources (Attachment A) indicates a need for this type facility. Due to the age and condition of the plant and possible production increases, installation of sophisticated control equipment for the existing plant may not be timely.
8. Special circumstances exist including age and physical condition of plant and potential adverse economic impacts which make strict compliance burdensome and would result in substantial curtailment of the facility if customers were lost due to price increases.

Director's Recommendation

The Director recommends that the Environmental Quality Commission:

1. Enter a finding that strict compliance is inappropriate because the age and physical condition of the facility and the cost of controls make strict compliance burdensome and would result in substantial curtailment of the facility.
2. Grant a variance to Ochoco Pellet Plant to operate out of compliance with Oregon Administrative Rules, Chapter 340, Sections 21-015(2)(b), 21-030(a) and 21-040 until January 1, 1979 subject to the following conditions:
 - a. Visible emissions shall not exceed 60% at any time.
 - b. Emissions should be maintained at the lowest practical levels at all times.

- c. Ochoco Pellet Plant operators shall submit a proposed control strategy and compliance schedule to the Department no later than October 1, 1978.
- d. The facility operation shall not cause nuisance conditions at any residences near the plant.
- e. The variance shall not be considered for extension unless all reasonable efforts are made to reduce emissions, including fugitive emissions, from all parts of the existing facility.

Bill

WILLIAM H. YOUNG
Director

RES:ds

Attachments:

- A - Hearing Officer's Report
- B - Prineville Map
- C - DEQ File Summary
- D - Air Contaminant Discharge Permit No. 07-0013
- E - Detailed Results of Source Test and Current Emission Standards
- F - March 31, 1976 Letter from James L. Zimmerlee to DEQ
- G - February 28, 1977 Letter from James L. Zimmerlee to DEQ
- H - May 2, 1977 Letter from James L. Zimmerlee to DEQ
- I - Statement from Ochoco Pellet Plant
- J - Flow Diagram

Attachment B

Ochoco Pellet Plant, Prineville - Request for Variance from Particulate Emission Limitations, OAR 340-21-015, 21-030 and 21-040

MINUTES OF THE OREGON ENVIRONMENTAL QUALITY COMMISSION
JUNE 24, 1977

Mr. Robert E. Shimek of the Department's Central Region staff presented the staff report and supporting slides on this matter. Commissioner Crothers asked in regard to item 2.d. of the Director's Recommendation, what criteria was used to determine a "nuisance condition." Mr. Shimek replied that nuisance conditions were determined by the number of compliants received on a source. Chairman Richards responded that a broad definition of nuisance is the utility of the use compared to the amount of the harm. Commissioner Phinney asked why a control strategy did not have to be submitted until October 1, 1978. Mr. Shimek replied that the Department's information indicated that the plant could change locations and the production could be expanded significantly within the next two years, which might make a control system which was adequate at this time not adequate a year from now.

Mr. James L. Zimmerlee, owner of the Ochoco Pellet Plant, said they felt a schedule could be worked out and included in a permit with a variance of 60% for five years. Mr. Zimmerlee said that they would be happy to meet with staff to formulate such a schedule. Mr. Zimmerlee then presented some of their history of ownership over the last two and one-half years and also some information to support the financial hardship that immediate compliance would have on the Company. Mr. Zimmerlee said that they were asking for the five year variance to allow them time to complete a payment contract so that there would be funds available to upgrade the plant and install emissions control equipment. Mr. Zimmerlee said that without the variance the plant would not be able to operate. Chairman Richards asked Mr. Zimmerlee if he had been asked for financial information by the staff. Mr. Zimmerlee replied that he had prepared financial information approximately a year before, but was told that it was not necessary at that time. Mr. Zimmerlee said they were subsequently asked to have it available at the public hearing on June 6, 1977. He said the information was not presented at that time, and they were told they could present it at this meeting.

Mrs. James Zimmerlee testified that the hearing on June 6th showed that there was a need in the area for a plant like theirs. Mrs. Zimmerlee said that their opacity problem came when they ran damaged hay on a custom basis from ranchers. Mrs. Zimmerlee said that when they ran hay they bought themselves, the plant ran at approximately 40% opacity. Mrs. Zimmerlee said that 60% of their production is in damaged hay. In response to a question by Chairman Richards, Mrs. Zimmerlee indicated that if they were forced to comply with the 20% opacity standard right now, the plant would have to shut down because their customers would not pay the higher cost they would have to charge for processing the hay in order to purchase the needed emission control equipment. Mrs. Zimmerlee said they would like to control the emissions problem if they could afford to, however, at the present time they were financially unable to do so.

Commissioner Somers stated for the record that he had reviewed the financial statement submitted by Mr. and Mrs. Zimmerlee's accountant and concluded that it would be financially impossible for them to take on any more expenses at this time in view of the debts they have.

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock and carried unanimously that the Director's recommendation be approved amending item 2.c. to reflect a compliance date of June 1, 1978 instead of October 1, 1978.

AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality

1234 S.W. Morrison Street

Portland, Oregon 97205

Telephone: (503) 229-5696

Issued in accordance with the provisions of
ORS 468.310

<p>ISSUED TO: JAMES L. AND DELORES D. ZIMMERLEE dba Ochoco Pellet Plant Route 2, Box 608 Prineville, Oregon 97754</p> <p>PLANT SITE: Lamonta Road Prineville, Oregon</p> <p>ISSUED BY DEPARTMENT OF ENVIRONMENTAL QUALITY</p> <p><i>William H. Young</i> William H. Young Director</p> <p><i>9-26-77</i> Date</p>	<p>REFERENCE INFORMATION</p> <p>Application No. 0975</p> <p>Date Received December 20, 1976</p> <p>Other Air Contaminant Sources at this Site:</p> <table border="1"> <thead> <tr> <th>Source</th> <th>SIC</th> <th>Permit No.</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td></td> <td></td> </tr> <tr> <td>(2)</td> <td></td> <td></td> </tr> </tbody> </table>	Source	SIC	Permit No.	(1)			(2)		
Source	SIC	Permit No.								
(1)										
(2)										

SOURCE(S) PERMITTED TO DISCHARGE AIR CONTAMINANTS:

Name of Air Contaminant Source	Standard Industry Code as Listed
Prepared Feed for Animals in Special Control Areas, less than 10,000 tons/year	2048

Permitted Activities

Until such time as this permit expires or is modified or revoked, Ochoco Pellet Plant is herewith permitted in accordance with the requirements, limitations and conditions of this permit to discharge air contaminants from its prepared animal feed plant located at Prineville, Oregon.

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

Performance Standards and Emission Limits

1. The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels.
2. The permittee shall not allow the emission of any visible air contaminant into the atmosphere from any source in excess of sixty percent (60%) opacity.

Special Conditions

3. The facility operation shall not cause nuisance conditions at any residence near the plant.

Compliance Demonstration Schedule

4. The permittee shall submit by no later than June 1, 1978, a proposed control strategy and schedule to reduce the pellet plant emissions so that emissions do not exceed the following:
 - a. 0.2 grains per standard cubic foot,
 - b. An opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, and
 - c. The particulate mass rate specified by OAR 340-21-240 (7.37 lbs/hr of particulate at a production rate of 6,000 lbs/hr).

Monitoring and Reporting

5. The permittee shall report to the Department by January 15 of each year this permit is in effect the plant production on a monthly basis for the preceding calendar year.

Fee Schedule

6. The Annual Compliance Determination Fee for this permit is due on December 1 of each year this permit is in effect. An invoice indicating the amount, as determined by Department regulations, will be mailed prior to the above date.

General Conditions and Disclaimers

- G1. The permittee shall allow Department of Environmental Quality representatives access to the plant site and pertinent records at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise conducting all necessary functions related to this permit.
- G2. The permittee is prohibited from conducting open burning except as may be allowed by OAR Chapter 340, Sections 23-025 through 23-050.
- G3. The permittee shall:
 - a. Notify the Department in writing using a Departmental "Notice of Construction" form, and
 - b. Obtain written approvalbefore:
 - a. Constructing or installing any new source of air contaminant emissions, including air pollution control equipment, or
 - b. Modifying or altering an existing source that may significantly affect the emission of air contaminants.
- G4. The permittee shall notify the Department at least 24 hours in advance of any planned shutdown of air pollution control equipment for scheduled maintenance that may cause a violation of applicable standards.
- G5. The permittee shall notify the Department by telephone or in person within one (1) hour of any malfunction of air pollution control equipment or other upset condition that may cause a violation of the Air Quality Standards. Such notice shall include the nature and quantity of the increased emissions that have occurred and the expected duration of the breakdown.
- G6. The permittee shall at all times conduct dust suppression measures to meet the requirements set forth in "Fugitive Emissions" and "Nuisance Conditions" in OAR, Chapter 340, Sections 21-050 through 21-060.
- G7. Application for a modification of this permit must be submitted not less than 60 days prior to the source modification. A Filing Fee and an Application Processing Fee must be submitted with an application for the permit modification.
- G8. Application for renewal of this permit must be submitted not less than 60 days prior to the permit expiration date. A Filing Fee and an Annual Compliance Determination Fee must be submitted with the application for the permit renewal.
- G9. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- G10. This permit is subject to revocation for cause as provided by law.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

OCHOCO PELLET PLANT
Lamonta Road
Route 1, Box 826
Prineville, Oregon 97754Background

1. James L. and Delores D. Zimmerlee, dba Ochoco Pellet Plant, operate a prepared animal feed plant located at Lamonta Road, Prineville.
2. The annual production capacity is approximately 2,600 tons/year.
3. Existing visible and particulate emission sources at the facility consist of four cyclones:
 - a. Bale buster cyclone
 - b. Hammermill cyclone (two in series; first one vents to second one)
 - c. Cooling dust cyclone
4. The emission control system includes the cyclones mentioned above.
5. The plant is operated 8 hours per day, 5 days per week and 50 weeks per year.
6. On June 24, 1977 the Environmental Quality Commission granted Ochoco Pellet Plant a variance to operate with emissions in excess of regulatory limits until January 1, 1979. The conditions of this variance are included in the draft permit.

Evaluation

7. The emissions from the pellet plant are scheduled to be in compliance with Department of Environmental Quality emission limitations in accordance with a time schedule to be submitted by June 1, 1978.

Recommendation

8. It is recommended that the proposed permit be approved for issuance to James L. and Delores D. Zimmerlee, dba Ochoco Pellet Plant.

Attachment D

*HP- Ochoco
Pellet*

May 26, 1978

Mr. James Zimmerlee
Ochoco Pellet Co.
P.O. Box 609
Prineville, OR 97754

Dear Mr. Zimmerlee:

Please be reminded that Condition 4 of your Air Contaminant Discharge Permit requires submission of a proposed control strategy and schedule by June 1, 1978.

If you have any questions, please contact me.

Sincerely,

Robert Danko
Regional Engineer

RD:dmc
Enclosure

Attachment E

June 23, 1978

Mr. James Zimmerlie
Ochoco Pellet Company
P.O. Box 609
Prineville, OR 97754

AQ - Ochoco Pellet Company
Crook County

Dear Mr. Zimmerlie:

Please note that we have not received a proposed control strategy as called for by Condition 4 of your Air Contaminant Discharge Permit.

If you have any questions, please contact me.

Sincerely,

Robert Danko
Regional Engineer

RD:dmc

cc:Air Quality Division

~~Nichols/File~~

Ochoco Pellet Plant
Route 1, Box 826
Prineville, Oregon 97754
447-7692

July 22, 1978

Department of Environmental Quality
Central Region
2150 NE Studio Road
Bend, Oregon 97701

Dear Mr. Danko:

This letter is to acknowledge your telephone call on July 16, 1978, and letter on July 18, 1978, concerning Ochoco Pellet Plant, in regards to "Condition 4 - Air Contaminant Discharge Permit".

As stated in my conversation with you, our son, James L. Zimmerlee has dropped the pellet plant on us with an indebtedness of over \$18,000.00. He simply could not stand another series of humiliating hearings and the pressures associated with trying to satisfy your department when he was financially unable to meet your requirements.

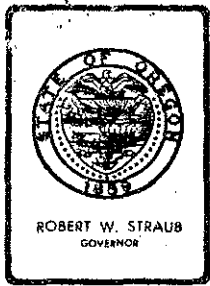
We must have time to work out the immediate problems here at the plant and also take care of the summer work at our ranch, so I am requesting that hereafter:

1. You send any and all information to Ochoco Pellet Plant, Route 1, Box 826, Prineville, OR 97754, Tel.-447-7692;
2. You allow at least two months for us to get things settled here;
3. You be a friend! You know the problems here, financial and otherwise. You know we want clear air, too. You know as reported in hearings, this plant is a great help to our ranching community. And, you should know those in the livestock industries need all the help they can get.

Until our meeting together, I am trusting you to keep our situation clearly in mind, as stated by telephone. We will be greatly dependent upon your cordial attitude and needful of your competent guidance.

Sincerely,

Mr. & Mrs. James S. Zimmerlee



Department of Environmental Quality
CENTRAL REGION

2150 N.E. STUDIO ROAD, BEND, OREGON 97701 PHONE (503) 382-6446

October 16, 1978

Mr. and Mrs. James Zimmerlie
Ochoco Pellet Plant
Route 1, Box 826
Prineville, OR 97754

AQ - Ochoco Pellet
Crook County

Dear Mr. and Mrs. Zimmerlie:

During my visit with you last week, you requested that I provide you with an outline showing how you should apply for another variance from the Environmental Quality Commission.

To apply for a variance, you should submit a letter to us describing why you cannot control emissions from your plant by January 1, 1979 -- the date your present permit expires. In your request you should include a date by which you can control your emissions and a schedule covering how you will arrive at that date. Condition 4 of your Air Quality Permit required the schedule to be submitted to us by June 1, 1978.

You have told me in the past that it is impossible to estimate the length of time you need to control emissions. However, it is very difficult for us to favorably recommend a variance to the Environmental Quality Commission without a schedule by which you will control emissions. Variances are granted for a specific length of time. Please attempt to develop a schedule by which you can control emissions in line with state regulations.

Since you have stated that your variance request is necessitated by economics, please submit complete financial information on the Ochoco Pellet mill. Also, you have indicated that you will be contacting air pollution control equipment manufacturers. It would be helpful if you submitted the recommendations pertaining to equipment and costs.



Mr. and Mrs. James Zimmerlie
October 16, 1978
Page 2.

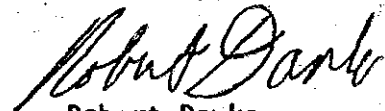
Finally, the variance request should be submitted as soon as possible, but by no later than November 15, 1978. A variance request submitted after November 15 likely cannot be considered by the Environmental Quality Commission before your permit expires on January 1, 1979.

To summarize, your variance request should contain:

1. The reason(s) why a variance is needed, and all information, including a financial statement, in support of the variance.
2. The length of time needed for the variance and a proposed schedule to control plant emissions.
3. Recommendations of equipment manufacturers and/or other information pertaining to the costs of controlling plant emissions.

I am available to discuss this matter with you. Please feel free to contact me.

Sincerely,



Robert Danko
Regional Engineer

RD:sm

cc: Air Quality via Fred Bolton
Central Region via Dick Nichols

Ochoco Pellet Plant
Route 1 Box 826
Prineville, Oregon 97754

Department Of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Department People:

Enclosed is material your department has requested.

2 copies Application For Air Contaminant Discharge Permit
2 copies Description Of Air Contaminant Source
check No. 207 for \$135.00 fees for 1079
copies of communications with Robert Danko
financial statement
Red Crown Mill price quotation & Exhibit A

Following is information requested by Robert Danko in his letter of October 16, 1978, Page 2.

"To summarize, your variance request should contain:"
(3. first; 2. second; 1. third)

3. American Sheet Metal - phone and letter - on response.

Champion - phone and letter - on response

Red Crown Mill - sent consultant October 31, 1978. Gave a verbal evaluation and recommends a bag-house system.

—engineering 30 - 90 days
assembling 30 -90 days
installation 30 -90 days

Their plan to be presented for your approval in November 1978.

Cost ?

A bag-house system will raise our fire insurance 2 -3% as stated by Daniel Halpin, agent, The Mills Mutual. (To be confirmed by home office in Seattle, Washington.) We are required by lessor to carry fire insurance in the amount of \$60,000.00 on the building we lease for our plant.

Conversed with J. Curtis, Small Business Adm., concerning a long term, low interest loan for the purchase of pollution control equipment. With all the 'red tape' it could take a long time. One source quoted up to eighteen months.

2. A schedule would depend on whether or not your department will approve a plan submitted by Red Crown Mill.

And if approved---

a schedule would depend on

- a. when the engineer completes plan
- b. when the equipment is available
- c. installation time
- d. long term, low interest loan availability

1. Same reasons as stated in the 29 page report beginning with your five page, Agenda Item E EQC Meeting June 24, 1977

We have a folder more than an inch thick representing minutely detailed information required by your department which is summerized in that 29 page report. It would be a gross waste of time to repeat such a burdensome task to come to the same conclusion.

We are requesting that you issue a variance for one year on the basis of information contained in the 29 page report. Consider, also, the importance of our plant to the hay grower and livestock feeder this year. An extremely wet season caused significantly large amounts of rain-damaged hay. Between July 5, 1978 and mid- October this year approximately 760 tons moved through our plant to make useful and palatable livestock feed.

