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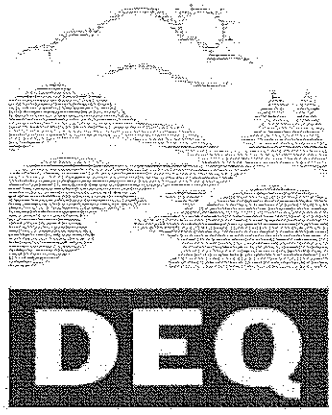
OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS



State of Oregon
Department of Environmental Quality

AGENDA

Environmental Quality Commission Meeting

9:00 a.m. May 22, 1970

Room 36 State Office Building, 1400 S.W. 5th, Portland, Oregon

A. Minutes of April 24, 1970 meeting

B. Project Plans for April 1970

C. Harris Feedlot, Milton-Freewater, water pollution problem

D. Douglas County Lumber Company, Roseburg

E. L & H Lumber Company, Sutherlin

F. Round Prairie Lumber Company, Dillard

G. B & D Paving Company, Hood River

H. Don H. Morris Company, Lincoln City

I. Proposed Field Burning Schedule

J. Proposed Regulations for Registration, Plan Review, Sampling and Testing of Air Contaminant Sources, and General Emission Standards for Particulate Matter

2:00 p.m.

K. Public Hearing regarding Proposed Emission Standards for Industrial Processes

L. Western Farms Association, Milton-Freewater - WDP application

M. Willamette Industries, Inc. (Duraflake) - Tax Credit Application No. T-97

HMP

MINUTES OF TWELFTH MEETING

of the

Oregon Environmental Quality Commission

May 22, 1970

The twelfth regular meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 9:10 a.m., Friday, May 22, 1970, in Room 36, State Office Building, 1400 S.W. 5th Avenue, Portland, Oregon. Members present were B.A. McPhillips, Chairman, Edward C. Harms, Jr., George A. McMath, Herman P. Meierjurgen and Storrs S. Waterman.

Participating staff members were Kenneth H. Spies, Director, E.J. Weathersbee, Deputy Director; Arnold B. Silver, Legal Counsel; Harold M. Patterson, Air Quality Control Division Director; Harold L. Sawyer, Supervising Engineer; James R. Sheetz and C. Kent Ashbaker, District Engineers; F. Glen Odell, C.A. Ayer, Harold W. McKenzie and F.A. Skirvin, Associate Engineers; Harold H. Burkitt, Assistant Engineer, and R. Bruce Snyder, Meteorologist.

MINUTES OF APRIL 24, 1970 MEETING

It was MOVED by Mr. Waterman, seconded by Mr. Meierjurgen and carried that the minutes of the eleventh regular meeting of the Commission held on April 24, 1970 be approved as prepared by the Director.

PROJECT PLANS

It was MOVED by Mr. Meierjurgen, seconded by Mr. Waterman and carried that the actions taken by the staff during the month of April 1970 on the following 36 water pollution control and 1 air quality control projects be approved:

Water Pollution Control

Date	Location	Project	Action
Municipal Projects (35)			
4-2-70	Mosier	Preliminary report	Comm. sub.
4-3-70	Oregon City	L.I.D. #31	Prov. app.
4-3-70	Salem	Seventh Ave., S.E. project	Prov. app.
4-3-70	East Salem Sewer District No. 1	Parkdale No. 4 Subdivision sewers	Prov. app.

Water Pollution Control (continued)

Date	Location	Project	Action
4-6-70	Portland	Addenda No. 1-10 to site preparation plan	Approved
4-8-70	Rockaway	Report on plant improvements	Comm. sub.
4-8-70	Springfield	Lindale Dr. & Down Terrace	Prov. app.
4-8-70	Mult. County (E)	United Medical Lab.-sewers	Prov. app.
4-8-70	The Dalles	Small boat basin sewer	Prov. app.
4-9-70	Oak Lodge San. D.	Hanwood Terrace sewer	Prov. app.
4-9-70	Mult. County (E)	Columbia Way Court system and treatment	Comm. sub.
4-13-70	Portland	S.W. Montgomery Dr. sewer	Prov. app.
4-13-70	Winston	Park St. sanitary sewer	Prov. app.
4-13-70	Ontario	Change Order #2 to sewage treatment plant	App.
4-13-70	Tualatin	Apache Bluff No. 5	Prov. app.
4-14-70	Lake Oswego	Spring Brook interceptor CO-0-4	App.
4-15-70	Green San. Dist.	Sanitary sewer extension	Prov. app.
4-15-70	Curry County	Comprehensive sewer and water study	Comm. sub.
4-16-70	Unified Sewerage Agency	West Slope-Beaverton interceptor	Prov. app.
4-16-70	Unified Sewerage Agency	Beaverton-Rock Creek interceptor	Prov. app.
4-17-70	Lincoln City	Addendum #1 to Phase 2	Approved
4-20-70	Ontario	L.I.D. #27	Prov. app.
4-21-70	Columbia County	Comprehensive sewer and water study	Comm. sub.
4-22-70	Eugene	Two sanitary sewer projects	Prov. app.
4-22-70	Pier Point Inn	Sewage treat. plant revisions	Approved
4-22-70	Salem	Glen Creek trunk	Prov. app.
4-24-70	Lake Oswego	L.I.D. #120	Prov. app.
4-27-70	Lincoln City	Stage I, Dawson Development	Prov. app.
4-27-70	Unified Sewerage Agency	Aloha--Deepwell No. 2	Prov. app.
4-27-70	Salem	Park Avenue sewer	Prov. app.
4-28-70	Yachats	System and treatment	Prov. app.
4-28-70	Twin Rocks	Change Orders B-10, 11, 12 13 and 14	Prov. app.
4-28-70	St. Helens	Primary plant expansion	Prov. app.
4-29-70	Wallowa	System and treatment	Final comments
4-30-70	Astoria	Pump station by-pass	Prov. app.

Industrial Projects (1)

4-23-70	Glendale Plywood, Glendale	Plywood glue recirculation treatment facility	Prov. app.

Air Quality Control

Date	Location	Project	Action
4-22-70	Joseph	Boise Cascade Corp. Wigwam Waste Burner Modification	Cond. app.

HARRIS FEEDLOT, Milton-Freewater

Mr. Sheetz presented a staff report dated May 11, 1970 regarding the stream pollution caused by the operation of the Harris Feedlot located at Barrett Station near Milton-Freewater in Umatilla County.

Mr. Archie Harris of 2009 N.E. 49th Street, Vancouver, Washington, operator of the feedlot was present and testified that the Archie Harris Corporation has been dissolved, that he no longer owns the property in question, that it now belongs to Sig Unander, but that he leases the property and operates the feedlot.

He explained that the reason for the overflow of manure and drainage last January was because of the heavy snow and rain. He admitted that the wastes overflowed onto other private property. He denied that it had caused any pollution of downstream water supplies and claimed that because they are shallow wells they are not acceptable anyway.

After several questions had been asked of Mr. Harris by the Commission members, it was MOVED by Mr. Harms, seconded by both Mr. McMath and Mr. Meierjurgen and carried that the owner and the lessee or operator be cited to appear at a formal hearing before the Commission at its regularly scheduled meeting on June 26, 1970, to show cause why the Commission should not adopt an order compelling the immediate installation, in accordance with detailed plans and specifications to be submitted to and approved by the Department of Environmental Quality, of equipment, devices, structures or other controls which will assuredly prevent deleterious effects upon the ground or surface water resources from existing and potential feedlot run-off or associated feedlot operations, or otherwise remove the threat of run-off by other approved means.

DOUGLAS COUNTY LUMBER COMPANY, Roseburg

Mr. Burkitt presented staff reports dated April 27 and May 8, 1970 regarding the problem of air pollution caused by the operations of the Douglas County Lumber Company plant located about 5 miles north of Roseburg. He recommended that an order be adopted directing the company to phase out of operation its two wigwam burners and to eliminate all waste burning activities by September 30, 1970.

Mr. M.L. Hallmark was present to represent the company. He said they are proceeding to phase out the use of the wigwam burners by September or October, that delivery of certain necessary equipment is expected by June 15, but that they are still uncertain about a market for the bark and so they may have to store it.

It was MOVED by Mr. McMath, seconded by Mr. Waterman and carried that an order be issued to the Douglas County Lumber Company directing it to continue to present by the first of each month progress reports, with documented evidence that the company is proceeding in good faith, and that the project to completely phase out of operation the two wigwam burners and to eliminate all waste burning activities be completed by September 30, 1970.

L & H LUMBER COMPANY, Sutherlin

Mr. McKenzie presented a staff report dated May 8, 1970 regarding the air pollution problem caused by the operations of the L & H Lumber Company sawmill located in Sutherlin. He also presented photographs and Ringelmann readings of the visible emissions observed by the staff during a recent inspection of the mill.

Mr. Ken Forest, Sawmill Superintendent, was present to represent the company. He stated that 75 to 80% of the material being burned in the wigwam burner is wet hemlock sawdust and bark (moisture content about 70%). He said they initially had a 5 H.P. blower on the burner which was not adequate, that during the Christmas weekend in 1969 they installed a 40 H.P. blower plus new grates, that with these changes they burned the fuel faster than it was produced and that in February 1970 they shut down the mill for more changes. He described the various operating problems that

they had experienced. He said that they installed over-fire blowers and a double screen over the top of the burner, that when operation was resumed it still produced too much steam and smoke, that their engineer then recommended a complete change in the grate and underfire system, that they burn only bark and sawdust, that they have a verbal agreement with the Roseburg Lumber Company for purchase of the sawdust at a later date, and that they have spent over $9,000 in the last 4 months (prior to March 1) for improvements to the wigwam burner which is 70 feet in diameter. He said further that the mill was being shut down on this date and he did not know when operations would be resumed, probably not for several months because of market and burner problems.

It was MOVED by Mr. Harms, seconded by Mr. McMath and carried that an order be issued to the L & H Lumber Company to cease operation of its wigwam burner by no later than July 15, 1970 unless it has been modified in accordance with plans approved by the Department prior to construction, and thereafter operated in such a manner as to comply with then applicable standards, provided that an automatic variance from the above terms be granted until September 1, 1970 if by that date complete termination of the use of the burner can be accomplished by approved alternative methods of disposal.

In making the above motion Mr. Harms commented that he sympathizes with the problems of the company, but that air quality in this area cannot be sacrificed because of economic considerations.