As stated in the letter to Robert Danko dated July 11, 1978, James L. and Dolores Zimmerlee no longer own nor operate Ochoco Pellet Plant.

Submitted by: James S. and Vivian Zimmerlee, owners.

Route 1 Box 826
Prineville, Oregon 97754

Phone 447-7692

November 15, 1978

RED CROWN MILL SUPPLY

No 6485

BOX 2704

PLEASE INDICATE THIS NUMBER WHEN ORDERING

PORTLAND, OREGON 97208

(503) 223-2181

Ochoco Pellet Plant
Route 1, Box 826
Prineville, Oregon 97754

DATE	
November 10, 1978	
YOUR INQUIRY DATED	
plant visit 10-1-78	
PROPOSED SHIPPING DATE	
six months	
TERMS F.O.B.	
1/3rd with order, 1/3rd on delivery, balance on installation.	
SALESMAN	
ab	
TO BE SHIPPED VIA	
our truck	
PRO. OR COLL.	X

Here is our quotation on the goods named, subject to the conditions noted:

CONDITIONS: The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and conditions existing on date of quotation and are subject to change by the Seller before final acceptance.

Typographical and stenographic errors subject to correction. Purchaser agrees to accept either overage or shortage not in excess of ten percent to be charged for pro-rata. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be made for reasonable spoilage and material must be of suitable quality to facilitate efficient production.

Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein which may appear on Purchaser's formal order will not be binding on the Seller.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	To supply the following equipment, installed similar to layout on sketch dated this date. . .		
1.	Furnish new 66" cyclone, recirculating type, 10 ga. body, 12 ga. cone, for use on hammermill discharge.	\$1,860.00	
2.	Replace lower 30" of cone on secondary cyclone of hammermill discharge, designed to fit rotary airlock.	186.00	
3.	Furnish two rotary airlocks for primary and secondary cyclones of hammermill, complete with gearmotor dr.	1,245.00	
4.	Furnish 24 lf of 1' x 2½' duct (5) from top of sec. cyclone to junction of duct from cooler cyclone . .	410.00	
5.	Furnish 20 lin. ft. of 1' x 4' duct from cooler cyclone to junction of duct from sec. cyclone . . .	400.00	
6.	Furnish 44 lin. ft. of 15" x 5' duct from junction of two ducts above to base of filter	1,032.00	
7.	Furnish used rotary airlock with gearmotor drive to attach to cooler cyclone	610.00	
8.	Used AeroVac Filter unit, 12 bag 3' dia by 7' high, designed to fit into basement of existing mill bldg.	5,000.00	
9.	Furnish 15" square duct from suction (bag cleaner) unit for filter to inlet of existing 20 HP cooler fan item #16 on sketch.	285.00	
10.	Delivery and installation of all items above not including electrical wiring for rotary airlocks and powered cleaner duct of filter	2,800.00	
11.	Wiring of 4 small gearmotors on airlocks and filter	1,100.00	
12.	Drawings necessary for approval and installation	800.00	
	Total of all above		\$15,728.00
	Timing: 60 days for drawing approval.		
	90 days for fabrication and delivery of parts		
	60 days for installation and wiring. Total 7 months.		

FORM 2040, REGENT FORMS, PENNSAUKEN, N.J. 08109

QUOTE VALID FOR 20 DAYS.

BY *Andy Bardson*
ANDY BARDSON

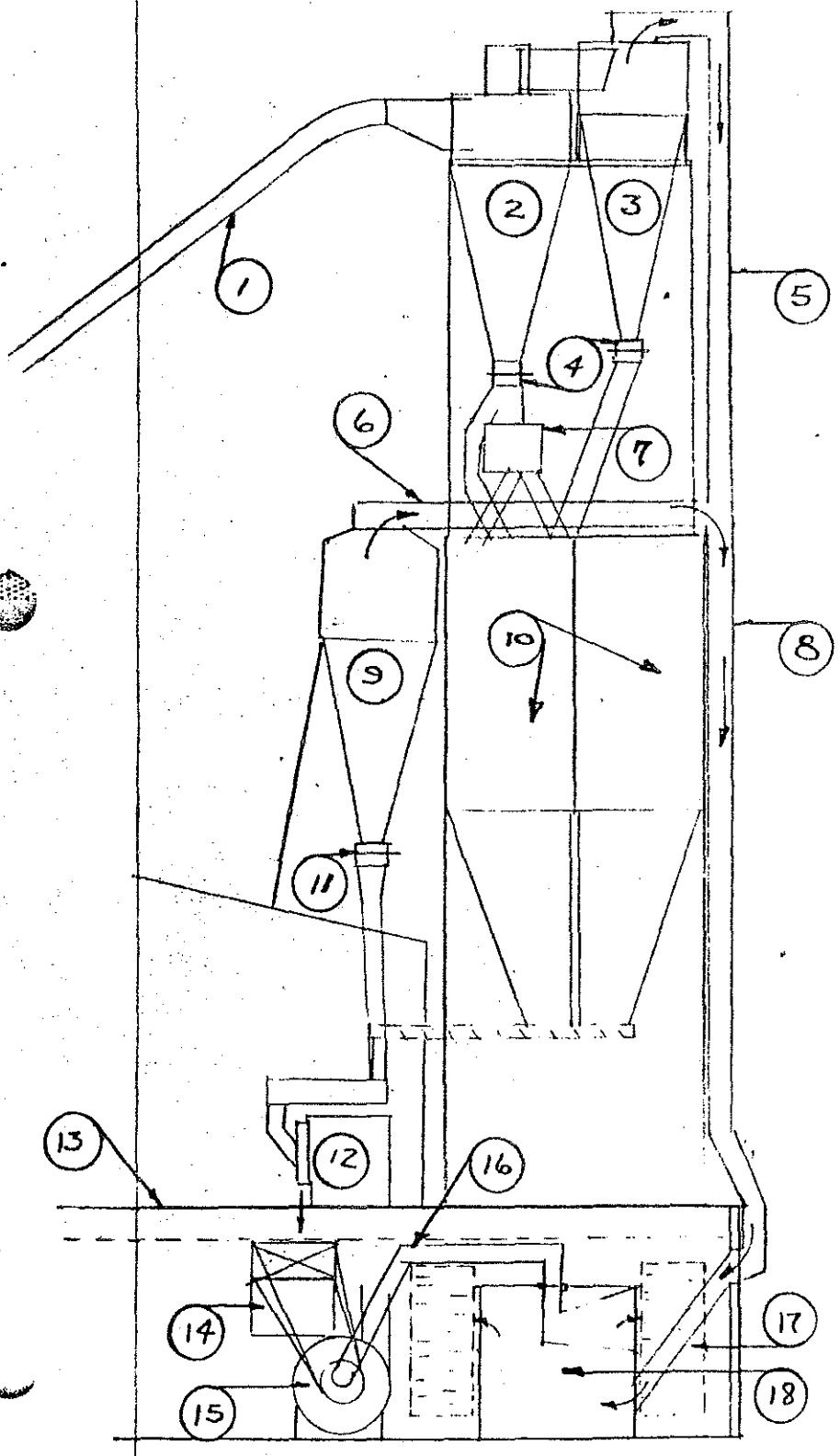
TO CONFIRM ORDER, SIGN & RETURN WITH ACCEPTANCE COPY

8" = 1'

OCHOCO PELLET PLANT, PRINEVILLE, OREGON

11-10-78

Exhibit A



1. 12" Φ DUCT FROM HAMMER MILL
2. NEW 66" CYCLONE
3. EXISTING 64" CYCLONE - DISCHARGE ^{NEW}
4. NEW ROTARY AIRLOCK
5. RECT. DUCT (NEW) SECONDARY CYCLONE TO FILTER
6. RECT. DUCT (NEW) COOLER CYCLONE TO FILTER.
7. EXISTING DISTRIBUTOR
8. COMBINATION RECT. DUCT - BOTH CYCLONES TO FILTER
9. EXISTING COOLER CYCLONE.
10. EXISTING MIXING TRAYS
11. NEW ROTARY AIRLOCK
12. EXISTING PELLET MILL
13. CONCRETE FLOOR, MILL
14. EXISTING HORZ. COOLER
15. EXISTING COOLER FAN
16. DUCT FILTER TO FAN (COOLER)
17. NEW AEROVAC FILTER SOCK, 3' DIA by 7' HIGH (12 EACH)
18. AEROVAC FILTER BODY -

Attachment 1

BLANK & CHAMNESS
CERTIFIED PUBLIC ACCOUNTANTS

Gerald F. Blank, CPA
Daniel G. Chamness, CPA
320 North Beaver - P. O. Box N
Prineville, Oregon 97754
Phone 447-7051

CONSULTANTS:
DIETRICH, BYE, GRIFFIN & YOUEL
CERTIFIED PUBLIC ACCOUNTANTS
PORTLAND, OREGON

OCHOCO PELLET PLANT

FINANCIAL STATEMENTS

October 1978

James & Vivian Zimmerlee
dba Ochoco Pellet Plant
Route 1 Box 826
Prineville, Oregon 97754

Dear James & Vivian Zimmerlee:

Attached hereto are the following financial statements of
Ochoco Pellet Plant.

Accrual Basis Balance Sheet Page 2
as of Mid October 1978.

Accrual Basis Statement of Income Page 3
for the four months ended mid-
October 1978.

These statements were prepared from the records and information
furnished by you. Since the scope of our examination was limited
to less than that required by generally accepted auditing standards,
we are unable to express an opinion on these financial statements.

Should you have any questions pertaining to these statements, we
shall be pleased to hear from you.

Nerald Blank

Blank & Chamness
Certified Public Accountants
October 31, 1978

JAMES & VIVIAN ZIMMERLEE
 dba OCHOCO PELLET PLANT
 ACCRUAL BASIS BALANCE SHEET AS OF
 MID - OCTOBER 1978

(From information supplied and without verification)

ASSETS

Current Assets		
Cash in Bank		\$ 105
Accounts Receivable		2,524
Inventory - Finish Material	\$ 3,910	
- Raw Material & Supplies	7,301	
- Operating Supplies	<u>446</u>	<u>11,657</u>
Total Current Assets		\$ 14,286
Plant and Equipment - Pledged - Cost	\$ 92,533	
Accumulated Depreciation	<u>4,406</u>	88,127
TOTAL ASSETS		<u>\$102,413</u>

LIABILITIES AND OWNERS' EQUITY

Current Liabilities		
Accounts Payable		\$ 25,203
Note Payable - Current Portion		<u>10,300</u>
Total Current Liabilities		35,503
Long Term Liabilities		
Note Payable - Secured	\$ 77,689	
Less: Current Portion	<u>(10,300)</u>	67,389
Owners' Equity		
Contribution	6,531	
Less: Net Loss	<u>(7,010)</u>	
Owners' Equity		<u>(479)</u>
TOTAL LIABILITIES and OWNERS' EQUITY		<u>\$102,413</u>

JAMES & VIVIAN ZIMMERLEE
dba OCHOCO PELLET PLANT
ACCRUAL BASIS STATEMENT OF INCOME
FOR THE FOUR MONTHS ENDED MID - OCTOBER 1978

(From information supplied and without verification)

Sales		\$ 30,168
Cost of Sales		
Purchases	\$ 24,945	
Less Inventory on Hand	<u>11,211</u>	
Cost of Goods Sold		<u>13,734</u>
Gross Profit On Sales		16,434
Operating Expenses		
Payroll	\$ 1,535	
Payroll Taxes	59	
Repairs	3,388	
Rent	800	
Supplies	451	
Office	274	
Hauling	234	
Depreciation	4,406	
Insurance	749	
Interest	8,695	
Telephone	90	
Electricity	<u>2,763</u>	
Total Operating Expenses		<u>23,444</u>
NET OPERATING LOSS		<u><u>\$ (7,010)</u></u>

Jerold C. Parker
3357 Cascade Hwy. N.E.
Salem, Oregon
November 29, 1979

Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Agenda Reference: Ochoco Pellet Plant, Dec. 15, 1978

Gentlemen:

I am writing in support of the variance application being made by Ochoco Pellet Plant in Prineville, Oregon.

My wife, Carol and I are purchasing the business, contingent on the variance being granted. We would be unable to run the business without the variance. We want to be in compliance with the D.E.Q. Clean Air Standards, but we must have time to learn the business, secure financing and install the equipment.

I don't know all of the past history on the plant, except that there seems to have been a great amount of animosity toward the D.E.Q. people by the former owners.

The pellet plant seems to have a lot of potential, if it is run properly. I believe the plant is needed by the community of Prineville. I have discussed this with several people in the Prineville area, including Chuck Deitz, First Nat'l Bank; Leonard Breck, First Nat'l Bank; Earl Hethorne, Louderback & Assoc.; Jim Curtis, Department of Economic Development, and others.

My intentions are as the new owner, to install the equipment as engineered by Mr. A.B. Baardson of Red Crown Mill Supply in Portland. Drawings and a copy of quote and letter to Red Crown Mill Supply are attached.

I would like to urge your co-operation and assistance in the granting of this one last variance. I would urge you to make the variance cover a minimum period of nine months. I feel this would be sufficient time to secure a loan for the pollution equipment, fabricate the necessary parts and install the equipment.

I respectfully submit this request on behalf of my wife, myself, and Ochoco Pellet Plant.

Sincerely,
Jerold C. Parker

Management Services Div.
Dept. of Environmental Quality

RECEIVED
DEC 05 1978

Jerold C. Parker
3357 Cascade Hwy. N.E.
Salem, Oregon 97381
November 29, 1978

Mr. A.B. Baardson
Red Crown Mill Supply
P.O. Box 2704
Portland, Oregon 97208

Dear Mr. Baardson,

I am writing in regards to our phone conversation of Nov. 27, 1978 regarding your quote # 6485 to Ochoco Pellet Plant.

As you know, my wife and I are purchasing the Pellet Plant effective January 1, 1979, assuming the D.E.Q. variance is granted for a minimum period of nine months.

I will accept your quote # 6485 (attached) with the following condition; Acceptance is subject to securing financing on the purchase of the needed equipment. I will make application for a direct SBA loan between Dec. 15, 1978 and Jan. 10, 1979. Based on preliminary information, I am confident a loan can be secured, but it will take some time.

It is my understanding that you intend to start securing the needed equipment based on my acceptance of your quote as shown above.

If you require any further information, please call me or write.

Sincerely,

A handwritten signature in cursive script that reads "Jerry Parker". The signature is written in dark ink and is positioned below the typed name "Jerold C. Parker".

RED CROWN MILL SUPPLY

NO. 6485

BOX 2704

PLEASE INDICATE THIS NUMBER WHEN ORDERING

PORTLAND, OREGON 97208

(503) 223-2181

Ochoco Pellet Plant
Route 1, Box 826
Prineville, Oregon 97754

DATE November 10, 1978	
YOUR INQUIRY DATED plant visit 10-1-78	
PROPOSED SHIPPING DATE six months	
TERMS 1/3rd with order, 1/3rd on delivery, balance on installation.	
SALESMAN ab	F.O.B. installation.
TO BE SHIPPED VIA our truck	PPD. OR COLL. X

Here is our quotation on the goods named, subject to the conditions noted:

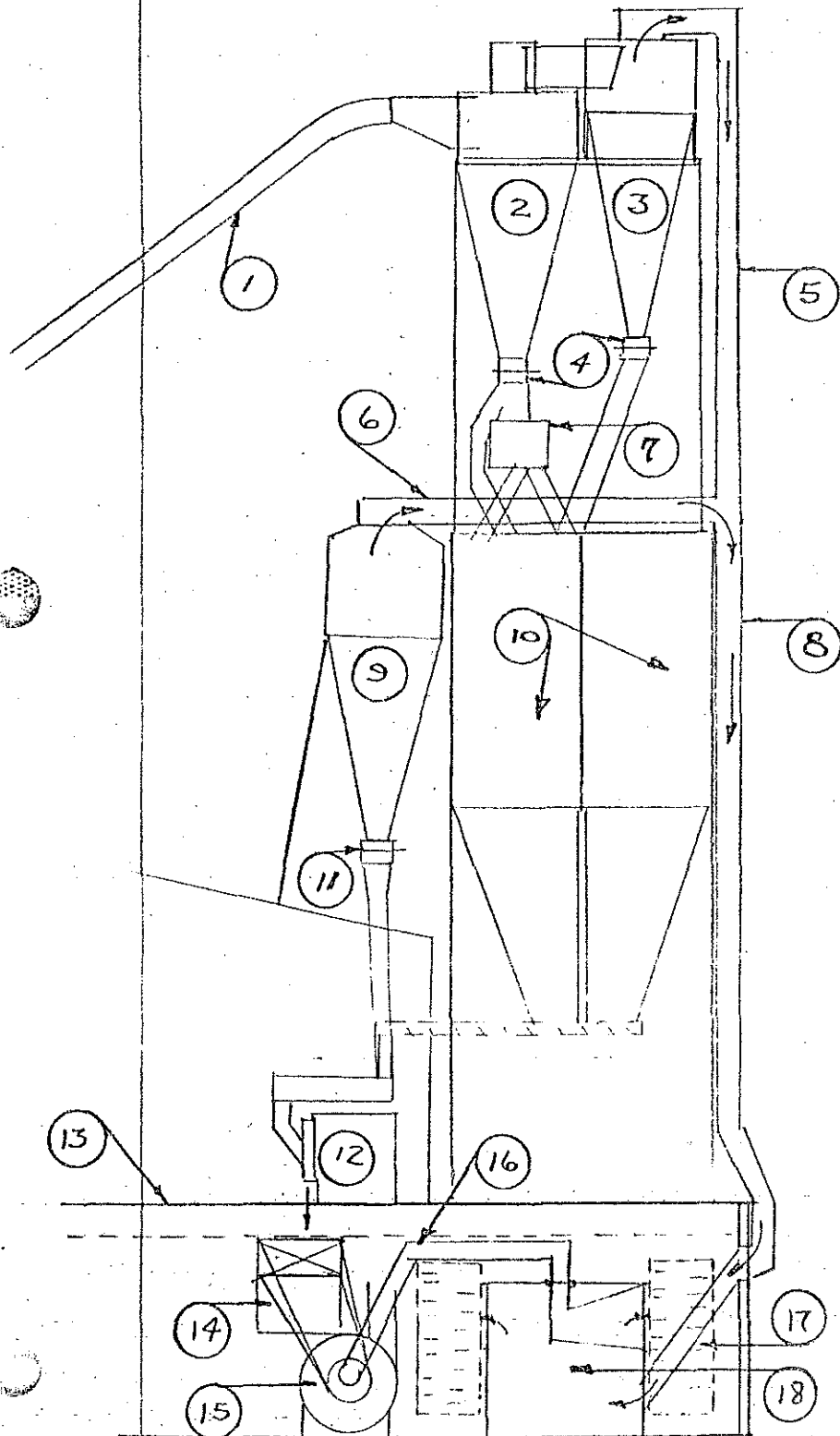
CONDITIONS: The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control. Prices are based on costs and conditions existing on date of quotation and are subject to change by the Seller before final acceptance.