ROUND PRAIRIE LUMBER COMPANY, Dillard

Mr. McKenzie presented a staff report dated May 8, 1970 pertaining to the air pollution problem of the Round Prairie Lumber Company of Dillard. He also showed photographs taken May 13 and 14 and presented Ringelmann readings of emissions observed on those dates.

Mr. Ralph Sanstede, Manager, was present to represent the company. He said that since May 11 they have been removing a high percentage of the sawdust from their waste which has improved the efficiency of their wigwam burner, and that as a consequence they now have to restart the fire every morning. He had a photograph taken of the burner at 4:30 p.m. on

May 21, 1970, which showed no smoke being emitted. He claimed that in January he had contacted the Mill Owners Construction Company for plans for improving or modifying the burner but that thus far no plans had been received. He explained that they produce about 32 units of sawdust per shift, that of that amount some 6 to 8 go to the burner, and that no market has yet been found for the bark and so that must be burned. In response to a question he said they use fine saws to keep the sawdust production to a minimum but he claimed that requires the use of more water which in turn makes the waste sawdust more difficult to burn.

Mr. Jack Clark of Mill Owners Construction Company was also present and said they had proposed to modify the wigwam burner so that it would operate within state standards. He mentioned the installation at Joseph which allegedly operates very satisfactorily with fuel of about 60% moisture content.

It was MOVED by Mr. Harms, seconded by both Mr. McMath and Mr. Waterman and carried that an order be issued to the Round Prairie Lumber Company of Dillard to cease operation of its wigwam burner by no later than July 15, 1970 unless it has been modified in accordance with plans approved by the Department prior to construction, and thereafter operated in such a manner as to comply with then applicable standards, provided that an automatic variance from the above terms be granted until September 1, 1970 if by that date complete termination of the use of the burner can be accomplished by approved alternative methods of disposal.

TUALATIN VALLEY SEWER CONNECTIONS

The Chairman read a policy statement dated May 22, 1970 which had been prepared by the staff regarding sewer connections in the Tualatin Basin. A copy of this statement has been made a part of the Department's files in this matter.

Pursuant to the order entered by the Commission on April 24, 1970 the statement announced that additional sewer connections could be made immediately to the Aloha, Cedar Hills, Cornelius, Forest Grove, Hillsboro Rock Creek, King City, Oak Hills, Sherwood, Somerset West, Sunset Valley, Tektronix and Tualatin sewerage systems.

Mr. Dan Potter, General Manager of the Unified Sewerage Agency of Washington County, was present and assured the Commission that the USA would cooperate fully with the Commission and Department in this matter.

The Chairman pointed out that the April 24 order would remain in effect.

It was MOVED by Mr. Waterman, seconded by Mr. McMath and carried that the policy statement read by the Chairman be adopted.

PROPOSED FIELD BURNING SCHEDULE

Mr. Snyder in a memorandum dated May 11, 1970 had summarized the testimony presented at the April 23, 1970 hearing on Proposed Field Burning Schedule and also summarized the staff's reaction to such testimony. As a result of April 23 hearing certain minor changes in the proposed schedule were suggested by Mr. Snyder. They included modifications to Sections I(3), I(4), I(5), III 3(b), III 3(c) and III(4)(e).

Mr. Snyder also reported that since the April 23 hearing 43 letters from Eugene area residents and 22 letters from grain and grass seed growers had been received. The letters from the Eugene area residents in general requested an immediate reduction in the acreage burned and the growers' letters opposed any reduction in acreage until suitable alternative methods can be found. The 65 letters were then entered in the record of the hearing.

Mr. Snyder reported further that a study of weather data for an 18-year period showed an average of 13 days of southwest wind with no rain during the field burning season.

In a letter dated May 20, 1970 the Mayor and City Manager of the city of Eugene requested that copies of all field burning permits issued by the counties and fire districts be filed with the DEQ as a routine matter at the time of issuance. Mr. Silver pointed out that the Commission probably could not require such filing and furthermore that it might be a real burden.

After further discussion of this item it was MOVED by Mr. Harms, seconded by both Mr. McMath and Mr. Waterman and carried that the staff develop a triplicate form to be furnished to all permit issuing agencies and that they be requested to submit copies to the DEQ at least weekly.

It was then MOVED by Mr. Harms, seconded by Mr. McMath and carried that subsection III(2) on page 2 of the proposed schedule be amended to read as follows: "On any marginal day, priorities for burning shall follow those set forth in ORS 449.840, Section 2, which give perennial grass seed fields first priority and annual grass seed fields second priority. Grain fields and other burning shall not be permitted."

Next it was MOVED by Mr. Harms, seconded by Mr. Waterman and carried that the proposed field burning schedule as amended be adopted.

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

B & D PAVING COMPANY, Hood River

Mr. Ayer read a staff report dated May 7, 1970 regarding the air pollution problem caused by the B & D Paving Company plant located some two miles from the city of Hood River.

Mr. Francis Gatchel was present to represent the company. He claimed that their only water supply is from a 3/4-inch connection to the Eastside Water District's system and that because of the lack of sufficient water they have been unable to install an adequate scrubber system to control atmospheric emissions. He claimed that prevailing winds carry the emissions seven miles eastward to Mosier and away from the center of population. He blamed the Hood River County Road Department for much of the dust. He stated that in response to the March 30, 1970 letter from the DEQ they are in the process of getting bids for control equipment, that they may have to provide water storage, that capacity of their plant is rated at 60 tons per hour but normal operation is only 40 to 45 tons per hour, and that their production is mostly for local work (about 100 tons/day) with occasionally some for state highway maintenance. He said the nearest residence to their plant site is three-fourths of a mile east.

Mr. Ashbaker pointed out that if they obtain sufficient water to run a scrubber system they will also need to provide facilities for disposal of the water or else recirculate it. Mr. Gatchel stated that recirculation would be possible. Mr. Ashbaker pointed out further that any settling ponds would have to be sealed.

It was MOVED by Mr. Meierjurgen, seconded by Mr. Waterman and carried that an order be issued to B & D Paving Company of Hood River requiring it

to submit by June 15, 1970 a proposal for complete control of dust emissions from the plant and to achieve compliance with Subdivision 6, Chapter 340 Oregon Administrative Rules by July 15, 1970.

DON H. MORRIS CO. HOT MIX ASPHALT PLANT, Lincoln City

Mr. Ayer reviewed the staff report dated May 7, 1970 regarding the air pollution problem caused by operations of the Don H. Morris Company hot mix asphalt plant located some 6 miles from Lincoln City.

Mr. George Green, manager and plant superintendent, was present and stated that they have sufficient water available and enough land area to provide storage and recirculation so there is no reason why they cannot comply with the state's regulations.

It was MOVED by Mr. Waterman, seconded by Mr. Meierjurgen and carried that an order be issued to the Don H. Morris Company directing it to submit a proposal by June 15, 1970 for controling dust emissions from its plant by July 15, 1970.

PROPOSED REGULATIONS FOR REGISTRATION, PLAN REVIEW, SAMPLING AND TESTING OF AIR CONTAMINANT SOURCES, AND GENERAL EMISSION STANDARDS FOR PARTICULATE MATTER

Mr. Odell discussed the testimony presented at the April 24, 1970 hearing regarding the above proposed regulations and standards. Referring to a staff memorandum dated May 12, 1970 he outlined the changes that had been made in the proposal considered at the April 24 hearing. These changes are contained in a draft dated May 4, 1970, a copy of which has been made a part of the Department's files in this matter.

He than suggested the following additional changes to the proposed regulations: (1) In Subdivision I: Registration, I, line 4, change the word "January" to the word "March". (2) In Subdivision I add a new section as follows: "IV. Effective Date: The effective date of this Subdivision shall be September 1, 1970." (3) In Subdivision II: Notice of Construction and Approval of Plans, III 4(a) add the sentence "Said order is to be forwarded to the owner by certified mail." (4) In Subdivision II: Notice of Construction and Approval of Plans add a new section as follows: "IV. Effective Date: The effective date of this Subdivision shall be September 1, 1970." (5) In Subdivision III: Sampling, Testing and Measurement of Air

Contaminant Emissions, I(3) insert the word "specified" after the word "of" and ahead of the word "air".

Mr. Mike Huddleston, Manager of the Asphalt Pavement Association of Oregon, was present and requested the opportunity to express the concern of his Association regarding the proposed regulations and standards and particularly the definition of "new source." He was requested to confer with the staff during the luncheon recess regarding this matter.

The meeting was then recessed at 11:50 a.m. and reconvened at 2:00 p.m.

Mr. Odell reported that after conferring with Mr. Huddleston it had been determined that the matter could be resolved by amending the regulations pertaining to hot mix asphalt plants and that such a proposal would be submitted for hearing at a future meeting of the Commission.

It was then MOVED by Mr. Harms, seconded by Mr. Waterman and carried that the proposed Regulation for Registration, Approval of Plans, and Sampling and Testing of Air Contaminant Sources as considered at the public hearing on April 24 and with the changes as since recommended by the staff be adopted.

Next it was MOVED by Mr. Harms, seconded by Mr. McMath and carried that the proposed General Emission Standards for Particulate Matter as considered at the public hearing on April 24,1970 be adopted.

Copies of the adopted regulations and standards are attached to and made a part of these minutes.

WESTERN FARMERS ASSN., Milton-Freewater

Mr. Sheetz read a staff memorandum dated May 22, 1970 regarding the application of the Western Farmers Association for a permit to discharge asparagus processing waste water into the Walla Walla River.

Based on the staff's recommendation it was MOVED by Mr. Harms, seconded by Mr. McMath and carried that the Department be authorized to notify the Western Farmers Association that it is the intent of the Department to deny the Association's application for a permit and that the Department proceed with such denial as provided by OAR Chapter 340, Section 45-045.

PUBLIC HEARING REGARDING PROPOSED EMISSION STANDARDS FOR INDUSTRIAL PROCESSES

Proper notice having been given as required by statute and copies of the proposal having been sent to all interested parties, a public hearing in the matter of adoption of proposed emission standards for industrial processes was called to order by the Chairman at 2:15 p.m. on Friday, May 24, 1970 in Room 36, State Office Building, 1400 S.W. 5th Avenue, Portland, Oregon, with all Commission members being present.

Mr. F. Glen Odell presented the staff report dated May 11, 1970 and reviewed the proposed standards. He pointed out that the proposed standards, if adopted, would apply to all industrial particulate emission sources other than fuel or refuse burning equipment, kraft pulp mills and hot mix asphalt plants which are already covered by other specific regulations.

Mr. Patterson entered in the record the informational report prepared by the staff. He also entered letters of comment from Joseph L. Byrne of Harvey Aluminum Company dated May 19, 1970 and E.J. Maney, Manager of Riddle Operations, Hanna Nickel Smelting Company, both registering objections to the proposed standards as written.

Mr. Joseph L. Byrne of Harvey Aluminum Co. was the next person to testify. He said he had no particular comment to make if it is the intention of the Commission to adopt special regulations for aluminum reduction plants. Later he stated that the aluminum plant at The Dalles could not possibly meet the emission standards being considered at this hearing.

Mr. Tom Donaca then presented a written statement for the Associated Oregon Industries registering several objections to the proposed standards. He asked specifically that legal counsel for the Commission and Department prepare information and instructions for maintaining confidentiality of information submitted by industry.

Mr. Michael D. Roach, Director of the Mid-Willamette Valley Air Pollution Authority, read his letter dated May 21, 1970 recommending adoption of the proposed standards.

Mr. W.A. Aschoff, Chief Engineer for Wah Chang Albany Corporation, presented a written statement objecting to the standards as proposed.

There being no one else present who wished to make a statement it was MOVED by Mr. Waterman, seconded by Mr. Harms and carried that action on the proposed standards be delayed until the next meeting of the Commission and that in the meantime the record be kept open for two weeks for receipt of additional information which anyone may wish to submit.

The staff was requested to prepare written comments covering the points raised in the testimony presented at this hearing.

Note: Subsequent to the hearing further objections to the proposed standards were received from (1) F.A. Kosciolek, Plant Manager, National Metallurgical Corporation by letter dated June 1, 1970, (2) E.J. Maney, Manager of Riddle Operations, Hanna Nickel Smelting Company by letter dated June 1, 1970, (3) W.E. Campbell, Plant Manager, Reynolds Aluminum Corporation by letter dated June 1, 1970, (4) Joseph L. Byrne, Harvey Aluminum Corporation by letter dated June 2, 1970, (5) William Swindells, Jr., Vice President, Willamette Industries, Inc. by letter dated June 2, 1970, and (6) Vincent J. Tretter, Jr., Environmental Engineer, Georgia Pacific Corporation by letter dated June 3, 1970.

All statements made at the hearing were recorded on tape. Copies of the written statements received prior to, during and subsequent to the hearing have been made a part of the Department's permanent files in this matter.

WILLAMETTE INDUSTRIES, INC. (DURAFLAKE), Albany

At the April 24, 1970 meeting of the Commission a motion was adopted deferring action on application No. T-97 submitted by the Willamette Industries, Inc. for tax credit for air pollution control facilities installed at a cost of $40,710.21. The company was requested to appear at this meeting to support the claims made in its application.

Mr. Sawyer presented the staff's report regarding this matter. Mr. Skirvin also submitted comments.

Mr. Max Ross was present to represent the company. He stated that the facilities in question had been installed strictly for pollution control purposes and that they had resulted in no change in production capacity.

It was MOVED by Mr. Waterman, seconded by Mr. Harms and carried that a tax credit certificate be issued to the Willamette Industries, Inc. (Duraflake) at Albany pursuant to Application T-97 in the amount of $40,710.21.

POLICY RE: TAX CREDIT FOR WIGWAM BURNERS

It was MOVED by Mr. Waterman, seconded by Mr. Meierjurgen and carried that it be the policy of the Commission that control devices that are used on refuse burners, wigwam burners or incinerators and which substantially reduce atmospheric emissions be given serious consideration for tax credit on an individual, situation by situation basis.

There being no further business the meeting adjourned at 3:15 p.m.

Respectfully submitted,

Kenneth H. Spies

Kenneth H. Spies, Director

ADOPTED May 22, 1970

~~PROPOSED~~ SUMMER FIELD BURNING SCHEDULE, AS AMENDED

This Schedule and Regulation are adopted in lieu of Sections 28-020, 28-025, 28-030, 28-035, Chapter 340, OAR.

I. DEFINITIONS: As used in this regulation and schedule,

1. "Northerly winds" means winds coming from directions in the northern half of the compass.

2. "Southerly winds" means winds coming from directions in the southern half of the compass.

3. "South Valley" means all fire permit issuing agencies in Benton, Linn, or Lane Counties, with the exception of the Linn County portion of the Stayton Rural Fire Protection District.

4. "North Valley" means all other fire permit issuing agencies in the Willamette Valley.

5. "Priority Areas" means the following areas in the Willamette Valley:

   a) Areas in or within 3 miles of the city limits of incorporated cities of populations of 10,000 or greater,

   b) Areas within 1 mile of airports serving regularly scheduled airline flights,

   c) Areas within 1/4 mile of U. S. Interstate Highway 5, U. S. Highway 99W, U. S. Highway 99E, U. S. Highway 99, and State Highway 34.

   d) Areas in Lane County south of the line formed by U. S. Highway 126 and State Highway 126.

II. SCHEDULE OF METEOROLOGICAL CONDITIONS:

Class of Day	Meteorological Conditions
Prohibition:	Forecast of northerly winds and maximum mixing depth less than or equal to 3500 feet mean sea level (MSL).
Marginal Class S:	Forecast southerly winds.
Marginal Class N:	Forecast northerly winds and maximum mixing depth greater than 3500 feet MSL.

III. SCHEDULE OF EXTENT AND TYPE OF BURNING:

1. Burning Hours. Burning may begin at 9:30 a.m. PDT, and all fires must be out by sunset.

2. Priority for Burning. On any marginal day, priorities for burning shall follow those set forth in ORS 449.840, Section 2, which give perennial grass seed fields first priority and annual grass seed fields second priority. Grain fields and other burning shall not be permitted.

3. Allowed Burning.

a) Prohibition:

Under prohibition conditions no burning shall be allowed except where a fuel such as propane is used such that combustion is essentially complete.

b) Marginal Class S:

North Valley: Burning in priority areas only.

South Valley: One or more basic quotas as authorized by the Department in accordance with Schedule "A" attached.

Priority Areas: Location, timing, and amount of burning shall be determined by the local permit authority, provided that no field shall be burned on the upwind side of any city, highway, or airport within priority areas. No weekend burning.

c) Marginal Class N:

North Valley: One or more basic quotas as authorized by the Department in accordance with Schedule "A".

South Valley: Burning in priority areas only.

Priority Areas: Location, timing , and amount of burning shall be determined by the local permit authority, provided that no field shall be burned on the upwind side of any city, highway, or airport within priority areas. No weekend burning.

4. Further Provisions.

a) Permits shall be issued on a day-to-day basis and each permittee shall have a current valid written permit for that day issued in accordance with this schedule and regulation.

b) The staff of the Department of Environmental Quality may authorize burning in excess of that permitted by the schedule where conditions in their judgment warrant it, or, by express written permit, burning on an experimental basis, and may also, or a fire district by fire district basis, issue limitations more restrictive than those contained in the schedule, when in their judgment it is necessary to attain air quality.

c) In no instance shall the total acreage of permits issued by each permit issuing agency exceed that of the schedule 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 acres 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 2 consecutive days.

d) All Willamette Valley fire permit issuing agencies not specifically named in Schedule "A", shall follow a 50 acre daily limitation.

e) The staff of the Department of Environmental Quality may designate additional areas as Priority Areas, and may adjust the basic acreage quotas of any permit jurisdiction, where conditions in their judgment warrant such action.

IV. Sections 28-020, 28-025, 28-030, and 28-035, Chapter 340 OAR, are hereby repealed.

SCHEDULE "A"

NORTH VALLEY

County and District	Basic Acreage Quotas for Specified Years			
	1970	1971	1972	1973
Clackamas				
Monitor	100	75	50	0
All other permit issuing agencies	50	50	50	0
Marion				
Aumsville	100	100	75	0
Marion #1 (Fourcorners, Brooks, Keizer)	100	75	50	0
Jefferson	100	100	75	0
St. Paul	100	75	50	0
Silverton	225	175	150	0
Stayton	200	150	125	0
Sublimity	200	150	125	0
Woodburn	75	75	50	0
All other permit issuing agencies	50	50	50	0
Polk				
Southeast Polk	225	175	150	0
Southwest Polk	100	100	75	0
Washington				
All permit issuing agencies	50	50	50	0
Yamhill				
McMinnville	75	50	50	0
All other permit issuing agencies	50	50	50	0

SOUTH VALLEY

Benton				
County jurisdiction	300	250	150	0
Corvallis	225	200	125	0
Monroe	275	250	150	0
Philomath	100	75	50	0
North Albany, Palestine	Included in Albany Quota			
All other permit issuing agencies	50	50	50	0

SOUTH VALLEY (Cont.)

County and District	Basic Acreage Quotas for Specified Years			
	1970	1971	1972	1973
Lane				
Alvadore	175	150	100	0
Coburg	150	150	100	0
Creswell	100	75	50	0
Junction City	425	375	225	0
All other permit issuing agencies	50	50	50	0
Linn				
Albany	875	775	500	0
Brownsville	750	675	425	0
Halsey-Shedd	1250	1100	695	0
Harrisburg	1275	1150	725	0
Lebanon	950	850	525	0
Scio	225	200	125	0
Tangent	600	550	350	0
All other permit issuing agencies	50	50	50	0

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

Adopted May 22, 1970

REGULATION FOR REGISTRATION, APPROVAL OF PLANS, AND SAMPLING AND TESTING OF AIR CONTAMINANT SOURCES

SUBDIVISION I: REGISTRATION

I. Registration in General - The following air contaminant sources, not under the jurisdiction of a regional air pollution control authority, shall register with the Department no later than March 1, 1971 and annually thereafter as required by this section:

1. Aluminum Reduction plants
2. Hot Mix Asphalt plants
3. Rendering plants
4. Kraft and sulfite pulp mills
5. Installations operating wigwam waste burners
6. Plywood, particleboard and fiberboard plant sites
7. Open burning refuse disposal sites receiving more than 500 tons/year of refuse
8. Thermal-electric power generating plants

Other contaminant sources shall register with the Department when so requested.

II. Registration Requirements:

1. Registration shall be completed within 30 days following the mailing date of the request by the Department.
2. Registration shall be made on forms furnished by the Department and completed by the owner, lessee of the source, or agent.
3. The following information shall be reported by registrants:
   a. Name, address and nature of business.
   b. Name of local person responsible for compliance with these rules.
   c. Name of person authorized to receive requests for data and information.
   d. A description of the production processes and a related flow chart.
   e. A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.
   f. Type and quantity of fuels used.

g. Amount, nature and duration of air contaminant emissions.

h. Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.

i. Amount and method of refuse disposal.