Typographical and stenographic errors subject to correction. Purchaser agrees to accept either overage or shortage not in excess of ten percent to be charged for pro-rata. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be made for reasonable spoilage and material must be of suitable quality to facilitate efficient production.

Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein which may appear on Purchaser's formal order will not be binding on the Seller.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
To	supply the following equipment, installed similar to layout on sketch dated this date. . .		
1.	Furnish new 66" cyclone, recirculating type, 10 ga. body, 12 ga. cone, for use on hammermill discharge.	\$1,860.00	
2.	Replace lower 30" of cone on secondary cyclone of hammermill discharge, designed to fit rotary airlock.	186.00	
3.	Furnish two rotary airlocks for primary and secondary cyclones of hammermill, complete with gearmotor dr.	12245.00	
4.	Furnish 24 lf of 1' x 2½' duct (5) from top of sec. cyclone to junction of duct from cooler cyclone . .	210.00	
5.	Furnish 20 lin. ft. of 1' x 4' duct from cooler cyclone to junction of duct from sec. cyclone . . .	400.00	
6.	Furnish 44 lin. ft. of 15" x 5' duct from junction of two ducts above to base of filter	1,032.00	
7.	Furnish used rotary airlock with gearmotor drive to attach to cooler cyclone	610.00	
8.	Used AeroVac Filter unit, 12 bag 3' dia by 7' high, designed to fit into basement of existing mill bldg.	5,000.00	
9.	Furnish 15" square duct from suction (bag cleaner) unit for filter to inlet of existing 20 HP cooler fan item.#16 on sketch.	285.00	
10.	Delivery and installation of all items above not including electrical wiring for rotary airlocks and powered cleaner duct of filter	2,800.00	
11.	Wiring of 4 small gearmotors on airlocks and filter	1,100.00	
12.	Drawings necessary for approval and installation	800.00	
	Total of all above		\$15,728.00
Timing:	60 days for drawing approval...		
	90 days for fabrication and delivery of parts		
	60 days for installation and wiring. . . Total 7 months...		

QUOTE VALID FOR 30 DAYS. BY [Signature]
ACCEPTANCE DATE ACCEPTED BY



1. 12" Φ DUCT FROM HAMMER ^{MILL}
2. NEW 66" CYCLONE
3. EXISTING 64" CYCLONE - ^{NEW} DISCHARGE
4. NEW ROTARY AIRLOCKS
5. RECT. DUCT (NEW) SECONDARY CYCLONE TO FILTER
6. RECT. DUCT (NEW) COOLER CYCLONE TO FILTER
7. EXISTING DISTRIBUTOR
8. COMBINATION RECT. DUCT - BOTH CYCLONES TO FILTER
9. EXISTING COOLER CYCLONE
10. EXISTING MIXING BINS
11. NEW ROTARY AIRLOCK
12. EXISTING PELLET MILL
13. CONCRETE FLOOR MILL
14. EXISTING HORZ. COOLER
15. EXISTING COOLER FAN
16. DUCT FILTER TO FAN (COOLER)
17. NEW AEROVAC FILTER SOCK, 3' DIA by 7' HIGH (12 EACH)
18. AEROVAC FILTER BODY -

Jerold C. Parker
3357 Cascade Hwy.N.E.
Salem, Oregon, 97381
November 29, 1978

Carol Kirchner
Department of Economic Development
317 S.W. Alder St.
Ninth Floor
Portland, Oregon 97204

Dear Ms. Kirchner,

I would like to file a Letter of Intent to obtain a tax credit for the Ochoco Pellet Plant in Prineville, Oregon. My wife and I are in the process of purchasing the plant. The date we are planning to take it over is Jan. 1, 1979.

It is my understanding that Crook County is classified as an Economically Depressed Area, and the purchase of this business would be eligible of a tax credit. It is also my understanding that according to the 1978 Tax Legislation that full credit may be extended to certain pollution control equipment after July 26, 1978.

1. The Ochoco Pellet Plant is located on Lamonta Road, Prineville, Or. The Pellet Plant is located in the north end of the building owned by Ochoco Farm Supply Co. The purpose of the plant is to pellet hay and grain for livestock feeds. One distinct advantage of this plant to the community of Prineville is to take rain damaged hay which livestock will not eat and mix with molasses in a pellet form. The livestock will eat hay that would ordinarily be useless otherwise.
2. The original investment in the equipment is \$ 117,000. The building is leased, so the equipment and inventory are the only things being purchased. There will be an additional investment required of \$16,000 for dust pollution control equipment. The plant is currently in violation of the D.E.Q. standards. This equipment will be required in seven to nine months after the first of Jan. 1979.
3. I would estimate that in two to three years there would be an additional one to three jobs created by the plant. My plans are to get into some additional related market areas besides the pellet operation.
4. The date of acquisition would be January 1, 1979. I plan to fill out an application for certification of a Job-Producing Facility in an Economically Lagging Area for Tax relief purposes. I would do this if the letter of intent proves to give a positive outlook for acceptance of the application.

If there is any further information you might require please write.

Sincerely,



Jerold C. Parker
3357 Cascade Hwy, N.E.
Salem, Oregon 97381

James E. Curtis
Department of Economic Development
Central Oregon Regional Office
409 N.E. Greenwood
Bend, Oregon 97701

Dear Mr. Curtis,

I wish to thank you for the information you supplied us with regarding the investment tax credit in Crook County.

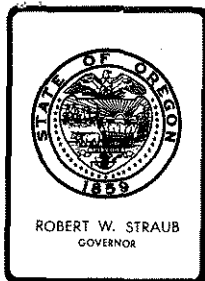
My wife and I have decided to purchase the Ochoco Pellet Plant based on securing a D.E.Q. Variance to operate until the bag house for pollution control can be installed.

We have the proper equipment located through Red Crown Mill Supply in Portland. The cost of the equipment plus installation is approximately \$16,000.

I would be very appreciative of any assistance you might be able to give in securing an SBA loan to finance the cost of the pollution equipment. If you can make any recommendations to SBA for me it would be very helpful. I plan on applying in January or late December for the loan. Please let me know what you can do, if anything to be of assistance.

Sincerely,

A handwritten signature in cursive script that reads "Jerry Parker". The signature is written in dark ink and is positioned below the typed name "Jerold C. Parker".



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. M , December 15, 1978, EOC Meeting

Request for Approval of Stipulated Consent Orders for the Cities of Brownsville and Cave Junction, and Bear Creek Valley Sanitary Authority, and Amendments to the Cities of Rockaway and Seaside's Stipulated Final Orders.

Background

The Cities of Brownsville and Cave Junction, and Bear Creek Valley Sanitary Authority are not meeting the effluent limitations of their NPDES Waste Discharge Permits. All are on time schedules to provide new or modified waste water treatment facilities to meet the effluent limitations. The Cities of Rockaway and Seaside have been unable to meet the time schedules of their stipulated final orders.

Summation

- A. The Cities of Brownsville and Cave Junction, and Bear Creek Valley Sanitary Authority are unable to consistently treat sewage to the required level of secondary treatment. The Department has reached agreement with these public entities on consent orders which provide for interim treatment limitations while existing facilities are modified or new facilities are constructed.
- B. The City of Seaside has not been able to comply with the Commission's September 22, 1978 Amendment to Stipulation and Final Order No. WQ-SNCR-77-159 (Attachment No. 1).
 1. That amendment required the City to submit a completed facility plan and Step II grant application by November 1, 1978.
 2. The City has been delayed in submitting the completed facility plan due to minor plan revisions which were deemed necessary prior to submitting the plan to the public for comment.
 3. To allow time for completion of the plan revisions, submission of a preliminary draft to the Department and conducting a public hearing, the City has requested a time extension until February 15, 1979 (see Exhibit A of Attachment No. 2).



Contains
Recycled
Materials

- C. The City of Rockaway did not submit final plans and a Step III grant application by November 1, 1978 as required by Stipulation and Final Order No. WQ-SNCR-77-160 (Attachment No. 3).
1. The City has encountered funding delays and design difficulties.
 2. The City has requested a time extension until March 1, 1979 to submit final plans and a Step III grant application (see Exhibit A of Attachment No. 4).

Director's Recommendation

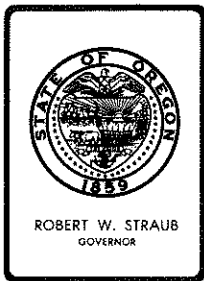
Based upon the summation, it is recommended that the Commission approve the following:

1. DEQ vs. City of Seaside, Amendment No. 2 to Stipulation and Final Order No. WQ-SNCR-77-159 (Attachment No. 2).
2. DEQ vs. City of Rockaway, Amendment to Stipulation and Final Order No. WQ-SNCR-77-160 (Attachment No. 4).
3. DEQ vs. City of Brownsville, Stipulation and Final Order No. WQ-WVR-78-103 (Attachment No. 5).
4. DEQ vs. City of Cave Junction, Stipulation and Final Order No. WQ-SWR-78-152 (Attachment No. 6).
5. DEQ vs. Bear Creek Valley Sanitary Authority, Stipulation and Final Order No. WQ-SWR-78-161 (Attachment No. 7).



WILLIAM H. YOUNG

Fred M. Bolton:DH
229-5373
November 28, 1978
Seven (7) Attachments



Environmental Quality Commission

POST OFFICE BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission
FROM: Director
SUBJECT: Agenda Item No. N, December 15, 1978 EQC Meeting

City of Portland, Gertz-Schmeer Road - Order to Connect
Sewage Disposal Facilities to City of Portland Sewer System

Background

In January 1970 the Multnomah County Health Department stated that specific health hazards existed in the Bridgeton-Faloma area of the county. The County Board of Commissioners on February 5, 1970 banned issuance of plumbing permits in an area between North Denver Avenue and N. E. 47th Avenue in response to this hazard. An annexation election for the subject area held on July 28, 1970 overwhelming rejected the proposal.

Residents of the area then petitioned the State Board of Health on August 19, 1970 for health hazard annexation to the City of Portland. On October 7, 1970 the City adopted resolution #30806 initiating health hazard annexation proceedings by expressing intent to annex, and requesting the Oregon State Board of Health to ascertain whether conditions dangerous to public health exist in the area and whether these conditions can be removed or alleviated by sanitary facilities provided by the City of Portland.

Finding of Fact of the Oregon State Board of Health dated September 15, 1971 stated that several continuing instances of discharge of raw sewage or inadequately treated sewage into the receiving stream drainage system existed in the area. It further stated that these conditions are a danger to the general public health but that the hazard could be removed or alleviated by sanitary facilities provided by the City.

The subject area was thereupon annexed to the City effective November 1, 1971 and planning for the necessary sewerage facilities was begun.

The proposed plans were approved by the Environmental Quality Commission and the Environmental Protection Agency in 1974 and provisions were made for obtaining maximum federal grant funds to minimize the costs borne by residents of the subject area.



Contains
Recycled
Materials

The project was begun in 1976 and completed in 1978. Notice that the facilities are available was given to property owners in the area upon completion of the project.

City records show that less than thirty percent (30%) of the properties have connected to the sanitary facilities to date.

Summation

1. The Oregon State Board of Health has found a public health hazard to exist in the affected area due to inadequately treated sewage.
2. The Board of Health has found that the health hazard can be removed or alleviated by sanitary sewerage facilities.
3. The City of Portland has annexed the subject area and constructed sanitary sewerage facilities adequate to serve the area. Notice was given to the property owners that service is available and that they can connect to the system.
4. The Environmental Quality Commission and Federal Environmental Protection Agency have approved the sewerage facilities built by the City.
5. A majority of the property owners have failed to connect to the sewerage system in a timely manner.
6. A public health hazard will continue to exist until the effected properties are connected to the sewerage system.

Director's Recommendation

Having found the foregoing facts to be true, I recommend the attached Order be approved by the Commission so that the health hazard can be eliminated in a timely manner.



WILLIAM H. YOUNG

Stephen C. Carter:mb
229-5295
12/1/78

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

ORDER

No. WQ-NWR-78-174

Multnomah County

WHEREAS:

1. On September 15, 1971 the Oregon State Board of Health issued a Findings of Fact declaring a danger to public health exists in the territory proposed to be annexed and as legally described in Resolution No. 30806 of the City Council of the City of Portland, Oregon, excluding those portions described in final orders of the Portland Metropolitan Area Boundary Commission Nos. 253, 263 and 279 (hereinafter called "subject area").

2. The subject area was annexed to the City of Portland effective November 1, 1971 and plans for the installation of sewer facilities were proposed by the City of Portland and approved by the Environmental Quality Commission for abating the described public health hazard.

3. Construction of the required sewer facilities was begun in 1976 and completed in 1978. Sanitary sewer service to the subject area is now available and the City has notified all property owners that connection to it can be made.

4. City records show that less than thirty percent of the properties have connected to date.

5. Timely connection of the properties so as to eliminate the public health hazard previously declared to exist by the Oregon State Board of Health, is vital.

NOW THEREFORE, the Environmental Quality Commission enters the following order:

- A. Each structure with sewage disposal facilities, located within the subject area, and where the area-wide sewerage system is available as defined by OAR 340-71-015 (5) shall connect to the City's sewer system as soon as practicable, but no later than September 1, 1979. The City of Portland shall promptly serve upon the owners of each such structure, a copy of this order and shall promptly and fully use its lawful powers to obtain compliance with this order.
- B. All sewage disposal facilities which are abandoned as a result of this order shall be cleaned and all sludges and wastewaters disposed at facilities approved by the Department of Environmental Quality. Abandoned septic tanks shall either be removed or filled with clean bank-run gravel or other material approved by the Department, pursuant to OAR 340-71-018 (2)(a) and (4).

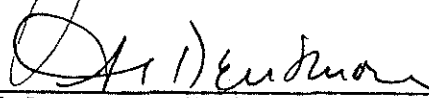
C. A status report as of August 1, 1979, on connections in the subject area, shall be submitted by the City of Portland to the Environmental Quality Commission by August 15, 1979.

Dated: 1-26-79

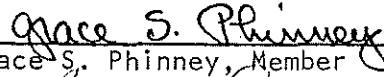
ENVIRONMENTAL QUALITY COMMISSION



Joe B. Richards, Chairman



Al Densmore, Member



Grace S. Phinney, Member



Ronald M. Somers, Member



Jacklyn L. Hallock, Member

Mr. Joe Richards

Dept. of Environmental Quality
RECEIVED
DEC 14 1973
Noise Pollution Control

71
7/16/1

We, the undersigned petition the Oregon Department of Environmental Quality to repeal that portion of Chapter 340 Oregon Administrative Rules, Division 35, exempting aircraft sound from the noise control regulations. The section for repeal is that exemption in 35-035, (5), (j), which states: "Sounds generated by the operation of aircraft".

The extension of the south runway at Portland International Airport and the accompanying modification of the flight paths has increased flight traffic noise in the area of Parkrose far in excess of the sound levels projected by the Port of Portland. These noise levels pose a serious threat to the value of our property and the quiet enjoyment of our homes.