III. Re-Registration:

1. Once a year upon the annual date of registration, a person responsible for an air contaminant source shall reaffirm in writing the correctness and current status of the information furnished to the Department.

2. Any change in any of the factual data reported under Section II-3 shall be reported to the Department, at which time re-registration may be required on forms furnished by the Department.

IV. Effective Date: The effective date of this Subdivision shall be Sept. 1, 1970.

SUBDIVISION II: NOTICE OF CONSTRUCTION AND APPROVAL OF PLANS

I. Requirement:

No person shall construct, install, or establish a new source of air contaminant emission of any class listed in Subsection II(1) and not under the jurisdiction of a regional air quality control authority without first notifying the Department in writing.

II. Scope:

1. This regulation shall apply to the following classes of sources of air contaminant emissions:

a. Air pollution control equipment

b. Fuel burning equipment rated at 400,000 BTU per hour or greater

c. Refuse burning equipment rated at 50 pounds per hour or greater

d. Open burning operations

e. Process equipment having emissions to the atmosphere.

2. New construction, installation or establishment includes:

a. Addition to or enlargement or replacement of an air contamination source.

b. A major alteration or modification of an air contamination source that may significantly affect the emission of air contamination.

c. A significant increase in process capacity.

III. Procedure:

1. Notice of Construction

Any person intending to construct, install, or establish a new source of air contaminant emissions of a class listed in Subsection II(1) shall notify the Department in writing on a form supplied by the Department.

2. Submission of Plans and Specifications

The Department may within 30 days of receipt of a Notice of Construction require the submission of plans and specifications for air pollution control equipment and facilities and their relationship to the production process. The following information may also be required.

a. Name, address and nature of business.

b. Name of local person responsible for compliance with these rules.

c. Name of person authorized to receive requests for data and information.

d. A description of the production processes and a related flow chart.

e. A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.

f. Type and quantity of fuels used.

g. Amount, nature and duration of air contaminant emissions.

h. Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.

i. Amount and method of refuse disposal.

The Department may require corrections and revisions to the plans and specifications to insure compliance with applicable rules, orders and statutes.

3. Notice of Approval

a. The Department shall upon determining that the proposed construction is in the opinion of the Department in accordance with the provisions of applicable rules, order, and statutes, notify the person concerned that construction may proceed.

b. A Notice of Approval to proceed with construction shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

4. Order Prohibiting Construction

a) If within 60 days of receipt of the items set forth in Subsection III (2) the Environmental Quality Commission determines that the proposed construction is not in accordance with applicable statutes, rules, regulations and orders, it shall issue an order prohibiting the construction, installation or establishment of the air contamination source. Said order is to be forwarded to the owner by certified mail.

b) Failure to issue such order within the time prescribed herein shall be considered a determination that the proposed construction, installation, or establishment may proceed, provided that it is in accordance with plans, specifications, and any corrections or revisions thereto, or other information, if any, previously submitted, and provided further that it shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

5. Hearing

Pursuant to law, a person against whom an order prohibiting construction is directed may within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, state the grounds for hearing, and be mailed to the Director of the Department of Environmental Quality. The hearing shall be conducted pursuant to the applicable provisions of ORS Chapter 183.

6. Notice of Completion

Within thirty (30) days after any person has constructed an air contamination source as defined under Subsection II(1), he shall so report in writing on a form furnished by the Department, stating the date of completion of construction and the date the source was or will be put in operation.

IV. Effective Date:

The effective date of this Subdivision shall be September 1, 1970.

SUBDIVISION III: SAMPLING, TESTING AND MEASUREMENT OF AIR CONTAMINANT EMISSIONS

I. Program:

As part of its coordinated program of air quality control and preventing and abating air pollution, the Department of Environmental Quality may:

1) Require any person responsible for emissions of air contaminants to make or have made tests to determine the type, quantity, quality, and duration of the emissions from any air contamination source.
2) Require full reporting of all test procedures and results furnished to the Department in writing and signed by the person or persons responsible for conducting the tests.
3) Require continual monitoring of specified air contaminant emissions and periodic regular reporting of the results of such monitoring.

II. Methods:

1. Any sampling, testing or measurement performed under this regulation shall conform to methods on file at the Department of Environmental Quality or to recognized applicable standard methods approved in advance by the Department.
2. The Department may approve any alternative method of sampling provided it finds that the proposed method is satisfactory and complies with the intent of these regulations and is at least equivalent to the uniform recognized procedures in objectivity and reliability, and is demonstrated to be reproducible, selective, sensitive, accurate and applicable to the program.

III. Department Testing:

The Department, instead of requesting tests and sampling of emissions from the person responsible for an air contamination source, may conduct such tests alone or in conjunction with said person. If the testing or sampling is performed by the Department, a copy of the results shall be provided to the person responsible for the air contamination source.

ADOPTED May 22, 1970

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

May 4, 1970

GENERAL EMISSION STANDARDS FOR PARTICULATE MATTER

I. Definitions:

1. "Existing source" means any air contaminant source in existence prior to June 1, 1970.
2. "Fuel burning equipment" means equipment, other than internal combustion engines, the principal purpose of which is to produce heat or power by indirect heat transfer.
3. "New source" means any air contaminant source installed, constructed, or modified after June 1, 1970.
4. "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background.
5. "Particulate matter" means any matter, except uncombined water, which exists as a liquid or solid at standard conditions.
6. "Refuse" means unwanted matter.
7. "Refuse burning equipment" means a device designed to reduce the volume of solid, liquid, or gaseous refuse by combustion.
8. "Ringelmann Smoke Chart" means the Ringelmann Smoke Chart with instructions for use as published in May, 1967, by the U. S. Dept. of Interior, Bureau of Mines.
9. "Standard conditions" means a temperature of 60° Fahrenheit and a pressure of 14.7 pounds per square inch absolute.
10. "Standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from fuel or refuse burning, "Standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 50% excess air.

II. Special Control Areas:

The following areas of the State are established as Special Control Areas, and are deemed applicable to these Regulations and to Emission Standards for Industrial Processes.

a) Willamette Valley, defined as all areas within counties of the State under the jurisdiction of a regional air pollution control authority as of June 1, 1970, including:

1) The Columbia-Willamette Air Pollution Authority, which includes the counties of Clackamas, Columbia, Multnomah and Washington,

2) The Mid-Willamette Valley Air Pollution Authority, which includes the counties of Benton, Linn, Marion, Polk and Yamhill,

3) Lane Regional Air Pollution Authority, which includes Lane County.

b) Umpqua Basin, defined as the area bounded by the following line:

Beginning at the SW corner of Sec. 2, T19S, R9W., on the Douglas-Lane County lines and extending due South to the SW corner of Sec. 14, T32S., R9W, on the Douglas-Curry County lines; thence Easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine and Jackson County lines; thence Easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Sec. 32, T32S, R3W, thence Northerly on the Umpqua National Forest boundary to the NE corner of Sec. 36, T25S, R2W, thence West to the NW corner of Sec. 36, T25S, R4W, thence North to the Douglas-Lane County line, thence Westerly on the Douglas-Lane County line to the starting point.

c) Rogue Basin, defined as the area bounded by the following line:

Beginning at the NE corner of T32S, R2E, W.M.; thence South along Range line 2 E to the SE corner of T39S, R2E; thence West along Township line 39S to the NE corner of T40S, R7W; thence South to the SE corner of T40S, R7W; thence West to the SE corner of T40S, R9W; thence North on Range line 9W to the NE corner of T39S, R9W; thence East to the NE corner of T39S, R8W; thence North on Range line 8W to the SE corner of Sec. 1, T33S, R8W on the Josephine-Douglas County line; thence East on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1 W; thence East along township line 32S to the NE corner of T32S, R2E to the point of beginning.

d) Within incorporated cities having a population of four thousand (4000) or more, and within three (3) miles of the corporate limits of any such city.

III. Visible Air Contaminant Limitations:

1. Existing Sources Outside Special Control Areas:

No person shall cause, suffer, allow, or permit the emission of any air contaminant into the atmosphere from any existing air contaminant source located outside a Special Control Area for a period or periods aggregating more than 3 minutes in any one hour which is:

a) As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, or

b) Equal to or greater than 40% opacity.

2. New Sources in All Areas and Existing Sources Within Special Control Areas:

No person shall cause, suffer, allow, or permit the emission of any air contaminant into the atmosphere from any new air contaminant source, or from any existing source within a Special Control Area, for a period or periods aggregating more than 3 minutes in any one hour which is:

a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or

b) Equal to or greater than 20% opacity.

3. Exceptions to III(1) and III(2):

a) Where the presence of uncombined water is the only reason for failure of any emission to meet the requirements of Sections III(1) and III(2), such sections shall not apply.

b) Existing fuel burning equipment utilizing wood wastes and located within Special Control Areas shall comply with the emission limitations of Subsection III(1) in lieu of Subsection III(2).

IV. Fuel Burning Equipment Limitations:

No person shall cause, suffer, allow, or permit the emission of particulate matter, from any fuel burning equipment in excess of:

a) 0.2 grain per standard cubic foot for existing sources; or

b) 0.1 grain per standard cubic foot for new sources.

V. Refuse Burning Equipment Limitations:

No person shall cause, suffer, allow, or permit the emission of particulate matter from any refuse burning equipment in excess of:

a) For equipment designed to burn 200 pounds of refuse per hour or less, 0.3 grain per standard cubic foot; or

b) For equipment designed to burn more than 200 pounds of refuse per hour,

1) 0.2 grain per standard cubic foot for existing sources, or

2) 0.1 grain per standard cubic foot for new sources.

VI. Section 21-011, Smoke Discharge, OAR Chapter 340, is repealed.

Table 3

PROJECT PLANS

During the month of April, 1970, the following project plans and specifications and/or reports were reviewed by the staff. The disposition of each project is shown, pending ratification by the Environmental Quality Commission.