- | | | |
|------------|----------------------------|-----------------------------|
| Hambree | <u>Greg B. Hambree</u> | <u>11349 N.E. Prescott</u> |
| Bruseeth | <u>Dorothy J. Bruseeth</u> | <u>11265 N.E. Prescott</u> |
| Hensel | <u>Nynthia J. Hensel</u> | <u>3827 N.E. 135th Ave.</u> |
| Gregory | <u>Doug K. Gregory</u> | <u>3542 NE 131st Pl.</u> |
| Jones | <u>Janice Jones</u> | <u>4105 N.E. 131st Pl.</u> |
| Hambree | <u>Mr. Greg Hambree</u> | <u>11349 N.E. Prescott</u> |
| Goldthorpe | <u>Jean Goldthorpe</u> | <u>11309 N.E. Prescott</u> |
| Granse | <u>Marjorie Granse</u> | <u>11268 N.E. Prescott</u> |
| Haversher | <u>Mrs. W.J. Haversher</u> | <u>11422 N.E. Prescott</u> |
| Haversher | <u>John A. Haversher</u> | <u>11422 N.E. Prescott</u> |
| Fox | <u>Hershel L. Fox</u> | <u>11440 N.E. Prescott</u> |
| Fox | <u>Lucille B. Fox</u> | <u>11440 N.E. Prescott</u> |
| Lokwood | <u>Arhan T. Lokwood</u> | <u>11437 N.E. Prescott</u> |
| Ball | <u>Federick K. Ball</u> | <u>4545 N.E. 115th Ave</u> |

We, the undersigned petition the Oregon Department of Environmental Quality to repeal that portion of Chapter 340 Oregon Administrative Rules, Division 35, exempting aircraft sound from the noise control regulations. The section for repeal is that exemption in 35-035, (5), (j), which states: "Sounds generated by the operation of aircraft".

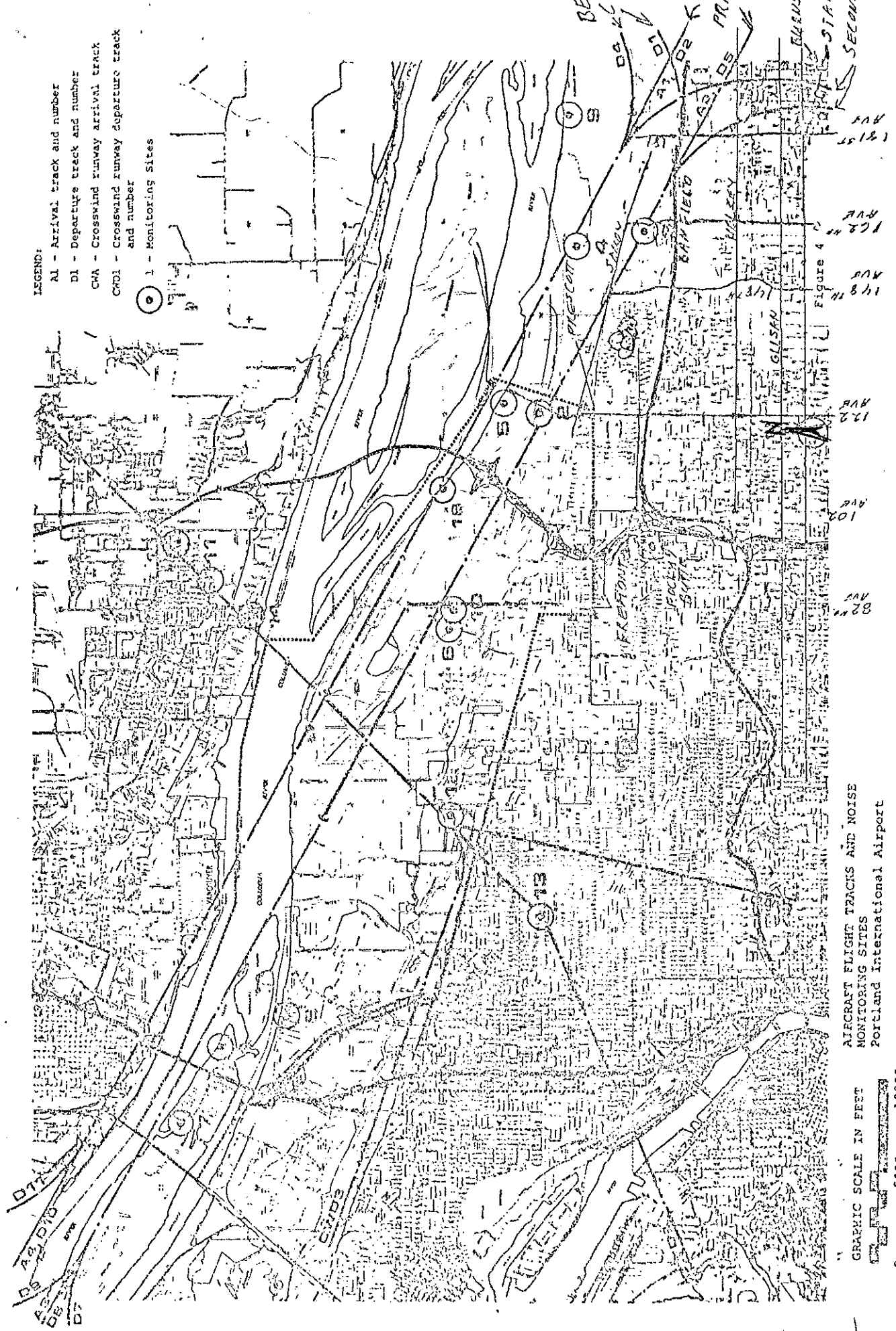
The extension of the south runway at Portland International Airport and the accompanying modification of the flight paths has increased flight traffic noise in the area of Parkrose far in excess of the sound levels projected by the Port of Portland. These noise levels pose a serious threat to the value of our property and the quiet enjoyment of our homes.

Beebe	<u>Kathryn L. Beebe</u>	<u>17117 E. 120th</u>
Lahrey	<u>John E. Lahrey</u>	<u>10833 NE Prescott</u>
Lahrey	<u>Pela Lahrey</u>	<u>10833 N.E. Prescott</u>
Ribagliatti	<u>Alice L. Ribagliatti</u>	<u>10806 NE Prescott</u>
Sheets	<u>H. O. Dell Sheets</u>	<u>10819 N.E. Prescott</u>
Dixon	<u>Lain L. Dixon</u>	<u>10832 NE Prescott St.</u>
Dixon	<u>James M. Dixon</u>	<u>10532 NE Prescott</u>
Berks	<u>Deanne Berks</u>	<u>4532 NE 109</u>
Berks	<u>David T. Berks</u>	<u>" " "</u>
Huddleston	<u>James G. Huddleston</u>	<u>3617 NE 109th Port</u>
Krening	<u>Jean Krening</u>	<u>3720 N.E. 109th</u>
Zamboni	<u>Anthony J. Zamboni</u>	<u>11349 N.E. Prescott St. Port, Ore.</u>
Nichols	<u>Sidney A. Nichols</u>	<u>4339 N.E. 113th Ave</u>
Nichols	<u>Doris M. Nichols</u>	<u>4339 N.E. 113th</u>
	<u>Jean Baker</u>	<u>2607 SE Monroe, Milw. 97222</u>

Ore.
97222

LEGEND:

- AI - Arrival track and number
- DI - Departure track and number
- CWA - Crosswind runway arrival track
- CWOL - Crosswind runway departure track and number
- ① - Monitoring Sites



AIRCRAFT FLIGHT TRACKS AND NOISE MONITORING SITES
Portland International Airport
Ferry Noise Consulting January 1978

November 9, 1978

The undersigned wish to petition for rulemaking, so their names should be included in first set of names in this packet. DR

EAST MULTNOMAH COUNTY CITIZENS FOR IMPROVED AIRCRAFT FLIGHT PATHS (TRACKS) FOR TAKEOFF/LANDINGS AT PORTLAND INTERNATIONAL AIRPORT

TO: Multnomah County Planning Commission
Oregon Environmental Quality Commission
Federal Aviation Authority

Present aircraft operations (8/77-11/78) over schools, churches and residential areas in East Multnomah County not considered impacted by the Port of Portland have caused three (3) areas of concern:

- 1) Excessive Noise
- 2) Safety
- 3) Air Quality

The Port of Portland has not considered this to be a problem or an area of concern in any of their planning for increasing airport operations in the future.

We the undersigned request the immediate implementation of a permanent solution such as returning to and strictly adhering to the takeoff/approach paths used prior to 8/77 and as shown in Port of Portland technical memorandum E-11, Figure 4. We suggest that this be resolved before any further increase in operation is allowed. In addition, we support the petition presently before the Oregon Environmental Quality Commission to give the Department of Environmental Quality authority to regulate and monitor the aircraft noise and air pollution thereby ensuring compliance.

33

NAME

ADDRESS

DATE

Lanning Wood	19407 SE Ash Portland OR	11-10-78
Dorothy Combs	4206 NE 133 Ave Portland OR 97230	11-10-78
Garun Frost	4206 NE 133 Ave Portland OR 97230	11-10-78
Robert K. Mortensen	4206 NE 133 RD PORTLAND, OR 97230	11-10-78
Bill Combs J.	4206 NE 133 Portland 97230	11-10-78
Roy R. ...	RT 4 Box 1080 Gresham	11-10-78
Niles R. ...	10 th 163 rd Portland OR 97230	11-10-78
BOD CO/662	1111 NE 192 DDx 97230	11/10/78
GEORGE HALLER	3217 NE 20th AV	10-11-78

EAST MULTNOMAH COUNTY CITIZENS FOR IMPROVED AIRCRAFT FLIGHT PATHS (TRACKS)
FOR TAKEOFF/LANDINGS AT PORTLAND INTERNATIONAL AIRPORT

NAME	ADDRESS	DATE
Dorothy Co Hensel	3807 N.E. 133 rd Ave, Portland, Ore.	Nov. 12/1978
Robert W. Hensel	3807 N.E. 133 rd Ave, Portland, Ore.	Nov. 13/78
Donald Kilton	3630 NE 133 rd , Portland 97230	11/13/78
Margie L. Pfifer	3601 N.E. 134 th Portland 97230	11-13-78
W.B. Stull	5812 N.E. 134 th Portland 97230	11/13/78
Cindy Andrews	3820 NE 133 rd 97230	11-13-78
E. C. McDougall	13415 NE Felling Portland-Ore 97230	Nov 13/1978
A. Kuhlman	3905 NE 134 th Portland Ore	12/13/78
Georgianna Kuhlman	3905 N.E. 134 th Portland Oregon	11/13/78
W. Porter	3821 NE 133 Portland Ore	11-13-78
George W. Porter	3821 NE 133 Portland, Ore	11/13/78
Frances A. Paul	3806 N.E. 133 Portland, Ore	11/13/78
Richard L. Paul	3806 N.E. 133 Portland	11-13-78
Norman D. Peterson	3660 NE 133 "	Nov 13
Anna L. Wallock	13211 N.E. Beech St. "	11-13-78
Wesley V. Wallock	13211 N.E. Beech St. "	11-13-78
Laura Van Atta	3715 N.E. 133 "	11/13/78
Donald E. Van Atta	3715 N.E. 133 "	11/13/78
Len Bean	13130 N.E. Beech "	11-13-78
Hieda Hahn	13131 N.E. Beech "	11-13-78
Burt Hahn	13131 N.E. Beech "	11-13-78

November 9, 1978

EAST MULTNOMAH COUNTY CITIZENS FOR IMPROVED AIRCRAFT FLIGHT PATHS (TRACKS)
FOR TAKEOFF/LANDINGS AT PORTLAND INTERNATIONAL AIRPORT

TO: Multnomah County Planning Commission
Oregon Environmental Quality Commission
Federal Aviation Authority

Present aircraft operations (8/77-11/78) over schools, churches and residential areas in East Multnomah County not considered impacted by the Port of Portland have caused three (3) areas of concern:

- 1) Excessive Noise
- 2) Safety
- 3) Air Quality

The Port of Portland has not considered this to be a problem or an area of concern in any of their planning for increasing airport operations in the future.

We the undersigned request the immediate implementation of a permanent solution such as returning to and strictly adhering to the takeoff/approach paths used prior to 8/77 and as shown in Port of Portland technical memorandum E-11, Figure 4. We suggest that this be resolved before any further increase in operation is allowed. In addition, we support the petition presently before the Oregon Environmental Quality Commission to give the Department of Environmental Quality authority to regulate and monitor the aircraft noise and air pollution thereby ensuring compliance.

NAME 9 ADDRESS DATE

NAME	ADDRESS	DATE
Terry M. Sasser	3818 N.E. 139 th	11/10/78
Lennis Rice	3102 NE 142	11/10/78
Marilyn Ford	980 N Jantzen	11/10/78
Richard Seales	2720 N.E. Halsey	11/10/78
Conrad McDonald	3810 N.E. 139 th Ave	11/12/78
H. Van D.	13877 N.E. Beech Ct	11/12/78
Kathleen Beal	13836 N.E. Beech Ct	11/12/78
R. W. Martin	14028 NE BEECH CT.	11/12/78
...

DEPARTMENT OF JUSTICE

MEMORANDUM

TO: Robert L. Haskins
Assistant Attorney General

DATE: December 11, 1978

FROM: George Lee
Law Clerk

SUBJECT: Petition before the EQC to amend rules
regarding airport noise pollution

WOULD THE PROPOSED RULE CHANGES INFRINGE ON AN AREA
PRE-EMPTED BY FEDERAL REGULATION?

The proposed rules would bring airports and the sounds generated by aircraft into the DEQ's regulatory scheme for noise abatement. OAR 340-35-015(13). This would necessitate adding appropriate guidelines for allowable sound levels pertaining to aircraft noise. OAR 340-035-1(a). Finally, the rules, as proposed, would delete the present exemption for aircraft under the noise control regulations. OAR 340-35-035(j).

The United States Supreme Court found that the FAA, in conjunction with the EPA, has full control over aircraft noise, pre-empting state and local control. City of Burbank v. Lockheed Air Terminal, 411 US 624, 5 ERC 1321, 1327 (1973). Burbank involved a non-proprietor municipality imposing flight curfews on a nearby airport. The court expressly avoided any decision as to the powers of a municipality acting as an airport proprietor.

Generally, airport proprietors can restrict the use of their facilities on the basis of noise considerations without coming into conflict with the pre-emption doctrine. The rationale for this exception is based on the fact that an airport proprietor can be held liable for interference with the use and enjoyment of nearby property and should, therefore, be able to control noise levels. Griggs v. Allegheny County, 369 US 84 (1962).

The validity of a flight curfew ordinance imposed by a municipality/proprietor was upheld in National Aviation v. City of Hayward, 418 F Supp 417 (ND Cal 1976). The

Memo to Robert L. Haskins

Page 2

December 11, 1978

court relied on the proprietary exception to federal pre-emption of aircraft noise control, and the Supreme Court's refusal to exclude municipality/proprietors from the exception.

Whether a state can enter the regulation of aircraft noise was addressed in Air Transport Association v. Crotti, 389 F Supp 58, 7 ERC 1748 (ND Cal 1975). Plaintiffs were seeking a declaratory ruling on the legality of noise pollution regulations promulgated by the California Department of Aeronautics. The court differentiated between regulations which: (1) set maximum noise levels for an airport area--Community Noise Equivalent Level (CNEL)--as a standard for continuing operation of the airport, and (2) set maximum noise levels generated by individual aircraft engaged in flight--Single Event Noise Exposure Levels (SENEL).

The second group of regulations were struck down as an infringement into an area strictly regulated by the FAA. But, the regulations regarding overall airport noise suffered by communities (CNEL) were held not to be per se violative of the pre-emption doctrine. The CNEL's were accompanied by recommended procedures which could be employed by airports in order to attain the established noise standards. 7 ERC 1750. These procedures are very similar to those options recommended to airport proprietors by the FAA and listed in the present Petition to Amend Rules (page 3). The Crotti court emphasized that no particular procedure was mandatory as a means of lowering noise levels. 7 ERC 175. Also, the court stressed that although the CNEL regulations were not per se invalid, enforcement techniques could lead to indirect state regulation of flight patterns. 7 ERC 1752.

This problem arose in San Diego Unified Port District v. Gianturco, 457 F Supp 283, 12 ERC 1046 (SD Cal 1978). Failure to meet CNEL's noise levels subjected airports to possible revocation of operating permits. In this case, a variance was issued by the Transportation Department containing a condition that flight curfews be imposed. This attempt by the state to enforce the CNEL regulations by indirectly regulating flight patterns was seen as probably unconstitutional and grounds for a preliminary injunction.

Memo to Robert L. Haskins

Page 3

December 11, 1978

Arguments that the state could direct the Port District's proprietary functions were rejected by the court. The proprietary exception to Burbank cannot extend to the state on the basis that the airport authority is a political subdivision of state government. Thus, the Port of Portland, and not DEQ, is responsible for any noise abatement decisions which directly regulate aircraft operation.

The Gianturco court specifically mentioned the U. S. Department of Transportation Aviation Noise Abatement Policy, which is relied on by the present petitioners (see Petition, pages 2 and 3). 12 ERC 1051. Although flight curfews are listed as an optional procedure for proprietor's use in curtailing noise, the state cannot force the airport proprietor to take such action. The Gianturco decision is not a ruling on the merits, but it is persuasive in showing the difficulty state agencies will encounter by attempting to dictate airport noise abatement policies. DEQ's authority to direct an airport proprietor to initiate any of the noise reduction procedures affecting air traffic flow is questionable, at best.