Date	Location	Project	Action
Municipal Projects (35)			
4-2-70	Mosier	Preliminary report	Comments submitted
4-3-70	Oregon City	L.I.D. #31	Prov. approval
4-3-70	Salem	Seventh Ave., S.E. project	Prov. approval
4-3-70	East Salem Sewer District No. 1	Parkdale No. 4 Subdivision sewers	Prov. approval
4-6-70	Portland	Addenda No. 1-10 to site preparation plan	Approved
4-8-70	Rockaway	Report on plant improvements	Comments submitted
4-8-70	Springfield	Lindale Dr. & Down Terrace	Prov. approval
4-8-70	Multnomah County (E)	United Medical Lab.-sewers	Prov. approval
4-8-70	The Dalles	Small boat basin sewer	Prov. approval
4-9-70	Oak Lodge San. D.	Hanwood Terrace sewer	Prov. approval
4-9-70	Multnomah County (E)	Columbia Way Court system and treatment	Comments submitted
4-13-70	Portland	S.W. Montgomery Dr. sewer	Prov. approval
4-13-70	Winston	Park St. sanitary sewer	Prov. approval
4-13-70	Ontario	Change Order #2 to sewage treatment plant	Approved
4-13-70	Tualatin	Apache Bluff No. 5	Prov. approval
4-14-70	Lake Oswego	Spring Brook interceptor CO-O-4	Approved
4-15-70	Green San. Dist.	Sanitary sewer extension	Prov. approval

Table 3 (Cont.)

Date	Location	Project	Action
4-15-70	Curry County	Comprehensive sewer and water study	Comments submitted
4-16-70	Unified Sewerage Agency	West Slope-Beaverton interceptor	Prov. approval
4-16-70	Unified Sewerage Agency	Beaverton-Rock Creek interceptor	Prov. approval
4-17-70	Lincoln City	Addendum #1 to Phase 2	Approved
4-20-70	Ontario	L.I.D. #27	Prov. approval
4-21-70	Columbia County	Comprehensive sewer and water study	Comments submitted
4-22-70	Eugene	Two sanitary sewer projects	Prov. approval
4-22-70	Pier Point Inn	Sewage treat. plant revisions	Approved
4-22-70	Salem	Glen Creek trunk	Prov. approval
4-24-70	Lake Oswego	L.I.D. #120	Prov. approval
4-27-70	Lincoln City	Stage I, Dawson Development	Prov. approval
4-27-70	Unified Sewerage Agency	Aloha--Deepwell No. 2	Prov. approval
4-27-70	Salem	Park Avenue sewer	Prov. approval
4-28-70	Yachats	System and treatment	Prov. approval
4-28-70	Twin Rocks	Change Orders B-10, 11, 12, 13 and 14	Prov. approval
4-28-70	St. Helens	Primary plant expansion	Prov. approval
4-29-70	Wallowa	System and treatment	Final comments
4-30-70	Astoria	Pump station by-pass	Prov. approval
Industrial Projects (1)			
4-23-70	Glendale Plywood, Glendale	Plywood glue recirculation treatment facility	Prov. approval

PROJECT PLANS AND REPORTS

The following project plans or reports were received and processed by the Air Quality Control Division staff during the month of April 1970:

Date	Location	Project	Action
22	Joseph	Boise Cascade Corp. Wigwam Waste Burner Modification	Conditional Approval

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman
E. C. Harms, Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION

DATE : May 8, 1970 for the May 22, 1970 Meeting

SUBJECT: STATUS REPORT, DOUGLAS COUNTY LUMBER COMPANY, WINCHESTER

Attached is a status report prepared by the staff dated April 27, 1970. In view of the status report and recommendations, Douglas County Lumber Company was advised by the staff by letter dated April 28, 1970, also attached, of the intended actions of the Department and was requested to reply by May 15, 1970.

On May 4, 1970, in a letter to the Department, also attached, Mr. Hallmark forwarded the requested progress report which informed the staff that both wigwam waste burners would be phased out by September or October 1970, and furthermore, that they would then be torn down.

RECOMMENDATION

Since the company has now responded by furnishing the Department staff with the requested progress report, it is recommended that the Environmental Quality Commission issue an order to Douglas County Lumber Company "to continue to present progress reports, with documented evidence that the company is proceeding in good faith, by the 1st of each month, and that the project to completely phase out the two wigwam waste burners and to eliminate all waste burning activities be completed by September 30, 1970".

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OFFICE BUILDING • 1400 S.W. 5th AVENUE • PORTLAND, OREGON • 97201

May 8, 1970

Douglas County Lumber Company
Post Office Box 1306
Roseburg, Oregon 97470

Attention: Mr. M.L. Hallmark
President

Gentlemen:

We are in receipt of your status report dated May 4, 1970, on the progress and documentation of your program to eliminate your wigwam burners by September 1970.

This is to notify you that your phase-out date for both wigwam waste burners of September 1970, in accordance with the attached letter, will be presented to the Commission for acceptance at the meeting on May 22, 1970, at 10:00 a.m. in Room 36 of the State Office Building located at 1400 S.W. 5th Avenue, Portland, Oregon.

It is possible that the Commission may desire to ask some questions concerning your present schedule since a hearing had been authorized. Therefore, it is requested that a representative of your company be present to respond to any questions from the Commission.

Very truly yours,

Harold M. Patterson

Harold M. Patterson, Director
Air Quality Control Division
Department of Environmental Quality

HHB:vt

cc Mr. Leo Baton
Medford District
cc Environmental Quality
Commission Members

Douglas County Lumber Co.

ROSEBURG
OREGON

Manufacturers of West Coast Veneer and Lumber Products

P. O. BOX 1306

PHONE 503-672-5711

May 4, 1970

Department of Environmental Quality
State Office Building
1400 S. W. 5th Avenue
Portland, Oregon 97201

Attention: Mr. Patterson

Dear Mr. Patterson,

At your request we enclose copies of purchase orders in connection with the plan to eliminate our wigwam burners. You will note that the large items cover the chip handling system which will be more than double in capacity. This equipment is to be furnished by Archer Blower & Pipe Company. Other major items include a large chipper purchased from Black Clawson-Sumner. The large chipper is required so that all wide slabs can be chipped. You will also note that we have purchased a large Jeffrey Hood & Bark Hog, a Jeffrey Conveyor, and numerous motors and a new surge bin. Also it will be necessary to purchase some additional bins, but we are waiting until after some pending auctions to see if we can make an advantageous purchase.

We also enclose a general plan showing the new installation of equipment. It is not practical and I feel sure you do not care for the actual plans. We are commencing now with the pouring of foundations for the bins and will endeavor to have all foundations poured before arrival of the equipment. There has been a delay in the chipper delivery which is now estimated to be about the middle of June.

It is impossible to say exactly when this equipment will be in operation and the burners eliminated but it seems probable that by September or October the new equipment will be in operation and the burners phased out. Once this equipment is installed there will be no connection at all with the burners and they will be torn down. There will absolutely be no burning on these premises. We hope the foregoing explanation is satisfactory.

Very truly yours,

DOUGLAS COUNTY LUMBER COMPANY

M. L. Hallmark

Western Wood Products Association

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OFFICE BUILDING • 1400 S.W. 5th AVENUE • PORTLAND, OREGON • 97201

April 28, 1970

Douglas County Lumber Company
P. O. Box 1306
Roseburg, Oregon 97470

Attn: Mr. M. L. Hallmark, President

Gentlemen:

The hearing as authorized by the Commission on July 14, 1969, was held in abeyance because of your letter, dated September 3, 1969, which, in effect outlined a program to eliminate all burning on the premises and to furnish the Department with progress reports and documents of proof that the company was proceeding in "good faith". In accepting the additional conditions of Mr. A. B. Silver's letter, dated September 10, 1969, you obligated the company to begin reporting on a monthly basis.

The above summarizes in brief what you were committed to comply with and to date the Department has received the following:

1. Progress report, dated September 29, 1969 for the month of September.

2. Progress report, dated October 31, 1969 for the month of October.

3. Progress report, dated December 4, 1969 for the month of November.

4. Progress report, dated February 3, 1970 for the month of January.

These reports have contained no documentation to indicate that your company is, in fact, proceeding in good faith, nor have any plans been received for the staff to evaluate. Also, your reports have not been submitted on the timely basis as agreed, the 4th of each month. Progress reports for December 1969, February and March of 1970 have not been received.

Because of these facts, it is my duty to inform you that the Department will proceed with the abatement hearing against Douglas County Lumber Company if a complete report, with copies of purchase orders, time schedules, delivery schedules, and approved copies of all sets of plans by an engineer are not received by this office by May 15, 1970.

Your immediate cooperation regarding this matter will be most appreciated.

Very truly yours,

H. M. Patterson, Director
Air Quality Control Division

HMP:HHB:h

cc: Leo Baton

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

DATE : April 27, 1970

SUBJECT: STATUS REPORT, DOUGLAS COUNTY LUMBER COMPANY, WINCHESTER

BACKGROUND

Douglas County Lumber Co. operates a sawmill, planing mill, and veneer plant west of the Interstate Freeway approximately five miles north of the Roseburg city limits. Sources of emissions are two wigwam waste burners, a boiler plant, and an open burning dump immediately north of the plant.

Complaints from residents with homes along the Umpqua River from ¼ to ½ mile southwest of the operation concerning smoke and fallout of burned and unburned particles date from August 1963. On August 10, 1965, a petition bearing 75 signatures was received and on December 14, 1965, another petition bearing 66 names was received.

On June 29, 1966, the problem was brought to the attention of the Members of the State Sanitary Authority. The staff report of that date stated that staff activity had included 12 plant surveys and interviews with personnel in responsible charge, that 10 letters had been written to Douglas County Lumber Co. and that 6 replies had been received. It also stated that nothing had been done by the company to achieve compliance with the original wigwam burner regulation.

After considerable discussion, Sanitary Authority action was then to accept the proposal of Mr. M. L. Hallmark, President, Douglas County Lumber Co. to hire a consulting engineer to cause a study to be made and to provide a copy of the engineering report to the Authority. However, Mr. Hallmark stated that he might not necessarily agree with the engineer's findings, but that if he considered them reasonable and economical, he would follow them.

At the next meeting of the Authority on September 13, 1966, Mr. Hallmark reported that he had just that day received the report from the engineers and that he had not had an opportunity to study it.

In subsequent staff surveys it was determined that the engineering firm had provided recommendations only concerning the wigwam burners and that over a considerable period of time a portion of these recommendations were put into practice, utilizing the project to provide "fill-in" work for the plant maintenance personnel.

The staff was advised by Mr. Hallmark that the problem of black smoke emissions from the boiler stack was expected to be corrected by the installation of a variable speed motor on the fuel conveyor system which had been ordered and was on hand. On subsequent visits it was determined that it had not been installed, and in fact the plant superintendent was completely unaware of such a project.

The staff was at one time informed that the practice of open burning on "Mt. Hallmark", immediately north of the plant, had been ordered terminated; however the practice has since been observed to continue with almost no interruption.

Because of the above facts which were presented at the Commission Hearing in Roseburg on July 25, 1969, it was moved and seconded "that a hearing be scheduled before a Hearings Officer whereby the Company will be required to appear and show cause why the use of its wigwam waste burners and the practice of open burning should not be terminated". The letter from Mr. Kenneth H. Spies, dated August 1, 1969, to Mr. M. L. Hallmark confirmed this action and informed the company that 15 days notice would be given in advance of the hearing.

Mr. Hallmark then responded to this action on September 3, 1969 with a letter outlining a new approach to the company air pollution problems. This was agreeable to the Department Staff and the letter from Mr. Arnold B. Silver dated September 10, 1969, accepted the company's proposals, and therefore, the scheduled hearing was held in abeyance.

Since that time the Department has received only four (4) progress reports which, in text, state that a 78" chipper has been purchased from Black Clawson, Inc. for delivery by May 31, 1970, that all work is progressing satisfactorily, and that Mr. Floyd Crenshaw has been retained as a consultant. Investigation by the staff would indicate that Mr. Crenshaw is not a registered engineer and a telephone call to the company revealed that he is not employed by the company in any capacity.

CURRENT STATUS

The sawmill was destroyed by fire in 1968. As a part of its reconstruction, the bark grinder was eliminated so that bark is now delivered to the burner in larger pieces. A steel contractor is reported to have done some work on the south burner, but no appreciable reduction in emissions have been observed as a result.

The boiler plant has been converted to natural gas and is now apparently no longer in violation of smoke discharge regulations.

Observations by the staff and District Engineer indicate that the open burning practices have been terminated to date.

The monthly status reports, copies of purchase orders, and formal plans have not been submitted by the company to the Department for review. Status reports were received for September, October, November and January, but were incomplete in that no finalized plans were submitted for review.

RECOMMENDATION

Since the company has failed to show good faith in complying with the terms stated in the letters dated September 3 and 10, 1969, it is recommended that the order for the hearing, as authorized by the Commission on July 14, 1969, be initiated and that the company be required to show cause why the use of its wigwam waste burners should not be terminated.

DOUGLAS COUNTY LUMBER RESUME' (As of 13 April 1970)

Complaints date from August 7, 1963.

Reports before Commission:

Aug. 26, 1965 - Report and petition with 74 signatures (HMP)

Dec. 17, 1965 - Report and petition with 66 signatures (HMP)

Feb. 17, 1966 - Report to Commission "

June 29, 1966 - Detailed reports to Commission " and Hallmark

Sept. 13, 1966 - Progress report with promise to start engineering " " "

July 25, 1969 - Status report AQC Staff

Progress and/or situation reports from Douglas County Lumber - 21 letters.

Sept. 3, 1963 - Re open burning - has been discontinued (Hallmark)

June 15, 1964 - Changing operators, testing and boiler operations "

Sept. 18, 1964 - Situation report - lack of chip cars "

Aug. 17, 1965 - Petition advise, blowers on WWB. "

Sept. 20, 1965 - Complaint, Reduction of fallout, unfair "

Nov. 8, 1965 - Progress report on smoke and fallout reduction "

Sept. 12, 1966 - CH_2M (C4305.0) Report (Evanson)

Oct. 17, 1966 - Reason for delay - Hallmark in East (Hanks)

Oct. 25, 1966 - CH_2M (C4305.0) Delay due to business (Evanson)

Nov. 2, 1966 - Re: CH_2M survey by Reeder (Hanks)

Dec. 14, 1966 - Cover letter with detailed CH_2M report and recommendations (Hanks)

Jan. 6, 1967 - Report that CH_2M recommendations are underway (Hanks)

Feb. 3, 1967 - Progress report "

Mar. 16, 1967 - Progress report "

May 26, 1967 - Progress report "

June 17, 1968 - Mill destroyed by fire-Medford Mail Tribune

Sept. 3, 1969 - Progress report and proposed plans (Hallmark)

Sept. 29, 1969 - Progress report and reson for some delay "

Oct. 31, 1969 - Progress report and management disagreement "

Dec. 4, 1969 - Progress report, purchase of chipper and retain. consultant "

Feb. 3, 1970 - Progress report, Del. of equip. May 31,70 "

Correspondence with Douglas County Lumber Company from DEQ = 25 letters
Investigations, observations, consultations = 37

DOUGLAS COUNTY LUMBER COMPANY

April 14, 1970

2.0 HISTORY

In chronological order, the following is a brief of the records concerning air pollution generated by Douglas County Lumber Company.

August 7, 1963. Memo from Ken Spies to R. Hatchard referring to complaint from John Amacher, a resident of Winchester, about sawdust, cinders and fly-ash from Douglas County Lumber Company.

August 13, 1963. Memo from R. R. Ott to R. E. Hatchard regarding a staff investigation and survey on August 9, 1963 of the open burning activities of Douglas County Lumber Company. R. R. Ott informed Mr. A. H. Jewell, the office manager, that these activities were a nuisance and in violation of OAR 22-011(3) based on Chapter 449.765 ORS. A copy of these rules were furnished the company for their information.

August 14, 1963. Letter from the State Sanitary Authority to Mr. M. L. Hallmark, Plant Manager of Douglas County Lumber Co., referring to the complaint and the staff investigation of August 9, 1963, and requesting a response as to the measures the company planned to take to eliminate this source of pollution by September 6, 1963.

September 3, 1963. Letter from Mr. M. L. Hallmark of the Douglas County Lumber Company to the Oregon State Sanitary Authority referring to the fact that no open burning had taken place in recent weeks and that plans call for no open burning in the future.

April 16, 1964. Letter from Avery W. Thompson, District Attorney, Douglas County, to Dr. Richard H. Wilcox, State Health Officer, and Director of the State Board of Health, concerning a complaint regarding Douglas County Lumber Company as an air pollution source.

April 21, 1964. Letter from Dr. Wilcox to Mr. Thompson stating that Mr. T. M. Gerow, Southern Oregon District Engineer, would be in Douglas County shortly to investigate whether or not the company was in violation of State air pollution control laws and would be in contact with him regarding this situation. Also reference was made to the staff investigation of August 9, 1963 which was made in response to the complaint of August 7, 1963 and that the letter from the company, dated September 3, indicated that no more open burning would take place.

April 29, 1964. Memo from T. M. Gerow to H. M. Patterson referring to the conference held with Mr. Hallmark of Douglas County Lumber Company on 23 April 1964 regarding the complaint received through the District Attorney's office. Mr. Gerow and Mr. Hallmark discussed the problem of not enough chip cars and consequently chips were piled and burned creating a considerable amount of smoke. Of particular note was the fact that the two (2) WWB and the steam power plant were producing a tremendous amount of smoke and it is recommended that some better controls be installed to prevent this condition.

May 18, 1964. Staff report of the power plant and wood burner survey by R. F. Wood.

June 4, 1964. Memo from R. F. Wood to H. M. Patterson regarding a complaint investigation and the power plant and wood burner survey conducted on May 18, 1964.

June 8, 1964. Letter from H. M. Patterson to M. L. Hallmark regarding complaints and staff surveys of May 18 and 19, 1964. Letter referred to and included copies of Sec. 21-011 of OAR Chapter 334, OAR 334 - 21-016, and Engineering Experiment Station Bulletin No. 39, and requested that the company notify the Authority of the changes to be made and the dates of completion so that another survey could be scheduled.

June 15, 1964. Letter from M. L. Hallmark to the Authority acknowledging letter and enclosures dated June 8, 1964, and explaining that until these changes in the operation are made and tested no one will know what the fallout problem will be. An explanation of the boiler house problem is included and Hallmark does not know what can be done.

June 25, 1964. Letter from H. M. Patterson to M. L. Hallmark acknowledging his letter of June 15, 1964 and requesting notification of the completion dates for the contemplated changes. Also Patterson advised the company that the boiler stack problem regarding fallout "would necessitate a study of the combustion unit, fuel mixture and total combustion process to determine the factors that might be altered to improve complete combustion" prior to the purchase of a new boiler unit.

September 17, 1964. Letter from H. M. Patterson to M. L. Hallmark regarding complaint concerning fallout from Douglas County Lumber Co. Also, L. Baton, the District Sanitary Engineer would be in contact with him as soon as travel schedule permitted to discuss the WWB's and other air pollution problems.

September 17, 1964. Memo and copies of letters dated 17 Sept. and June 25 from H. M. Patterson to L. Baton explaining recent events and requesting him to inspect and discuss air pollution problems to try to bring Douglas County Lumber into compliance.

September 18, 1964. Letter from H. M. Hallmark to Oregon State Sanitary Board, Attn: H. M. Patterson, explaining that the barker and chipper as previously discussed, are in operation and that the air pollution situation is improved. Unfortunately, because of the lack of chip cars the chips have had to be burned.

September 21, 1964. Letter from H. M. Patterson to M. L. Hallmark thanking him for the letter of Sept. 18 and reporting that there was still a shortage of chip cars. Also, what was the disposition of the three-way valve on the pneumatic feed lines for diverting the chips to either the waste burner or the fuel house and what is going to be done about the WWB's? (Copy's of this letter and letter of September 18 to L. Baton.)

October 2, 1964. Memo from L. Baton to H. M. Patterson explaining that on his September 23 survey of Douglas County Lumber Co. and discussions with M. L. Hallmark, he found conditions about the same as original report. The south burner was Ringelmann #1 to #2 while the north burner was indicating #2 to #3. However, later in the P.M., the north burner was indicating Ring. #3 to #4. Several small fires were burning in the parking lot around the parked cars. While his car was parked on the lot that A.M. during the survey, a considerable amount of sawdust was deposited on it. The condition of the burners is bad and they need repair.

October 26, 1964. Memo from H. M. Patterson to L. Baton thanking him for his report on survey conducted on September 23 and that it would appear that it would be necessary to establish fallout jars to establish a violation of regulations.

December 8, 1964. Memo from L. Baton to H. M. Patterson reporting that on December 2, he observed heavy black smoke from both boiler stacks and both WWB's.

August 10, 1965. Receipt of petition containing 74 signatures, requesting action from the Sanitary Authority to prevent further air pollution from Douglas County Lumber Co.

August 11, 1965. Letter from H. M. Patterson to M. L. Hallmark advising that a petition had been received on August 10 complaining that Douglas County Lumber Co.'s operation was responsible for sawdust and ashes having recently been deposited on land and water near Winchester, Oregon. Enclosed with this letter were copies of ORS Chapter 449 and Administrative Rules, Chapter 334, and a copy of the July issue of the Oregon State Board of Health Bulletin with the article on the operation and maintenance of WWB's.

August 17, 1965. Memo from L. Baton to H. M. Patterson relating details of his visit to Douglas County Lumber Co. on August 10, and that very little was being done about the smoke problems.