Crop Science Dept.
EXTENSION SERVICE

Oregon
State
University

(503) 754-2771

Corvallis, Oregon 97331

November 17, 1978

Scott A. Freeburn
Coordinator, Field Burning Program
Department of Environmental Quality
16 Oakway Mall
Eugene, OR 97401

SUBJECT: DEQ hearing on open field burning rules.

Dear Mr. Freeburn:

In response to your request for information, the following statement has been prepared in consultation with Drs. John Hardison, Orvid Lee, James Kamm, and D. O. Chilcote. It summarizes the status of alternatives to open field burning available to growers in 1979.

PLANT DISEASE CONTROL

The effectiveness and importance of fire and flame sanitation in plant disease control has been well established. Major diseases, especially ergot, blind seed disease, and grass seed nematode, are now controlled only by open field burning. Chemical control is not available for seed nematode. The experimental chemical Bayleton has shown promise in control of diseases such as rusts and powdery mildew. However, Bayleton will not control ergot and blind seed disease. Bayleton is not registered. Sodium azide has given control of ergot and blind seed disease by suppression of ascocarps, but is not registered for this use. New chemicals are being screened continually to find materials that will control blind seed disease, ergot, rusts, strip smut, and flag smut.

WEED CONTROL

Open field burning is the primary method available for control of winter annual grass weeds in annual ryegrass seed fields. Ethofumesate (Nortron), the herbicide that has shown promise for control of weeds to annual ryegrass seed fields in trials is now registered by the state of Oregon under section 24-C of FIREA for control of winter annual grass weeds in annual ryegrass seed fields. However, because of the high cost of this herbicide (\$25 to \$35 per acre) and the need to chop and incorporate crop residues before its use (\$30), it is difficult for a grower to justify the use of a weed control practice that costs \$55 to \$65 per acre in a crop with a gross value of only \$150 to \$170 per acre (based on the present price of .075/lb. and a yield of 1600 to 1800 lb. of seed



per acre). Since open field burning costs only about \$5 per acre, including burning fees, it does not appear that the use of Nortron is a feasible economic alternate to open burning at today's seed prices. In addition, the 24-C registration prohibits grazing or use of crop residues for feed. Since many annual ryegrass seed growers receive considerable income from winter sheep pasture and crop screening used for feed, the use of Nortron would further reduce their income and is unacceptable to them except where extreme weed problems exist.

Weed control in perennial grass seed fields is still dependent on open field burning. The mobile field sanitizer concept has been set aside, at least for the present, based on the FMC report. Complete and thorough mechanical removal of crop residues have shown some promise as an alternative to open field burning in some perennial crops. More study is needed before the effectiveness of this practice can be determined.

STIMULATION OF SEED PRODUCTION

Post-harvest burning of perennial grass seed crop residue is important to stimulate seed yield the following season. This effect is exerted primarily through enhanced tillering in the fall giving a larger number of vigorous new shoots which subsequently have a greater degree of reproductive development. Research suggests that this is a result of rather complete residue removal allowing greater light penetration and absorption by the soil. This change in micro-climate gives warmer soil temperatures during the day and cooler temperatures during the night, thus enhancing tiller development and subsequent reproductive development. To date, no treatment other than burning accomplishes this effect.

The close-clipping and sweeping method in experimental plots gives residue removal similar to open burning. Although not as effective as burning, it seems to assist in maintaining higher seed yields. Raking and flail-chop removal methods are less effective. The costs and extended effects of close-clip-sweep are being evaluated on a field basis. Less than annual burning is an alternative that is being researched in field scale tests. Although benefits of burning are well documented, the yield reduction and pest problems under the "less than annual" burning system will be identified through this research effort.

INSECT CONTROL

Plant pests that use leaves, seed culms, and stems of grasses as overwintering sites are affected by field burning. Those pests that feed in the roots or crowns of grasses are not affected by burning. Insecticides that once effectively controlled plant bugs have been cancelled by the EPA because of real or potential environmental concerns. Field burning now controls the plant bugs that cause "silver top" in grass seed crop. Research studies indicate that any reduction in field burning is likely to result in an increase in "silver top". This disease causes all or parts of the inflorescence to prematurely turn white and abort seed development.

Open field burning remains the only control for insects that infest grass seed fields and cause "silver top" in perennial ryegrass.

SUMMARY

There is no chemical or substitute thermal treatment available to farmers in 1979 to control ergot, blind seed disease, or seed nematode other than open field burning. Field burning remains the only available technique for control of insects that cause "silver top". Field burning is an essential practice for weed control in both annual and perennial grasses grown for seed. Without it, the maintenance of the high quality standards for purity demanded by the consumer will be difficult or impossible to attain. The limited burning in the past two years and the poor quality of burns in the late season of 1978 increase the need for the maximum amount of burning in grass seed production.

The following is a response to your questions: (1) What advice or recommendations can OSU provide to the Commission regarding establishment of an annual maximum acreage limitation for 1979 and 1980, taking into consideration particular local air quality conditions, soil characteristics, the extent, type, or amount of open field burning of grass seed crops, and the availability of alternative methods of field sanitation, straw utilization, and disposal?

The poor drainage characteristic of 259,000 acres of soil in the southern Willamette Valley on which grass seed crops are now grown greatly limit the crop choices available to farmers. Restricted markets and low returns per acre prevent some of the adapted crops from being produced. The perennial and annual ryegrass are the most tolerant winter crops of the high water table and frequent winter flooding that occurs on many of the soils in the southern Willamette Valley. Forcing shifts from grass seed production on these soils, with limited alternatives, will create a severe economic hardship on farmers and create new pollution problems. The perennial grass seed crops are sod-forming with extensive root systems that protect the soil from water erosion. This is particularly important on hill land soils around the Willamette Valley. The most likely alternative crops on soils now growing grasses require annual fall tillage and replanting. This requires extra soil tillage and leaves the soil with little vegetative covering to protect the soil from winter erosion.

Preliminary tests of burning machines and techniques have not provided and practical means of achieving an acreage reduction in open burning. Less than annual burning poses potential pest and seed yield problems which will be identified as analysis of results from newly initiated research becomes available.

Straw utilization research and market development activities have not yet identified any economically feasible large-scale use for the straw residue from grass seed field. Animal feed remains the largest use. The volume of straw used for animal feed fluctuates with the availability and cost of high quality hay. Based on projections of price and availability of alfalfa hay, the use of straw for animal feed will be lower in the winter of 1978-79 than in the past several years. It is difficult to predict the trends for 1979-80 at this time, but the probable

Page 4
Scott Freeburn
November 17, 1978

carry-over from 1978-79 and the 1979 production of hay will probably hold hay prices at low levels, thus limiting the use of straw for animal feed. The increase in the rust diseases of the grasses requires wider use of rust control chemicals. Since the residue from these treated fields cannot be fed to livestock, this reduces the amount of straw available for feeding.

Small amounts of straw are being used in the manufacture of building materials and fiber products. Until these uses can be expanded, the straw from unburned fields must be hauled away and dumped. The entire cost of the straw removed must be added to the cost of seed production.

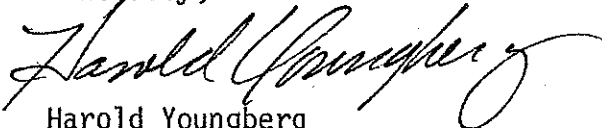
I would suggest that in the light of information that has been gathered in the 1978 season that less attention be directed toward a reliance on the number of acres burned and more effort directed toward reducing emissions and keeping smoke from population centers through the use of lighting techniques and a review of the meteorological criteria for allowing burning. Emission-reducing techniques such as straw and stubble moisture limitations need to be examined to determine their practicality.

In order to protect the Willamette Valley from shifts in production practices that may affect the environment through increases in erosion, the amount of agricultural burning allowed should be limited by atmospheric conditions rather than a specific number of acres. Since there were such poor results from burning in 1978, all grass seed fields should be burned in 1979 to regain control of diseases and weeds.

The following is a response to your question (2): When registered acreage exceeds the burning limitations adopted by the Commission, what advice or recommendations can OSU provide the Commission regarding procedures for allocating permits?

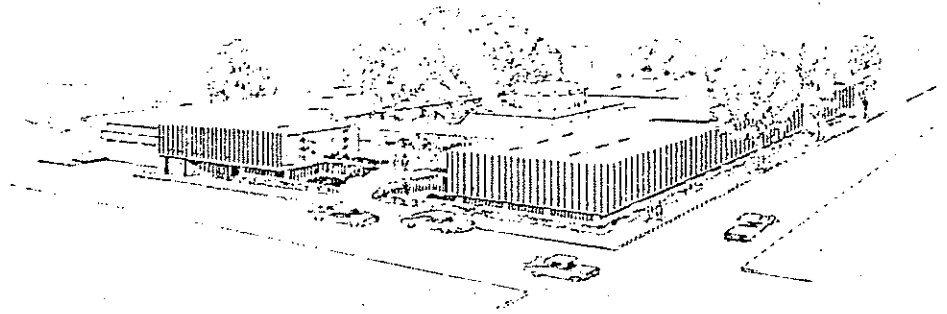
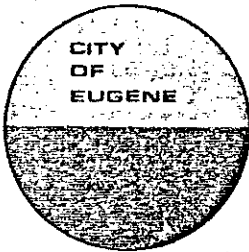
There is no information basis for acreage allocation based on soil characteristics or grass seed species. When the registered acreage, by the deadline, exceeds the burning limitation, the available acreage should be allocated to grass seed growers on a proportional basis so that all seed growers share the hardship equally. The decision as to which fields should remain unburned is a management decision that should be left to each individual grower based upon his judgment of the best way to minimize his losses.

Sincerely,



Harold Youngberg
Extension Agronomist

HY/nm



OFFICE OF THE CITY MANAGER
503/687-5010

P.O. BOX 1967

EUGENE, OREGON
97401

November 22, 1978

TO: ENVIRONMENTAL QUALITY COMMISSION

FROM: BOB ELFERS AND TERRY SMITH, Representing
THE CITY OF EUGENE

SUBJECT: RESPONSE TO COMMENTS MADE IN NOVEMBER 17 EQC HEARING

Several representatives of the grass seed industry made use of the Aerovironment's "Interim Report on Willamette Valley Field and Slash Burning Impact Air Surveillance Network Data Evaluation" to try to justify removing field burning from the State Implementation Plan (SIP) to be submitted next year. This report and the City's previous position on the air quality impact of field burning was misrepresented in the process.

The City has two concerns about field burning: (1) its potential for producing a violation of air quality standards, and (2) its impact on human health whether standards are violated or not. Our analysis leads us to believe that field burning had a small effect on annual TSP concentrations in Eugene and Springfield in the past, and an even smaller effect in 1978. Although no exceedence of the 24-hour TSP standard was caused by field burning in 1978, the potential for such an occurrence exists. In addition, the concentrations of fine suspended particulate matter produced by field and slash smoke intrusions are high enough to cause adverse health effects, but the duration and severity of these effects are not known at this time. These adverse health effects are of significant concern to us and are a more serious constraint on development of field burning rules and control strategies than existing air quality standards.

ANNUAL AND 24-HOUR TSP STANDARDS

Aerovironment's report addresses only the impact on TSP standards. It states these preliminary findings:

"On a valley-wide basis, field burning has little significant impact on the air shed's particulate mass or composition. Localized impacts can, however, be substantial for short time periods."

Rec 11-28-78
EUG. DEQ

"Field burning, under the 1978 Smoke Management Plan, had not been found, thus far, to have a great enough impact on total particulate mass to cause exceedences of the annual or 24-hour TSP standards."

Our own findings from analysis of this year's data, the analysis reported to you last February in the "Preliminary Report on the Impact of Field Burning on Eugene and Springfield's Air Quality", and EPA's "Technical Support Document on the Phasedown of Oregon Open Field Burning" (March 1977) supports Aerovironment's preliminary findings. The last two studies estimated that, during 1974-76, field burning contributed between one-fourth and four ug/m³ to annual mean TSP concentrations measured in Eugene and Springfield. It is important to remember that an average of three times as many hours of smoke intrusions occurred during those three seasons than in 1978. Even so, the effect of smoke intrusions on annual TSP levels has to be small since it will be diluted by what occurs on the 330 or so days during the year when no burning is allowed. The Aerovironment report indicates that the impact of burning on annual mean TSP concentrations in Lebanon is in the range of the estimates given above for Eugene and Springfield in previous years.

Our analysis and concerns have been and continue to be focused on what Aerovironment calls "substantial localized impact for short time periods." The EPA-TSD estimated that a maximum of 31 ug/m³ was contributed by a field burning smoke intrusion to 24-hour TSP concentrations. The City's February 1978 report estimated that severe smoke intrusion could contribute 60-90 ug/m³ to 24-hour TSP concentrations. During the August 11, 1978 smoke intrusion into Lebanon, the 24-hour TSP concentration was 100 ug/m³. The data shows that smoke intrusions contributed 55-65 ug/m³ to that value. TSP concentrations upwind of the burning activity ranged from 18 ug/m³ in Creswell to 46 ug/m³ at the Springfield Library station. It is very apparent that the only reason field burning did not cause an exceedence of the 24-hour TSP standard is the fact that burning was conducted on a day when air quality would have been quite good.

The August 3 slash smoke intrusion demonstrates that smoke can contribute to an exceedence of the 24-hour standard. This intrusion was caused by a mistaken weather forecast and was somewhat less intense than the August 11 Lebanon incident. In Eugene, the fine particulate concentration was an alarming 72 ug/m³ and the 24-hour TSP was 152 ug/m³. Although it is still not certain how much the smoke contributed to these concentrations, it is safe to say that the exceedence of the 24-hour standard would not have occurred in the absence of the intrusion. With certain operational errors or poor rules, the field burning smoke management program could produce the same situation. However, with the 1978 burning rules and acreage limitation, no such exceedence occurred and the chances of such an occurrence in the future are small if such a program is continued. Table 1 of our testimony shows that there is a strong correlation between the number of hours of smoke intrusions and the total number of acres burned in a season. This is interpreted to mean that the chances of smoke intrusion or an exceedence of the 24-hour TSP standard increase as the total acreage burned increases.

It is also important to reiterate that this Summer's emission tests conducted by DEQ indicated that the particulate emissions from field burning are 10-15 times the previous estimates and that every acre burned at 12% straw moisture will release about one-third of a ton of particulate. The purpose of the modifications we have suggested to the 1978 rules is to further reduce the number of hours and intensity of the smoke intrusions which are the inevitable result of burning a large amount of acreage.

In addition, the Aerovironment report assesses the impact of field burning on the air shed only for 1978. Data from 1977 was used to determine compliance with TSP standards, but no estimates of the impact of field burning could be made. For regulatory purposes, three years of data are usually required to show compliance with standards and to demonstrate the effect of a large source. Obviously, that much data does not exist.

SIP AMENDMENTS

However the debate is resolved on what is the base year emissions required for the Prevention of Significant Deterioration (PSD) regulations, and whether dispersion techniques or smoke management are acceptable practices under the 1977 Clean Air Amendments, several things are clear from the above discussion. Field burning is one of the largest manmade sources of particulate in the State. Although the impact of well regulated burning on annual TSP concentrations is small, the impact on 24-hour TSP concentrations can be substantial. This impact increases with increases in the acreage burned. There is not enough data at this time to determine exactly how many acres can be burned without exceeding standards or applicable PSD increments. Based upon this year's data it probably can be presumed that 152,000 acres can be burned with minimal impact. A great deal is now known about successful and economical strategies for controlling the impact of this non-traditional source. For these reasons, the City of Eugene believes that it is essential that field burning control strategies are included in the State Implementation Plan.

If reductions in emissions are to be the primary strategy elements required in SIPs, then acreage limitations, into-the-wind strip lighting, and straw moisture content restrictions are the primary options to be used. When the policy questions mentioned above are resolved, the extent to which these three measures must be applied in the SIP can be decided. The recommendations made in our testimony are useful and may be more than sufficient to meet the requirements for SIP development. These recommendations are also necessary for reducing the adverse health effects caused by field burning smoke intrusions.

RJE:bw

cc: Scott Freeburn
DEQ Field Burning Office
16 Oakway Mall
Eugene, Oregon 97401



DEPARTMENT OF JUSTICE

PORTLAND DIVISION
500 Pacific Building
520 S.W. Yamhill
Portland, Oregon 97204
Telephone: (503) 229-5725

December 14, 1978

Mr. Joe Richards, Chairman
Environmental Quality Commission
300 Forum Building
777 High Street
P.O. Box 10747
Eugene, Oregon 97401

Re: Oregon Environmental Council Petition
Requesting Promulgation of Rules
to Regulate Noise Emissions from Aircraft

Dear Joe:

You requested that we briefly review the law to determine whether or not the rules proposed by the Oregon Environmental Council would be preempted by federal law. I asked our law clerk, George Lee, to prepare a memorandum. Enclosed is a copy of a portion of George's December 11, 1978 memorandum to me regarding the preemption question. I have included his discussion of pertinent case law.