August 17, 1965. Memo from L. Baton to H. M. Patterson informing of an aerial survey he made of the general area over the Douglas County Lumber Co. on August 11 and that the smoke problem created by this company and others was so bad that the Roseburg Airport to the south was obscured.

August 17, 1965. Letter from H. M. Hallmark to Oregon State Sanitary Authority acknowledging receipt of the letter dated August 11 and that they were surprised that the Authority had received a petition charging Douglas County Lumber Co. with air pollution. An explanation then follows as to the modifications that have been made to the main burner; that these modifications are such as recommended by the staff, but are, in fact, much better; that the fallout is only a fraction of what it formerly was; that they are chipping all suitable waste for chips; and that they are selling most of the shavings and some of the bark. Mr. Hallmark feels that he has been unduly singled out as a violator and that others are also responsible for air quality problems.

August 19, 1965. Letter from H. M. Patterson to M. L. Hallmark acknowledging receipt of letter dated August 17 and informing him that the state files are open to the public and upon written request he could obtain a copy of the petition. Also, the other firms mentioned in the petition was installing control equipment to bring their operation into compliance.

September 17, 1965. Letter from H. M. Patterson to M. L. Hallmark referring to previous complaints and an additional complaint. In reviewing the Douglas County Lumber Co. situation - no further progress reports have been received relative to their air pollution problems. A request is thereby made that Douglas County Lumber Co. advise the Authority of their plans and the progress made relative to these problems.

September 20, 1965. Letter from H. M. Hallmark to Oregon State Sanitary Authority stating that he is sorry that another complaint had been received and that he feels that considerably progress has been made in regard to their fallout problem. An explanation of the modification that was made to the main WWB follows with an expression that these air pollution problems are probably not coming from Douglas County Lumber Co., but rather from a rock crushing plant. Hallmark feels that he should be entitled to know the location of the property of the people complaining so that he can know what the situation is. Otherwise, there is nothing that can be done.

September 22, 1965. Letter from H. M. Patterson to M. L. Hallmark acknowledging his letter dated September 20 pertaining to the WWB improvements and enclosing a copy of the petition received on August 10 as requested. Also, Mr. Patterson informed Hallmark that the rock crushing plant would probably be removed from the site on September 24 to a new location. A request was again made to keep the Authority informed of their progress.

November 3, 1965. Complaint filed with the Douglas County Health Dept. by Ted Moriche concerning the "extremely heavy flyash fallout for several months." Mr. Moriche stated that he talked with the mill owner about this situation and was told that "he would have to learn to live with this condition."

November 8, 1965. Letter from M. L. Hallmark to Oregon State Sanitary Auth. reporting the progress that has been made and of the company's future plans to rebuild a portion of their operation so as to eliminate one of the WWB's.

November 9, 1965. Letter from H. M. Patterson to M. L. Hallmark thanking him for the progress report dated November 8.

December 14, 1965. Receipt of a petition dated November 20, 1965 with 66 signatures regarding the air pollution problem created by Douglas County Lumber Co. A cover letter from Mr. Theo F. Mouche (who filed the complaint dated November 3) explaining his situation accompanies the petition.

December 16, 1965. Letter from H. M. Patterson to M. L. Hallmark advising him that the Authority had received another petition with 66 signatures relative to air pollution caused by Douglas County Lumber Co. Mr. Patterson will have Mr. H. McKenzie from the Portland Office and Mr. L. Baton, the District Engineer, call at the plant to assist Douglas County Lumber Co. as soon as travel schedules can be arranged.

December 16, 1965. Letter from H. M. Patterson to Theodore F. Mouche acknowledging receipt of his letter and petition dated November 20 pertaining to air pollution problems created by Douglas County Lumber Co.

December 26, 1965. Memo from H. W. McKenzie to H. M. Patterson regarding his plant survey on December 22. The bark and slab wigwam waste burner is the principal offender. The veneer plant wigwam waste burner, according to M. L. Hallmark, is expected to be discontinued after February 1, 1966. The boiler plant stack emissions have been due to batch-firing.

January 4, 1966. Memo from H. W. McKenzie to H. M. Patterson reporting that, in conversations with M. L. Hallmark on December 30, Hallmark is not very optimistic about markets for the barkdust. Hallmark expects to phase-out the veneer plant wigwam waste burner in approximately one month. The company was proceeding with the installation of a variable speed conveyor drive to even out the materials flow into the boiler which should reduce stack emissions.

February 10, 1966. Memo from H. W. McKenzie to H. M. Patterson reporting that by February 15 the company will install ground bark collector at the south burner and by March 11 the north burner and remanufacturing operations will be phased-out. Mr. Hallmark agrees that if this program does not solve the smoke and fallout problem, then the company will install a Medford type underfire system and if this does not work, they will then eliminate the hog grinder.

April 15, 1966. Memo from H. W. McKenzie to H. M. Patterson reporting that on April 4 Douglas County Lumber Co. was again surveyed and that 35 mm Ektochromes were taken from the ground and by aerial survey. On April 5 Mr. McKenzie was conducted on an inspection of the boiler plant by Mr. Hanks, the mill superintendent. It was noted that the only control of the fuel feed rate was by starting and stopping the feed conveyor. When Mr. McKenzie suggested that the company install a variable speed drive for this purpose, Mr. Hanks stated "We're thinking about doing that."

After returning to his office, Mr. McKenzie reviewed the files and found that on December 22 Mr. Hallmark had stated the variable speed drive was on order for the fuel feed conveyor, and on December 30 he reported that this variable speed drive was in the process of being installed and that it should be in operation within about 5 days. Also, on April 5, Mr. Hanks reported to Mr. McKenzie that the wigwam waste burner had had a cyclone mounted on it to accept the ground bark but some adjustments were needed and that the other burner would not be phased-out until this was operating properly.

June 13, 1966. Memo from H. W. McKenzie to H. M. Patterson reporting that the survey conducted on May 24 revealed that both burners were smoking badly, that they needed considerable maintenance, and that the boiler plant emissions were still Ringelmann #4 to #5 continuously.

June 22, 1966. Letter from Kenneth Spies, the Secretary and Chief Engineer of the State Sanitary Authority to M. L. Hallmark scheduling the June 29 meeting of the Authority for consideration of Douglas County Lumber Co. as a source of air pollution and requesting that the company be represented.

June 29, 1966. Staff report presented to the State Sanitary Authority.

July 7, 1966. Letter from Mr. Kenneth Spies to M. L. Hallmark informing him of the action taken by the Authority and that if the company does not proceed in good faith then the Authority will cite the company for a formal hearing.

August 23, 1966. Memo from K. Spies to H. M. Patterson referring to a telephone call from M. L. Hallmark. Mr. Hallmark reported that CH_2M had been retained to make a study of their air pollution problems, that automatic stokers had been installed at the boiler plant which had improved the operations of that facility, and that negotiations were underway with Roseburg Lumber Co. to use the bark residues for power generation.

September 7, 1966. Letter from K. Spies to M. L. Hallmark notifying him that the next meeting of the Authority was scheduled for September 13, and requesting that he be present since he had failed to comply with the requirements of the Authority.

September 12, 1966. Initial report from Austin E. Evanson, an engineer with CH_2M to M. L. Hallmark making initial recommendations.

September 12, 1966. Memo from L. Baton to H. M. Patterson noting that on September 9 he had observed Douglas County Lumber Co.'s north wigwam burner emitting a considerable amount of black smoke and sawdust (about Ringelmann #4), the boiler stack belched black smoke for about 4 minutes and some light colored smoke coming from the south wigwam burner.

September 13, 1966. Memo from Air Quality Control staff to the members of the State Sanitary Authority advising them of the events concerning Douglas County Lumber Co. since the last meeting on June 29, 1966.

September 16, 1966. Letter from Ely J. Weathersbee, Acting Secretary State Sanitary Authority confirming the action taken by the Authority on September 13, that the company keep the staff advised as to progress and that the company will be scheduled before the authority at the next meeting.

September 23, 1966. Memo from L. Baton to H. M. Patterson pointing out that in reviewing the CH_2M letter dated September 12, Mr. Evanston of CH_2M didn't really offer much of a solution to the present air pollution problems and that it appeared that Mr. Hallmark has no definite plan for early implementation to correct the bad situation. Mr. Hallmark has never committed the company to authorize CH_2M to go ahead with plans and specifications that would lead to construction.

September 27, 1966. Memo from E. J. Weathersbee to K. Spies and H. M. Patterson confirming M. L. Hallmark's telephone call reporting that Douglas County Lumber Co. was not getting satisfactory service from CH_2M concerning his waste disposal problem. Also, according to Hallmark, it appears that the company is on the verge of finalizing an agreement with Roseburg Lumber Co. for the bark residues.

September 30, 1966. Memo from H. M. Patterson to K. H. Spies and E. J. Weathersbee reporting his conversation with Austin Evanson of CH_2M about a proposed visit on October 10, and that since Mr. Evanson was also a consultant for Roseburg Lumber Co., he would be able to verify some of Mr. Hallmark's other disposal plans.

October 17, 1966. Letter from William C. Hanks, sawmill superintendent of Douglas County Lumber Co. advising the Authority that Mr. Hallmark will be on a business trip in the East and will not return prior to mid-November. Mr. Hanks advises that Mr. Evanson has failed to make the promised appearances at the plant during the week of October 10-15 to review the conditions and to submit a complete analysis and recommendation. The company is agreeable to terminate CH_2M and hire a new consultant if the Authority wishes.

October 25, 1966. Letter from A. E. Evanson of CH_2M to M. L. Hallmark regretting the circumstances of bad scheduling and work loads which have prevented his being able to meet with Douglas County Lumber Co.. A visit will be made by another engineer from CH_2M, Mr. Harry Reeder, on November 1 to gather the detailed information necessary to make specific recommendations.

November 2, 1966. Letter from W. C. Hanks to OSSA enclosing the CH_2M letter and reporting that Mr. Reeder did survey the company on November 1.

November 9, 1966. Letter from K. H. Spies to W. C. Hanks acknowledging letters of October 17 and November 2, and advising that as soon as a schedule for implementation is received it will be presented to the Authority.

November 18, 1966. Complaint from Theo F. Mouche to H. M. Patterson regarding the fallout collected from his patio. Also, he was under the impression the Authority had given Douglas County Lumber Co. two (2) months to make improvements in their air pollution problems and to date none have been made.

November 21, 1966. Letter from H. M. Patterson to T. F. Mouche acknowledging his complaint dated November 18 and explaining to him the actions taken by the Authority.