Based on our brief review, our preliminary conclusions are as follows. The proposed rules would not bring the State into direct conflict with a federally preempted area of regulation for the reason that it expressly would exclude from coverage aircraft noise which is "subject to preemptive federal regulation." The proposed rules would be similar to the CNEL's currently on the books in California. The real question remains: What would not be preempted?

The proposed rules would establish enforceable standards covering aircraft noise; however, the State, as opposed to the proprietor, would be preempted from regulating flight patterns through its noise standards. Furthermore, by defining industrial and commercial noise levels as including "sounds generated by the operation

Mr. Joe Richards
Chairman, Environmental Quality
Commission
December 14, 1978
Page 2

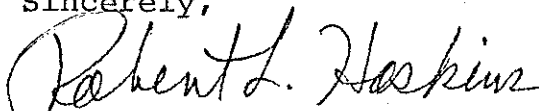
of aircraft," would leave an airport proprietor with the possibility of arguing that the rules apply only to aircraft, and not to the proprietor of the airport.

Inasmuch as a proprietor has much greater legal authority to control noise in his role as proprietor than does government in the exercise of police powers, such a result would be undesirable. The proprietor has the control to achieve overall airport noise mitigation. The individual aircraft owners do not have control over the overall noise levels, and police power (non-proprietor) regulation of their flight patterns is preempted. If the proposed rules were construed to apply only to aircraft there may not be very many activities to which they would apply. Furthermore, the aircraft owners probably would not be in a position to implement mitigation; for example, maintenance of noise buffers.

Therefore, in order to effectively exercise the maximum police power control over airport noise emissions it would appear to be important to clearly define airport proprietors as being responsible for the noise emissions from their airports. Even then the amount of police power regulatory authority would be limited. Airport proprietors would still be given a great deal of leeway in deciding the exact program to be implemented.

Please call me if you have any questions, or if you wish to have us research this matter any further.

Sincerely,



ROBERT L. HASKINS
Assistant Attorney General

RLH/law

cc: William H. Young
E.J. Weathersbee
John Hector
Grace S. Phinney
Ronald M. Somers
Jacklyn L. Hallock
Albert Densmore
Enclosures



HOOD RIVER COUNTY HEALTH
DEPARTMENT
1109 JUNE STREET
HOOD RIVER, OREGON 97031
—
TELEPHONE 386-1115

February 28, 1977

Ladd Henderson
135 Country Club Rd.
Hood River, Oregon 97031

RE: EVERGREEN TERRACE PARK
2N 10E 27 #1200

Dear Mr. Henderson:

This letter is to confirm our conversation of February 25, 1977 regarding your proposal to install a septic tank and drainfield system to serve eighteen (18) mobile home spaces and a two bedroom house at the Evergreen Terrace Park. Oregon Administrative Rules Section 71-015, subsection 5 states:

The Director or his authorized representative shall not issue a permit if a community or area-wide sewerage system is available which will have adequate capacity to serve the proposed sewage discharge and which is being, or at the time of connection will be operated and maintained in compliance with the provisions of a waste discharge permit issued by the Department.

After conferring with the City of Hood River and the Department of Environmental Quality it is my understanding that the present sewer hook-up is available and possible to be utilized. Therefore, this department will not issue a permit for a septic tank and subsurface sewage disposal system. Installation of a septic tank and drainfield system will be in violation of Oregon Revised Statute 454.655 and Oregon Administrative Rule 71-013, Permit Required for Construction. Proceeding contrary to the intent of these rules will result in this office initiating appropriate legal action which may result in assessment of civil penalties.

If you have any further questions regarding this matter, please contact this department.

Sincerely,

Scott D. Fitch, R.S.
County Sanitarian

SDF/bjf
CC City of Hood River
Robert Shimek

Treatment Plant Can't Do the Job, Says Engi

A consultant engineer hired by Diamond Fruit Growers to diagnose the problems that have characterized the operation of the City's \$2 million plus wastewater treatment plant since its completion in 1975 said Friday the facility "isn't capable" of consistently meeting the standards set up by regulatory agencies.

To a small audience at City Hall that included the council members, he said: "It isn't because you've got the 'village drunk' operating it; it's because the plant isn't capable of doing it."

Leonard Eder, of Eder, Connors & Associates, P. C., a New York firm specializing as "environmental consultants,"

had more bad news for a city that has already heard a lot of bad news about the treatment plant.

In September, DEQ assessed a \$1,000 fine for effluent violations. A lagoon-construction project in progress is running more than 300 per cent over the estimate and could cost the city and DFG more than \$100,000.

To that and more, Eder added his opinion that the only way to improve the performance of the facility will be to build larger aeration tanks and then modify the existing centrifugal system for de-watering the sludge.

Eder declined to estimate what it would cost to do all that, saying it would be one of the things covered in a report he will write and submit to the DFG and the city.

DFG and the city own and operate the plant as a partnership in which DFG picks up about two-thirds of the tab.

Eder was hired to check out both the internal system at DFG and the outside treatment plant, said Jack Olson, DFG's manager of operations.

The consultant concluded that there isn't much either the operators can do within the plant or DFG personnel can do

at their facility that would significantly improve the situation so long as the present plant is unmodified.

There's nothing the plant operators can do, he said, "that is going to make that plant function such that they can correct the sludge disposal problems they have now."

Similarly, DFG could install various monitoring and control equipment but "the end result would make very little difference on the operation of that plant," said Eder.

As he explained his findings, the problem is basically that the plant isn't removing solids from the influent—the incoming waste products—in the amount called for in the original design.

That's in spite of the fact, he said, "that the plant is loaded (incoming volume) far less than what it was designed (to process)."

One place in the process where solids are supposed to be removed from the wastewater

is the Activated Biological Filter (ABF) tower, a 21-foot high cylinder that can hold 75,000 cubic feet of material.

"We miss performance by almost 100 per cent" in the ABF tower, Eder said. Rather than remove about 50 per cent of the solids, he reported, the process in the ABF tower seems to be converting them into insoluble solids and passing the whole load over to the aeration tanks.

"The load on aeration is almost as high," he said, "as if the filter (ABF) weren't there."

That's one reason for the recommended increase in aeration capability, in his view. Aeration tanks give the solids the opportunity to settle out of the fluid, piling up in a "sludge" at the bottom.

The sludge needs to be thickened in most cases in order to make sludge removal economical, and that's where the centrifuges fit into the process at the Hood River plant.

Eder predicted that once the aeration capacity is increased, modification of the present centrifuge system would be necessary.

The expense of the power and

the chemicals presently used in the effort to thicken the sludge is the factor behind the high operating costs of the plant, he said.

Eder returned to New York to prepare a draft report of his findings. The report will include the recommended changes, a time schedule for the implementation of the changes and an estimate of what it all might cost.

Present at Friday's meeting was Dick Nichols, manager of the DEQ's central region. The DEQ has already levied one fine against the Hood River facility and is generally conceded to be in a position to add to that action because of the plant's ongoing difficulties.

"I see no problem in us waiting to see what the report says," Nichols said.

December 13, 1978

Joe B. Richards, Chairman
Grace S. Phinney, Vice Chairman
Albert H. Densmore
Jacklyn S. Hallock
Ronald M. Somers

HEARING ON OREGON ENVIRONMENTAL COUNCIL PETITION - DECEMBER 15, 1978

The Port of Portland would like to express its willingness to cooperate with the Department of Environmental Quality if the Environmental Quality Commission decides to undertake the development of a separate noise abatement program for Portland International Airport. The supporting documentation for the Master Plan is discussed in detail in documents available to DEQ staff.

Substantial technical analysis of alternative operating procedures, beyond that described in the DEQ staff report, was conducted as part of the Portland International Airport Master Plan. This work was developed in accord with the FAA Noise Abatement Policy, and we feel it fully supports the recommendations for noise abatement included in the Master Plan. The Port Commission has approved this work. The Portland City Council has also approved the Airport Master Plan.

We recommend any report to EQC fully address the powers and responsibilities of the various agencies which may be identified to implement a noise abatement program.



Lloyd Anderson
Executive Director
Port of Portland

cc: Fred Klabo
Paul Burkett
Robert Brown
Lee Camphouse

EX23M

Subject: Addendum to Agenda Item No. H, December 15, 1978, EQC Meeting

Proposed Modification of the Chem-Nuclear License for
Operation of the Arlington Hazardous Waste Disposal Site

In response to recent Commission concern, it is proposed that the following license condition also be added to the Chem-Nuclear license:

B24. Whenever, in the judgment of the Department from the results of monitoring or surveillance of the site operation, there is reasonable cause to believe that a clear and immediate danger to the public health and safety exists from the continued operation of the site, without hearing or prior notice, the Department may order the operation of the site halted by service of the order on the site superintendent.

The licensee shall be obliged to rectify the dangerous conditions immediately, subject to such direction as the Department may give.

If the licensee fails to act when directed, the Department may take action as is necessary to rectify the dangerous conditions. The licensee shall be responsible fo all expenses incurred in carrying out the action including reasonable charges for services performed and equipment and materials used.

Fred S. Bromfeld:mm
12/13/78

MR. CHAIRMAN AND MEMBERS OF THE ENVIRONMENTAL QUALITY COUNCIL. I'M GENE HOPKINS, EXECUTIVE VICE PRESIDENT OF THE GREATER MEDFORD CHAMBER OF COMMERCE. I HAVE A BRIEF STATEMENT ON BEHALF OF THE CHAMBER.

IN ITS EVALUATION OF TESTIMONY CONCERNING THE PROPOSED VOC RULES, THE DEPARTMENT OF ENVIRONMENTAL QUALITY ANSWERED SIX BASIC QUESTIONS THE MEDFORD CHAMBER ASKED IN A LETTER DATED OCTOBER 27. THE CHAMBER APPRECIATES THESE ANSWERS.

BUT THEY ALSO POINT OUT THE DIFFICULTY OF THE UNIQUE AIR POLLUTION CONTROL SITUATION IN THE ASHLAND-MEDFORD AREA. DESPITE THE WELL INTENTIONED EFFORTS OF THE DEQ, WE STILL DON'T HAVE A GOOD INFORMATION BASE ON WHICH TO CALCULATE SPECIFIC OR OVERALL CONTROL STRATEGIES FOR OUR GROWING COMMUNITY.

THIS IS A MAJOR CONCERN OF THE MEDFORD CHAMBER OF COMMERCE,
AND IT SHOULD BE AN IMPORTANT CONCERN FOR EVERYONE.

AT THE CHAMBER, WE BELIEVE A GOOD DEAL MORE BASIC
INFORMATION IS REQUIRED TO DEVELOP EFFECTIVE CONTROL STRATEGIES
FOR THE GREATER MEDFORD AREA. AND WE REALIZE THAT NEITHER THE
EQC NOR THE DEQ CURRENTLY HAVE THE RESOURCES NECESSARY TO
PROVIDE ADEQUATE AIR MONITORING DATA AND RELATED FACTS.

THEREFORE, WE WOULD URGE THE DEQ AND/OR THE EQC TO
REQUEST SPECIFIC FUNDING FOR THE PURPOSE FROM THE FORTH-
COMING STATE LEGISLATURE. THE MEDFORD CHAMBER OF COMMERCE
WOULD SUPPORT AND ENDORSE SUCH A REQUEST OF THE LEGISLATURE.

Agenda Item E, December 15, 1978, EQC Meeting

FIELD BURNING RULES - PROPOSED ADOPTION OF REVISIONS TO
AGRICULTURAL BURNING RULES, INCLUDING OPEN FIELD BURNING
ACREAGE LIMITATIONS FOR 1979-80 BURNING SEASON, OAR 340-26-005
through OAR 340-26-030

Amended Director's Recommendation

Based upon the information set forth in pages 1-18 of the Director's December 15, 1978, staff report to the Commission; the testimony in the record of the November 17, 1978, public hearing; and the recommendations of Oregon State University pursuant to ORS 468.460(3), it is recommended that the Environmental Quality Commission act as follows:

1. Enter a finding that the open burning of 180,000 acres pursuant to the proposed rules in Attachment 1 to the Director's Staff Report will not substantially impair public health and safety and will not substantially interfere with compliance with relevant State and Federal Laws.
2. Designate as its final State of Need for Rulemaking the Statement of Need set forth on pages two and three of the Director's Staff Report.
3. Adopt as permanent rules the proposed rules set forth in Attachment 1 to the Director's Staff Report, such rules to become effective upon their prompt filing (along with the State of Need for Rulemaking) with the Secretary of State and to include an Order establishing 180,000 acres as the number of acres for which permits may be issued for open field burning.
4. Instruct the staff to submit the rules set forth in attachment 1 of the Director's Staff Report to EPA pursuant to Federal rules, but request that these rules not be acted upon except as they may be later submitted as a part of an overall State Implementation Plan Revision package.

Bill

WILLIAM H. YOUNG

PWMc:cs/jas
12/12/78

December 13, 1978

Joe B. Richards, Chairman
Grace S. Phinney, Vice Chairman
Albert H. Densmore
Jacklyn S. Hallock
Ronald M. Somers

HEARING ON OREGON ENVIRONMENTAL COUNCIL PETITION - DECEMBER 15, 1978

The Port of Portland would like to express its willingness to cooperate with the Department of Environmental Quality if the Environmental Quality Commission decides to undertake the development of a separate noise abatement program for Portland International Airport. The supporting documentation for the Master Plan is discussed in detail in documents available to DEQ staff.

Substantial technical analysis of alternative operating procedures, beyond that described in the DEQ staff report, was conducted as part of the Portland International Airport Master Plan. This work was developed in accord with the FAA Noise Abatement Policy, and we feel it fully supports the recommendations for noise abatement included in the Master Plan. The Port Commission has approved this work. The Portland City Council has also approved the Airport Master Plan.

We recommend any report to EQC fully address the powers and responsibilities of the various agencies which may be identified to implement a noise abatement program.



Lloyd Anderson
Executive Director
Port of Portland

cc: Fred Klabo
Paul Burkett
Robert Brown
Lee Camphouse

EX23M



State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: John Borden ^{12/13}

Date: Dec. 12, 1978

From: Ted Groszkiewicz

Subject: Teledyne Wah Chang Albany Status Report 4th Quarter 1978

A. Permit Compliance Status:

1. Water Permit- TWCA will submit the first monitoring data required by the recently issued NPDES permit next week. We have received several upset reports which will have to be verified. The Department has under consideration enforcement action against the company for permit violations from Dec. 1977 thru Oct. 1978.
2. Air Permit- Meetings between the Department's and the company's legal representatives have taken place and staff level discussions of potential settlements of the contested case permit are being held. Another round of legal negotiations is anticipated. TWCA is currently in compliance with the terms of its Air permit with the exception of compliance schedules affected by control equipment manufacturers' shipping delays. An addendum is being prepared to extend the affected schedules and to mandate controls for emissions from extremely hazardous zirconium fines burning chambers. A time extension for control of opacity from the sand and pure chlorination areas will also be a part of the addendum.

B. Department/ Company Interactions:

1. The new NPDES permit was issued in October.
2. TWCA notified the Department of their intent to contest the new NPDES permit.
3. Negotiations on the contested Air Permit began.
4. TWCA notified the Department of their intent to switch from natural gas to residual fuel oil as boiler feed.
5. Several pollution control equipment construction plan reviews were conducted by the Department.
6. Plans for chemical and radiological sampling at the Coffin Butte Landfill were made. Sampling will take place in February- weather permitting.
7. TWCA's effluent continued to meet or better the toxicity limit imposed by the NPDES permit.

DEPARTMENT OF ENVIRONMENTAL QUALITY

1979-81 Governor-elect Atiyeh Budget appeal Hearing

	<u>General Fund</u>	<u>Other Funds</u>	<u>Federal Funds</u>	<u>FTE Pos.</u>	<u>Results of Final Review by Transitional Director</u>
I. <u>AGENCY APPEAL OF ANALYST REPORT IN PRIORITY ORDER</u>					
1. Experimental systems -- DP-17	\$ 283,078	\$ 8,446	\$ 68,198	6.95	ok
2. Portland Air data base monitoring RLB 20	84,178	--	13,652	1.30	ok
3. Contract review and accounting services -- DP-22(part)	71,494	--	--	2.00	ok
4. Program coordination and analysis (including current LCDC)--DP-25(part)	189,869	--	--	3.14	ok
5. Restore solid waste monitoring -- DP-29(part: restoration)	43,410	--	--	.94	ok
6. Restore water source control -- DP-21(part)	80,231	--	--	1.00	ok
7. Restore typing services to approved packages--RLB 06	31,698	--	--	1.00	ok
8. Supplemental funding of legal services -- supplemental request	106,117	--	--	--	No
9. LCDC goal compliance -- DP-48	95,271	--	--	2.21	No
10. LCDC local plan review -- DP-28(part)	212,041	--	--	4.25	No
11. LCDC technical assistance -- DP-28(part)	184,106	--	--	3.29	No
II. <u>ADDITIONAL ITEMS THE AGENCY WOULD APPEAL IF AN INCREASE IN SUBSURFACE SEWAGE PERMIT FEES IS APPROVED:</u>					

	<u>General Fund</u>	<u>Other Funds</u>	<u>Federal Funds</u>	<u>FTE Pos.</u>	<u>Results of Final Review by Transitional Director</u>
12. Restoration of existing subsurface sewage effort: - DP-27, RLB - 1.90 existing FTE (Coos Bay, Pendleton) - 1.00 new FTE (Pendleton)	--	138,533	--	2.90	ok
13. Sanitarian, Southwest Region (Roseburg)--DP-44	--	48,293	--	1.00	No
14. Reduce General Fund recommended in Budget Report	-134,767	+134,767	--	--	ok
III. <u>TECHNICAL ADJUSTMENTS TO ANALYST REPORT:</u>	3,648	15,542	-69,516	-0.40	ok
IV. <u>DATA ACQUISITION AND MONITORING IMPROVEMENTS NOT INCLUDED IN THE ANALYST REPORT BUT TO BE INCLUDED IN GOVERNOR-ELECT ATIYEH'S BUDGET PER INSTRUCTIONS OF THE TRANSITIONAL DIRECTOR</u> (1)					
- Air laboratory quality assurance -- DP-35	28,190	--	--	0.63	ok
- Millersburg special monitoring DP-38	15,199	--	--	0.30	ok
- Eugene air strategy coordinator (2)	(63,245)	--	--	(1.00)	No (2)
- Air monitoring improvements	39,627	--	--	0.53	ok
V. <u>CHANGE FUNDING OF POLLUTION CONTROL FACILITY TAX CREDIT APPLICATION PROCESSING FROM OTHER FUNDS RECOMMENDED IN THE ANALYST REPORT TO GENERAL FUND PER INSTRUCTIONS OF THE TRANSITIONAL DIRECTOR</u>	156,383	-156,383	--		ok

	<u>General Fund</u>	<u>Other Funds</u>	<u>Federal Funds</u>	<u>FTE Pos.</u>	<u>Results of Final Review by Transitional Director</u>
VI. <u>IMPROVE RULE MAKING AND ECONOMIC ANALYSIS (ATTORNEY AND ECONOMIST)</u>	116,334	---	---		ok

(1) To be financed by reductions in analyst report: General Fund \$-86,286, FTE -0.15.

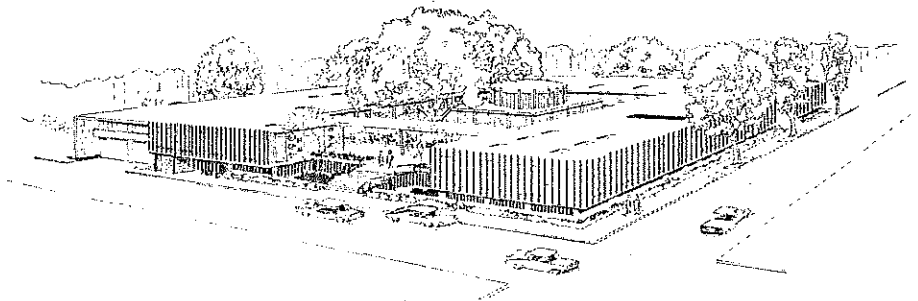
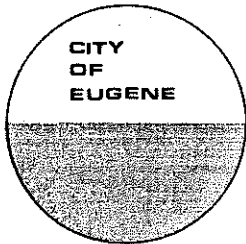
(2) Alternative provision can be made for this activity within the analyst report.

ED:BAM
12-6-78

Summary of Anticipated Governor's Recommended Budget

		Budget			Positions / FTE		
		77-79	79-81	Diff	77-79	79-81	Diff
		Authorized (6-30-78)			(Est'd)**		
1	Air Quality	G 2815644	3234060	+418411			
2		O 4003152	324884	-378272			
3		F 1457409	1436878	-20531			
4	Total	8076204	8295822	+19608	157.36/1931	157.49/126.06	
5							
6	Noise Control	G 408693	462772	+54079			
7		O 0	0	0			
8		F 10000	36477	+26477			
9	Total	418693	499249	+80556	5.42/540	6.93/6.92	
10							
11	Water Quality	G 2799613	3208970	+409357			
12		O 901302	1131107	+229805			
13		F 2160169	2294524	+134355			
14	Total	5861084	6634601	+773517	99.69/96.53	107.73/104.70	
15							
16	Solid Waste	G 1291801	1504131	+212330			
17		O 25000	0	-25000			
18		F 339312	631736	+292424			
19	Total	1656113	2135867	+479754	31.35/30.1	35.10/33.41	
20							
21	Agency Management	G 724967	1650406	+925439			
22		O 1192113	1508037	+315924			
23		F 220738	53980	-166758			
24	Total	2137818	3212423	+1074605	67.0/59.5	70.75/62.75	
25							
26	DEQ Total	G 8049723	10060339	+2019616	+25%		
27		O 6121571	6264028	+142457			
28		F 4187628	4453635	+266007			
29	Total	18349222	20778002	+2428780	378.71/316.55	377.99/333.84	
30							
31				+13.2%			
32							
33	* Includes \$900,000						
34	shift from other						
35	programs.						
36							
37	** Do not add.						
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							

-0.72 POS
 +17.29
 FTE



OFFICE OF THE CITY MANAGER
503/687-5010

P.O. BOX 1967

EUGENE, OREGON
97401

December 15, 1978

TO: ENVIRONMENTAL QUALITY COMMISSION
FROM: ROBERT ELFERS, REPRESENTING THE CITY OF EUGENE
SUBJECT: MODIFICATIONS TO THE PROPOSED FIELD BURNING REGULATIONS

Although the City of Eugene continues to have a number of reservations about the proposed field burning rules, at this time it is primarily concerned with the staff's revised position on straw moisture content restrictions.

The staff originally proposed, at the Commission's hearing on November 17, a retention of the 12% moisture content rule, except on unlimited ventilation days, [26-010(3)(c)] and a prohibition when the relative humidity is greater than 50% [26-015(1)(d)]. The staff supported its proposal with the following justifications:

"...analysis of data accumulated during the 1978 season indicates fuel moisture content to be a significant variable affecting total particulate production from field fires. However, further analysis of the 1978 data may support a change away from the 12% moisture content value to a different value."

"It is believed that the high moisture content in regrowth contributes to higher particulate emission. Analysis of emission testing data collected this summer will help determine more specifically the effect of regrowth on emissions."

"... development of the regulation in c. above, should proceed based upon the analysis of this summer's emission testing..."

However, in the current staff report and proposed regulations, the 12% rule is completely eliminated and the 50% relative humidity restriction is lessened to 65%. No justification is offered by the staff in support of this revision.

Although the City of Eugene had suggested the dropping of the 12% moisture content rule in favor of the 50% relative humidity restriction, it strongly questions the wisdom of relaxing at the same time the 50% restriction. What information from this year's burning data does the staff have to justify its changed position from that position proposed and justified last month? If anything, it would appear that data from this summer's emission testing would support the opposite action.

This area of the rules would appear one of the few opportunities available in the smoke management program to reduce emissions while still allowing burning. The importance of a moisture restriction is to reduce the intensity of any smoke intrusion which may occur. Statistical analyses show that more intensive smoke intrusions are associated with higher relative humidity levels.

The staff's revised proposal appears to amount to no restriction at all. This position is supported by burning statistics from the period 1973-1977. During that time, under a variety of smoke management programs, an average of 17% of the total acres burned were burned when the relative humidity was greater than 50%. However, only an average of 2% of the total acres burned were burned when the relative humidity was greater than the proposed 65% relative humidity. The average number of total acres burned during this 5 year period of time was 213,500 acres. Based purely upon past statistical analysis, an imposition of the 50% relative humidity restriction should not prevent the proposed 180,000 acres from being burned. Additional statistical analysis from these 5 burning

seasons reflects a contrasting potential of a 4,800 ton reduction of emissions to only a 150 ton reduction in emissions under the less restrictive relative humidity rule.

Although the staff equates the 65% relative humidity level to that of a 12% moisture content restriction, this relationship only exists during dry weather conditions. Later in the season, when there is a greater potential for wetter weather, greater straw moisture and regrowth, the 65% relative humidity level may be entirely ineffective.

The City of Eugene is not interested in unnecessarily restricting the number of burning days available to the seed industry. However, it is suggested that the Commission should not support a lessening of the moisture content restrictions unless information is presented to it to document such an action. The City feels that this summer's emission testing data does not support the staff's revised position on this matter.

###

cc: Scott Freeburn
DEQ Field Burning Office
16 Oakway Mall
Eugene, Oregon 97401

Pollution does not add to ailments, study says

NEW HAVEN, Conn. (AP) — Moderate air pollution apparently does not contribute to such lung ailments as chronic bronchitis and asthma, although it does make people cough and choke more, a six-year study indicates.

An earlier study by the Environmental Protection Agency linked abnormal appearances of chronic bronchitis in several U.S. cities to sulfur oxide and smog.

Scientists at Yale University's Lung Research Center said their survey of 3,056 residents of an industrial area and a rural area showed no significant differences in the rate of chronic bronchitis, asthma and reduced breathing ability.

The researchers also reported that "among smokers, the influence of smoking overrides any differences associated with residence."

Urban non-smokers complained of coughing and excess phlegm more than rural non-smokers. But the study team said the breathing ability of urban non-smokers was not reduced and said the coughing and phlegm may be the body's natural way of getting rid of inhaled particles.

The Yale study agreed that excessive pollution still represents a health danger. But Professor Arend Bouhuys, head of

the lung center, said the latest study "gives you a very strong impression the effects (of moderate pollution) on the lungs aren't very great at all."

Bouhuys said his study was "on firmer ground" than the 1974 EPA study because it used a more sensitive test for lung damage and made better allowances for age, race, sex, weight and height.

"I believe air pollution should be controlled because it's an annoyance and a nuisance. But I feel in general it has been overemphasized (as a cause of lung disorder) by some groups," he said.

Further statistical analysis will detail the team's findings that smoking and occupational pollution, such as working with asbestos, are much more serious than general air pollution, Bouhuys, statistician Gerald J. Beck and researcher Janet B. Schoenberg wrote.

"We have no objective evidence for substantial differences in respiratory health between urban and rural residents," the researchers wrote in the British scientific journal "Nature."

Their study focused on two small Connecticut towns, industrial Ansonia and rural Lebanon.



OREGON
SEED
COUNCIL

2100 LANCASTER DR. N.E.
SALEM, OREGON 97303

December 7, 1978

Joe Richards, Chairman
Environmental Quality Commission
P.O. Box 1760
Portland, OR. 97207

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
R E C E I V E D
DEC 15 1978

OFFICE OF THE DIRECTOR

Dear Mr. Richards,

I recently received the enclosed copy of the new EPA policy on preservation of Agricultural land. The policy statement speaks to several issues including the "inadvertant" and irreversible encouragement of conversion of farm land to other uses (urbanization or small rural tracts).

The policy statement identifies several categories of farm land that are of significant environmental concern. They include: prime farmland, unique farmland, additional farmland of statewide importance, farmland of local importance and farmland contiguous to environmentally sensitive areas in addition to others.

The background paper lists many environmental points for protecting agricultural lands including watershed protection, insulation of environmentally sensitive areas, wildlife habitat, aesthetic relief, scenic or cultural values, pollution absorption capacity for ozone and sulfur dioxide and many others.

I am also including a section titled "WHY FARMLANDS ARE LOST" from the background paper. It deals with the psychology of loss of hope for the future. Quoting the EPA paper "An 'impermanence syndrome' sets in and a transition from farming

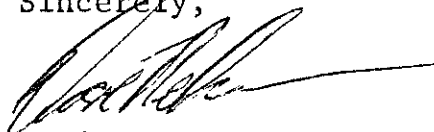
December 7, 1978

activities is almost assured. This phenomenon may precede a change in land use by as much as 20 years."

The policy statement seems to say that in the interest of preserving farmlands the impact of regulation should be considered very carefully. The long term environmental consequences of loss of agricultural land in the Willamette Valley could far outweigh the rather small impact of field burning.

The EPA should consider its own policy as we would expect the Environmental Quality Commission to consider the policy in drafting its revisions to the State Implementation Plan and regulations dealing with the grass seed farmers.

Sincerely,



David S. Nelson

DSN/ln
enclosure

cc: Albert Densmore
Grace Phinney
Ronald Somers
Jacklyn Hallock
Governor elect Victor Atiyeh
Senator L.B. Day
Senator John Powell
Rep. Jeff Gilmour
Rep. Bud Byers
William Young

8. WHY FARMLANDS ARE LOST

Confining urbanization to limited areas might appear to preserve agricultural land by avoiding dispersion and sprawl, but history shows us that cropland is twice as likely as non-cropland to be urbanized. For several reasons, cities have tended to grow in precisely those areas where some of the best farmlands occur. Throughout the world, civilizations have tended to develop in river basins, where rich, deep soils, level topography, and ample water were available.²³ Urban centers developed close to farm populations, and, as they expanded, tended to cover level, well-drained land. Most major cities are located on major waterways that provided water for municipal use and transportation, as well as a disposal system for sewage and industrial wastes. Highways and railroads within and between urban areas also generally followed the flat river basins which contain some of the best agricultural land. Thus, our evolutionary patterns of urban growth tended to have built-in land use conflicts which fostered conversion of our best farmlands.

Many factors can lead to premature conversion of farmland. One set of factors surrounds the use of federal grants-in-aid which provide financial assistance for community infrastructure and new development. All too often these capital improvements (which guide future growth) are planned and built on the assumption that farmlands are not the highest and best use. In other words, federal infrastructure grants for sewers, highways, and other capital improvements do not recognize that farmlands are a finite agricultural and environmental resource which is absolutely, cumulatively, and irretrievably diminished as a result of federal actions.

Another set of factors has to do with the unique economic problems faced by farmers on the urban-rural fringe. As urbanization pressures emerge, the cost of land begins to rise, often pushed upward by speculation. The dilemma is that good farmland is also good for urban development. As the cost of adjacent land increases, so do property taxes and estate and inheritance taxes. Soon the urban development value outweighs the productive resource value of the land. Thus, the farmer-owner is burdened with taxes which often bear no relationship to the profitability of his agricultural enterprise, and is induced to profit from changes in land value.

A third set of factors²⁴ has to do with encroachment of urban-oriented uses and their impacts on agricultural activities: pilfering and needless destruction of crops and farm equipment

by people, increased traffic making it difficult and dangerous to drive farm machinery on the roads, and complaints from neighbors concerning the application of manure, fertilizer, and pesticides. In some cases, as suburbanites gain political power, their complaints have been enacted into ordinances which restrict normal farming practices. Further, farmers are often assessed for new water and sewer lines which run through their property, even though they don't use them.

All these factors change the individual farmer's view of the future, and once he is convinced that his area will eventually be urbanized, he stops investing in improvements to his farm. An "impermanence syndrome"²⁵ sets in and a transition from farming activities is almost assured. This phenomenon may precede a change in land use by as much as 20 years. Figure 4 illustrates the range of farmers' responses to urbanization.

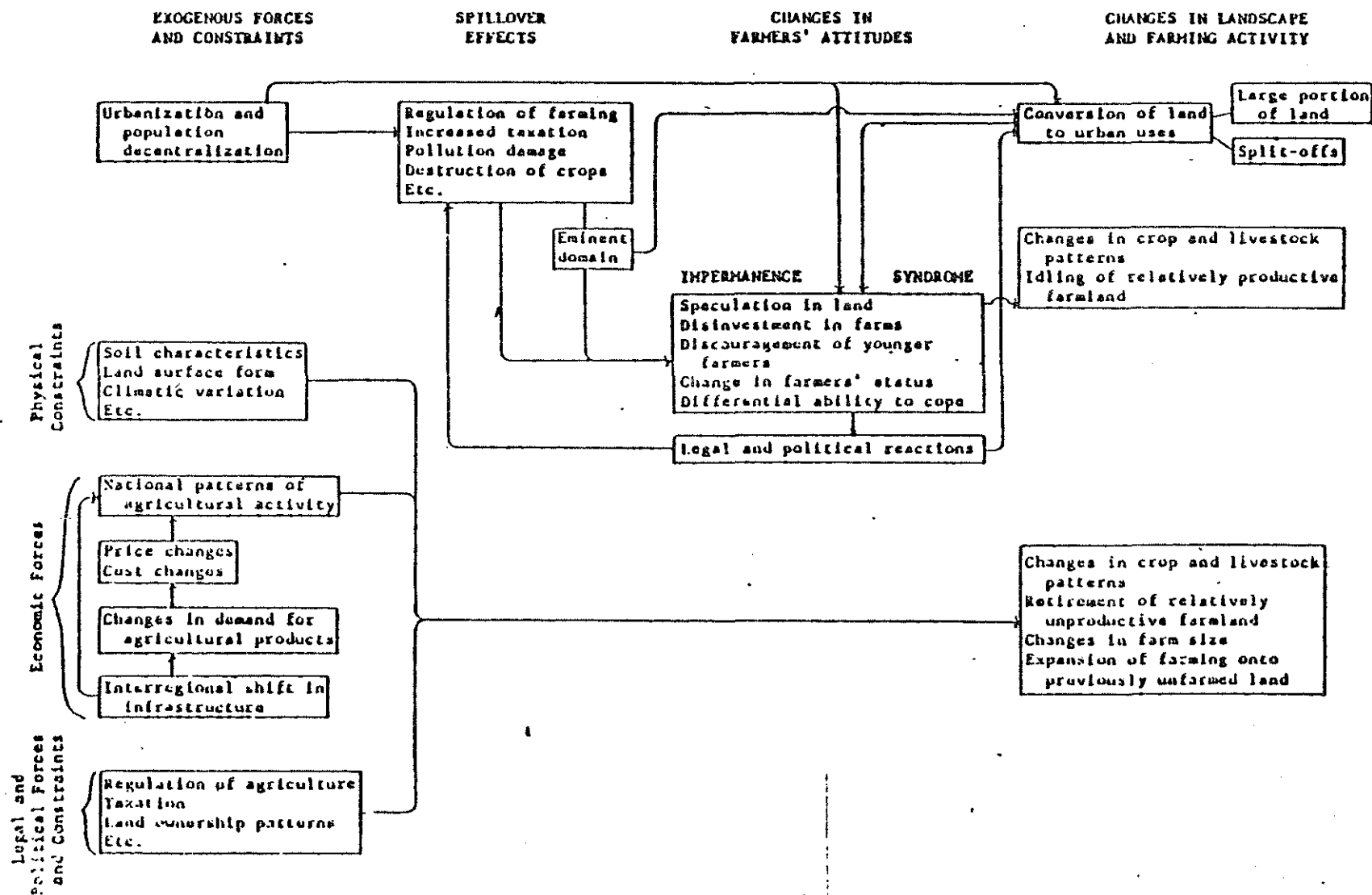
As urban pressures begin to weigh on agricultural operations, a chain of events is set in motion. Rising taxes and development pressure begin to take their toll on neighboring farms; as the number of farms begins to decline, the important support industries, such as feed and grain dealers, farm equipment outlets, etc., begin to leave the area because there simply isn't enough business; in dairy areas the milk processors often begin to leave for more productive "milk sheds" that can continue to provide adequate sources of raw milk. In time, farm labor becomes more expensive and scarce as higher paying jobs "in the city" come within reasonable commuting distance for the rural labor force; the farmer slowly feels his political strength drain away as country and local governments become dominated by suburban, non-farm residents who often begin passing "nuisance" ordinances which keep slow moving vehicles (such as tractors) off local roads during certain hours of the day, or "health ordinances" which prevent the spread of manure during certain weather conditions.

Eventually, farmers often begin to make management decisions based on the opinion that they will not realize a return on further investment in farming. Conservation improvements such as terracing and soil conditioning which are environmentally beneficial tend to be neglected. Consequently, no new investments in improved and more efficient farm equipment are made, nor is available land purchased for expanded operations. Typically, the farmer's profit margin begins to shrink. For example, feed and grain often becomes more expensive because remaining suppliers have to travel further for delivery and no longer deal in cost-saving volumes, and farm commodities must be shipped to more distant processors--a direct cost to

Figure 4:

FARMERS' RESPONSES TO URBANIZATION IN THE CONTEXT OF
OTHER EXOGENOUS FORCES AND CONSTRAINTS

SOURCE: SAVING THE GARDEN, COUGHLIN, ET. AL., PAGE 75



the farmer. This is ironic, since many farmers in these situations have marketing advantages of being in close proximity to consumers, and have an option to grow crops such as vegetables for local high-value markets.

For those who wish to remain in farming, the choices come down to hanging on for as long as possible and then selling to the highest bidder, usually a developer, or selling out and moving the operation to an area that has a stronger agricultural community.

The underlying point to these illustrations is that once the impermanence syndrome takes effect within an agricultural community, it becomes a self-fulfilling prophecy. A county which has a number of farms may point with pride to the active, producing areas but those who farm the land may be preparing for what they view as inevitable abandonment of farming. Those that do remain most often farm as a hobby. Young people interested in farming simply can't buy in unless they are prepared to make a several hundred thousand dollar investment.

Under these constraints, farming as an industry can't survive in the area, leaving scattered remnants of hobby farming or estates which may or may not remain open land over time. A "critical mass" of farming activities must be maintained in order to keep an agriculture functioning viable in a community.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

September 8, 1978

THE ADMINISTRATOR

SUBJECT: EPA Policy
To Protect Environmentally Significant Agricultural Lands

TO : Assistant Administrators
Regional Administrators
Office Directors

PURPOSE

The purpose of this statement is to establish EPA policy that will recognize the food production and environmental value of agricultural lands and the necessity to protect them wherever impacted by Agency programs. This policy is intended to guide Agency actions, regulations, program guidance and technical assistance to reduce or mitigate adverse impacts, and to encourage farmland protection efforts which are consistent with environmental quality goals.

RATIONALE

Conversion and loss of agricultural land, particularly prime farmlands to expanding urban uses, has significantly diminished the Nation's cropland base, and affects environmental quality. With less "prime" quality agricultural land available, greater reliance on marginally productive farmland will occur, resulting in greater soil erosion, increased fertilizer requirements, and increased environmental damage. Conversion of agricultural land also reduces our future food production capability, the viability of farming units, and causes adverse secondary economic impacts on farming enterprise in many metropolitan areas.

Loss of agricultural land diminishes environmental quality by reducing the beneficial role which the land itself can play. Agricultural land reduces runoff by absorbing precipitation, aids in replenishing groundwater supplies, buffers environmentally sensitive areas from encroaching development, and serves in wastewater treatment through land treatment processes. These environmental benefits are predicated on best management practices. Other benefits of retaining agricultural land in or near urbanizing areas are the value of convenient sources of food production in proximity to consumer markets enabling reduced consumption of scarce fossil fuels for transportation, which in turn will assist in protecting ambient air quality, and the open space; recreational, and aesthetic setting these lands may provide for fuller enjoyment of cleaned waters.

Protecting agricultural land to maintain environmental quality also is based on sound planning practice which reduces sprawl development and its associated social, economic, and environmental costs. Retaining agricultural land can be a significant element of an environmental management strategy, and is consistent with the President's Initiatives to limit urban sprawl.

In a recent report, the U.S. Soil Conservation Service pointed out that 79.2 million acres have been converted from cropland since 1967. While additional acreage has been converted to cropland during the same period, the net loss to cropland has been 30.5 million acres, leaving about 400 million acres in the nation's cropland base. Of the nearly 17 million acres converted to urban development, reservoirs, and other built-up uses (often with federal assistance), more than 8 million acres was of prime quality. These losses to the cropland base are absolute, yet they also have a qualitative aspect. To maintain crop production, land of lower quality is brought into cultivation requiring greater input of crop production technology, with its potential negative impact on environmental quality. In 1976, the Council on Environmental Quality recognized these conditions and directed that federal agencies evaluate the impacts of their actions on prime and unique farmlands in NEPA reviews and environmental impact assessments.

Urban encroachment, unique economic problems faced by farmers, and the impact of federal programs all influence the conversion of agricultural land. The impacts which result from federal grants-in-aid for community infrastructure and new development are significant in the conversion process. Decisions on federal grants for sewers, highways, and other capital improvements do not adequately recognize that agricultural lands are a finite productive and environmental resource which is cumulatively and irretrievably diminished as a result of federal actions.

Some EPA programs impact on farm management practices, economically affect farming operations, and can inadvertently cause conversion of agricultural land to other uses. Cumulatively, there likely are significant EPA program impacts which induce land use changes, unplanned urban development, remove land from agricultural production and reduce our ability to maintain environmental quality.

A recently issued policy on land treatment of municipal wastewater underscores our Agency's reliance on a variety of agricultural lands in proximity to urbanized areas to enable the option of wastewater management and beneficial utilization of municipal wastes in agriculture to continue in the future. The land treatment systems fostered by this policy involve the use of plants and the soil to remove unutilized wastes from wastewaters. The recovery and beneficial reuse of wastewater and its nutrient resources through land treatment can contribute to the productivity of farmlands. Thus, land treatment can enhance production, and the availability of agricultural land in urbanizing areas can enable land treatment to continue as a viable waste management approach.

The Agency currently has no overall policy which assures that its actions, regulations, and programs reinforce the retention and protection of environmentally significant agricultural land. Since agricultural land itself can play an important role in maintaining environmental quality, it is in EPA's interest to treat it as an environmental resource, and to discourage its conversion to other non-agricultural uses.

EPA is in a strategic position to assist in the protection of the Nation's vital agricultural land resources. It must, therefore, seek to minimize the impact of its programs which may induce conversion of agricultural land unless the proposed activity serves an essential public need.

DEFINING ENVIRONMENTALLY SIGNIFICANT AGRICULTURAL LAND

Soil capability for food and fiber production, together with management and technology are among the major factors governing the potential of land productivity. The importance of agricultural land from an environmental perspective, in addition to these factors, is determined by its capability to contribute to maintaining or improving environmental quality. Thus, the ability of agricultural land to directly or strategically aid in maintaining environmental quality determines its significance.

For purposes of this policy, agricultural land types defined in 1, 2, 3, and 4 are those set forth by the U.S. Department of Agriculture in 7 CFR Part 657. Their environmental significance is based on their own merits for productive capability and general environmental resource value. Agricultural land types defined in 5, 6, and 7 are those identified for their specific environmental value. Their environmental significance is based on their role in an EPA-required environmental plan or management strategy. Under these definitions, prime farmlands are to be considered as having the greatest environmental significance.

Environmentally Significant Agricultural Lands include:

1. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not developed land or under water). It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed.
2. Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods.
3. Additional farmland of statewide importance is, in addition to prime and unique farmlands, significant for the production of food, feed, fiber, forage, ornamental, and oilseed crops. Criteria for defining and delineating this land is to be determined by the appropriate State agency or agencies.
4. Additional farmland of local importance is not identified as having national or statewide importance. In some local areas, however, it is economically important and environmentally sound for certain additional farmlands for the production of food, feed, fiber, forage, ornamental, and oilseed crops. Where appropriate, these lands may be identified by the local agencies concerned.

5. Farmlands in or contiguous to Environmentally Sensitive Areas (ESA's), such as floodplains, wetlands, aquifer recharge zones, or natural scientific study areas; these farmlands play a crucial environmental buffer role to prevent development from encroaching on ESA's, thereby protecting their capability to remain environmentally productive and stable.

6. Farmlands of waste utilization importance which may serve in the land treatment process, be used for composting activities, or for controlled beneficial application of sewage sludges or other wastes.

7. Farmlands with significant capital investments in Best Management Practices (BMP's), which serve as elements of an area's (or state's) soil erosion and non-point source pollution control plans.

BASIS FOR ACTION

The basis for Agency action to protect environmentally significant agricultural land is found in several policy directives and statutes:

EPA final regulations implementing the requirements of the National Environmental Policy Act in 40 CFR Part 6 direct the Agency to specifically identify impacts affecting prime agricultural land or agricultural operations on such land. A Council on Environmental Quality Memorandum for Agency Heads (dated August 30, 1976) seeks to assure that prime farmlands are not irreversibly converted to other uses as a result of federal program impacts.

Impacts resulting from programs administered under the following statutes can directly or indirectly influence agricultural lands or farming operations:

The Clean Water Act provides for waste treatment works and water quality planning which impact on agricultural lands. It also requires that comprehensive pollution control programs give due regard to agriculture activities.

The Clean Air Act Amendments focus on air resources and consider public welfare impacts such as effects on soils, water, crops, and vegetation.

The Resource Conservation and Recovery Act calls for criteria and guidelines to ensure that solid and hazardous waste disposal activities do not create adverse health or environmental effects, including those which may affect agricultural activities.

The Safe Drinking Water Act enables the designation of areas containing sole source aquifers which are likely to contain agricultural lands performing groundwater recharge and natural cleansing functions for those aquifers.

The Federal Insecticide, Fungicide, and Rodenticide Act enables the Administrator to reclassify or suspend the registration of a pesticide. This may lead to changes in crop patterns and ultimately to conversion of prime farmland to other uses.

POLICY

It is EPA's policy to protect, through the administration and implementation of its programs and regulations, the Nation's environmentally significant agricultural land from irreversible conversion to uses which result in its loss as an environmental or essential food production resource.

IMPLEMENTATION

EPA will apply this policy to the full extent of its authorities in implementing Agency actions. Each major Agency Office and Region will review its programs and modify its policies and operations as necessary to carry out the actions required in this policy. Headquarters Offices and Regions shall designate staff responsible for seeing that required actions are carried out.

Responsibility for implementing this policy rests with each Agency program and Regional Office. Responsibility for monitoring the implementation of this policy rests with the Office of Federal Activities, which will report its progress and recommend adjustments prior to the next issuance of the annual EPA Policy Guidance.

ACTION REQUIRED

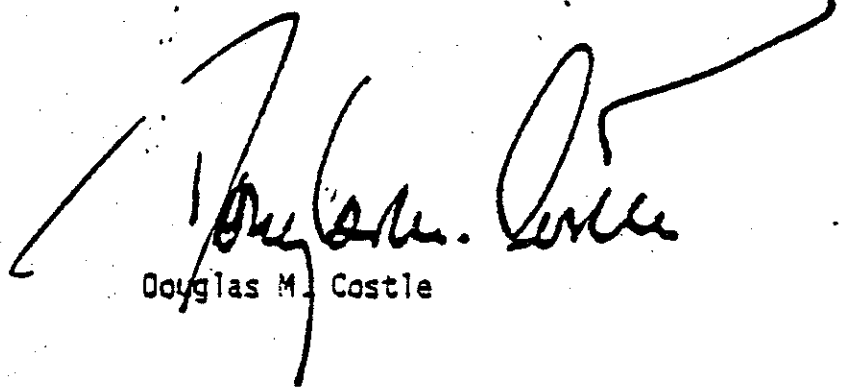
Assistant Administrators and Regional Administrators shall ensure that their actions and those of their staffs clearly advocate protection

of agricultural lands. Protection of environmentally significant agricultural lands shall be carried out in the following Agency actions:

- a. A consideration of impacts on agricultural land shall be incorporated within the process of developing new or revised Agency regulations, standards, or guidance.
- b. Specific project decisions involved in the planning, design, and construction of sewer interceptors and treatment facilities shall consider farmland protection. Consistent with Agency cost-effectiveness guidelines, interceptors and collection systems should be located on agricultural land only if necessary to eliminate existing discharges and serve existing habitation.
- c. Agency permit actions which are subject to NEPA review shall ensure that the proposed activity will not cause conversion of environmentally significant agricultural land. The permit process shall consider farmland protection alternatives, and ensure that the least damaging environmental alternative is implemented.
- d. Primary and secondary impacts on agricultural land shall be determined, and mitigation measures recommended in environmental assessments and reviews of environmental impact statements of EPA decisions, and reviews of actions proposed by other federal agencies.
- e. The regional or local significance and economic value of farmlands to communities shall be considered in Agency enforcement actions.
- f. Future environmental consequences, trends, and applications of the environmental roles of agricultural land shall be studied and research needs identified.
- g. A public awareness program which recognizes the environmental value of agricultural land and its role as an environmental resource shall be pursued.
- h. Agency technical assistance activities in the development of air quality, water quality, and solid waste plans shall support and encourage State and local government agricultural land protection programs. Significant farmlands recognized in these programs shall be incorporated into Agency-required environmental plans and implementation approaches, whenever appropriate.

i. Agricultural land protection efforts of states, local governments, or other federal programs shall be supported through intergovernmental coordination and EPA project reviews. Opportunities for review and comment on proposed EPA actions which impact on agricultural land shall be afforded.

j. Future EPA Policy Guidance shall reflect this policy of protecting environmentally significant agricultural land.

A large, stylized handwritten signature in black ink, appearing to read "Douglas M. Costle". The signature is written in a cursive, flowing style with a long horizontal stroke extending to the right.

Douglas M. Costle

Dec 78

OREGON LUNG ASSOCIATION, SOUTHERN REGION

servicing
CURRY
JACKSON
JOSEPHINE
KLAMATH
counties

December 14, 1978

Mr. Joe Richards, Chairman
Environmental Quality Commission
P. O. Box 10747
Eugene, Oregon 97401

Dear Mr. Richards:

I represent the Oregon Lung Association of the Southern Region. The Primary Goal of the Oregon Lung Association is the Prevention of Eradication of Lung Disease. I am writing in regards to the Proposed Offset Rule as proposed by the Medford-Ashland Air Quality Committee. We of the Oregon Lung Association strongly support the Committee's recommendations in the Proposed Offset Rule.

With the public's Respiratory Health as our main concern, we feel it would be premature to change the proposed levels to less stringent levels until more data is compiled, showing that there will be no long term adverse health effects. Once a standard is set, if given time and research, the levels recommended by the Committee are found to be lower than necessary, they could be changed. On the other hand, if an increase in Respiratory illness and other Air Pollution related health problems, show that the standards set were too high to be healthful, it is then too late to prevent illness and harmful side effects.

The Offset Policy is intended to be an interim measure to improve Air Quality and prevent further degradation of the air until an attainment strategy is developed and implemented. In Southern Oregon we have had continual violations of the National Health Standards, bearing this in mind, some type of stringent interim measure seems to be advisable.

Sincerely,



Debra K. McFadden
Regional Director

DKMcF:mdh

cc: Max Mehlhaff
Esther Jenson

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

DEC 20 1978

OFFICE OF THE DIRECTOR

Christmas Seals fight lung disease

DEBRA K. MCFADDEN
Regional Director