December 9, 1966. Memo from L. Baton to H. M. Patterson regarding observations he made of Douglas County Lumber Co. on December 6. The north burner was emitting a white plume with very little fallout noticed and the south burner appeared to have been inactive for the last several weeks.

December 9, 1966. Letter from H. M. Patterson to W. C. Hanks requesting a progress report and, if possible, a copy of the engineering report be submitted prior to Dec. 15 so that it would be included on the agenda for the Sanitary Authority meeting on December 20.

December 13, 1966. Letter from W. C. Hanks to H. M. Patterson enclosing a copy of the CH_2M engineering report and advising that one of the company mechanics had been assigned to this project.

December 16, 1966. Letter from K. H. Spies to M. L. Hallmark acknowledging receipt of the letter dated December 13 with the engineering report and advising the representation of the company would not be necessary at the Authority meeting on December 20 since the staff could report the current progress. However, it was requested that an implementation schedule, in accordance with the CH_2M report, be furnished to the staff for evaluation prior to the first meeting of the Authority in 1967.

December 21, 1966. Memo from L. Baton to H. M. Patterson advising the observation of open burning activities near Douglas County Lumber Co. on December 21 and that the south burner had no smoke while a moderate amount was being emitted from the north burner.

January 6, 1967. Letter from W. C. Hanks to K. H. Spies advising that Mr. Clyde Johnson, the construction foreman, had been assigned to proceed with the implementation of the CH_2M report and that additional personnel had been hired and the steel for repair and alteration had been purchased.

February 3, 1967. Progress report W. C. Hanks to K. H. Spies advising that four overfire air fans along with the tangential openings in the south burner had been relocated and that the base of the burner had been repaired.

February 7, 1967. Letter from K. H. Spies to W. C. Hanks acknowledging receipt of the February 3 progress report and advising that as soon as travel schedules permit, a staff survey will be conducted to assess the degree of improvements.

February 27, 1967. Complaint from Douglas County Health Department reporting that Mrs. Edward Adams is complaining that fallout conditions are as bad, if not worse, since January 1, 1967.

March 8, 1967. Letter from H. W. McKenzie to Mrs. Edward Adams bringing her up to date on the actions taken by the Authority and the progress being made by Douglas County Lumber Co.

March 16, 1967. Progress report from W. C. Hanks to K. H. Spies advising that a pyrometer and thermocouple have been installed in the south burner and that a temperature log is being kept. The screen in the top of the north burner will be replaced shortly, depending upon delivery schedules.

March 27, 1967. Memo from L. Baton to H. M. Patterson reporting that on March 22 he noted a considerable amount of open burning being conducted by Douglas County Lumber Co. The burners were emitting moderate amount of smoke.

May 8, 1967. Memo from L. Baton to H. M. Patterson advising that on May 3, "Mount Hallmark", as referred to in an earlier memo from H. W. McKenzie, was still afire, that new fuel was being added and pushed on the pile by a dozer and that three (3) other open fires were going to the southeast of this mound. The north burner was emitting a considerable amount of fallout material and not much smoke. The south burner appeared inactive.

May 26, 1967. Progress report from W. C. Hanks to K. H. Spies advising that the major portion of the fallout material is fine, light, charred wood particles. This material is coming from the chip screens at the veneer plant by pneumatic conveyor to the burner. It is apparently caught in the updraft and carried into the atmosphere in this partially burned state. Arrangements have been made to sell this material to a local particleboard manufacturer and this should alleviate this problem. Also, the dampering of the tangential openings in the south burner is completed.

June 1, 1967. Letter from H. W. McKenzie to W. C. Hanks thanking him for the progress report dated May 26 and calling attention to the fact that the open burning activities as noted by the district engineer, were not in compliance to either the Authority rulings or the new company policy.

October 2, 1967. Memo from L. Baton to H. M. Patterson reporting heavy smoke was observed from both burners on September 29 at about 2 p.m.

January 30, 1968. Memo from L. Baton to H. M. Patterson reporting that on an inspection of Douglas County Lumber Co. on January 16, the smoke from all sources, including open burning, was as bad as he had ever seen it.

February 27, 1968. Memo from L. Baton to H. M. Patterson reporting that on February 20 Douglas County Lumber Co. had emissions from the north burner of #3 Ringelmann and from the south burner of #2 Ringelmann plus three (3) open fires and "Mount Hallmark" was still smoking.

March 18, 1968. Memo from L. Baton to H. M. Patterson reporting that on his inspection of the company on March 8 he noted that the doors were open on the south burner and a light colored smoke was being emitted. The north burner showed very little signs of smoke discharge.

April 19, 1968. Memo from H. W. McKenzie to AQC files noting that on this date, the north burner was emitting a #4 Ringelmann continuously while the south burner was discharging a #5 Ringelmann continuously both from the top and at the conveyor opening. Also, construction was underway on the installation of a chain conveyor from the barker to the burner which will eliminate the pneumatic conveyor.

May 10, 1968. Memo from L. Baton to H. M. Patterson advising of the conversation with a reporter doing an article on air and water pollution and that the reporter desires photos of the fallout station at the Roseburg Gun Club. The reporter asked many questions about Douglas County Lumber Co. which L. Baton answered.

June 18, 1968. Memo from L. Baton to H. M. Patterson with newspaper article concerning the fire at Douglas County Lumber Co.

June 24, 1968. Memo from L. Baton to H. M. Patterson advising that it appeared that the damage and loss to Douglas County Lumber Co. due to the fire would be about $700,000.

July 9, 1968. Wigwam waste burner review report form for Douglas County Lumber Co. conducted by Ron Householder.

July 22, 1968. Memo from L. Baton to H. M. Patterson that he noticed the "Hallmark Mound" was afire on July 5 and that dozers were moving trash and debris around on the mound. It was first thought to be remains from the recent fire, however, this was later proven not to be the case.

October 18, 1968. Memo from L. Baton to H. M. Patterson reporting that on October 14 the smoke discharge from Douglas County Lumber Co. was in excess of Ringelmann #5 and that because of this the sources were completely obscured.

July 7, 1969. Letter from K. H. Spies to Douglas County Lumber Co. advising that the next meeting of the EQC will be held in Roseburg on July 25th and that they have been included on the agenda. Because of this the company should plan to have a representative at the meeting to answer any questions the Commission may ask.

July 25, 1969. Status report on Douglas County Lumber Co. presented to the Commission at the meeting.

August 1, 1969. Memo from Ron Householder to AQC files reporting that on July 30 four (4) fallout stations were established for evaluating fallout from Douglas County Lumber Co. Also, smoke observations were made of the burners and both were in violation. A small amount of smoke was coming from the open burning activities on the "Mound".

August 1, 1969. Letter from K. H. Spies to M. L. Hallmark confirming the official action taken by the Commission in Roseburg in that the company will be required to appear at a hearing to show cause why they should not be required to terminate the wigwam burners and cease open burning practices.

August 6, 13, 20 and 27. Ringelmann chart readings by Householder and Savaugeau of the wigwam burners at Douglas County Lumber Co.

August 25, 1969. Memo from L. Baton to H. M. Patterson of observations made on August 13 regarding excessive smoke - Ringelmann #4 continuously. And on August 15 both burners were at least Ringelmann #4 continuously.

September 3, 1969. Letter from M. L. Hallmark to EQC outlining a course of action which they hope will be acceptable to all parties. The goal of this action is to eliminate all burning of any kind on the premises except, of course, the gas fired boilers. Being committed to this, the company will furnish the Commission with proof of purchaser of materials and equipment and progress reports.

September 10, 1969. Letter from Arnold B. Silver, Assistant Attorney General for the DEQ, acknowledging receipt of the letter dated September 3 and notifying the company that the hearing will be held in obeyance provided certain conditions are fulfilled to the satisfaction of the staff.

September 29, 1969. Letter from M. L. Hallmark to A. B. Silver accepting the conditions of his letter dated September 10 and reporting on the progress made to date.

October 10, 1969. Letter from H. M. Patterson to M. L. Hallmark acknowledging receipt of his letter dated September 29.

October 31, 1969. Progress report from M. L. Hallmark to A. B. Silver explaining that a recent meeting with Mr. Ken Ford of Roseburg Lumber Co. revealed that the use of some of the wood residues would probably be required by the new particleboard plant being constructed in Dillard. However, completion of this plant might possibly be delayed because of

present market conditions. If this falls through, then some other method of disposal, other than burning, will be found. A problem exists in the sizing of a new chipper and because of this a disagreement in management has resulted, but this will be resolved shortly and an order for the equipment will be placed.

December 4, 1969. Progress report from M. L. Hallmark to A. B. Silver confirming the purchase of a 78" chipper from Black Clawson, Inc. The company is proceeding as rapidly as possible to eliminate the burners and has hired Floyd Crenshaw as a consultant.

February 3, 1970. Progress report from M. L. Hallmark to A. B. Silver stating that the company is progressing satisfactorily with the plan to eliminate all burning. The exact date for completion is uncertain but the equipment has been promised for delivery by May 31 and it is expected to be completely installed by October 1.

April 22, 1970. Complaint from Mrs. Sines through the Douglas County Health Department concerning excessive smoke and flyash coming from Douglas County Lumber Co.

April 28, 1970. Letter from H. M. Patterson to M. L. Hallmark summarizing the obligations that the company was committed to comply with when the Department advised that the scheduled hearing be held in abeyance, and outlining how they had failed to meet these obligations. Because of these failures the abatement hearing would be scheduled if the company did not furnish a complete progress report, with documented evidence that the company was proceeding in good faith, by May 15, 1970.

April 30, 1970. Letter from M. L. Hallmark to H. M. Patterson stating that the company would respond to letter dated April 28, 1970 by May 15, 1970.

May 4, 1970. Progress Report from M. L. Hallmark to H. M. Patterson with documented copies of purchase orders and plans to eliminate both wigwam waste burners by September or October, 1970 and that both burners would be torn down.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

DATE : May 8, 1970 for Meeting of May 22, 1970

SUBJECT : STATUS REPORT, L & H LUMBER CO., SUTHERLIN

BACKGROUND

L & H Lumber Company operates a sawmill and planing mill on Central Avenue, near the center of the populated area of Sutherlin. The bark and sawdust from this operation are burned in a wigwam burner, which has been the subject of numerous complaints from the citizens of Sutherlin. Staff observations indicate that this burner has been operated in almost continuous violation of smoke discharge standards.

On October 14, 1969, the company was requested to submit a program and schedule for attaining compliance with regulations within one month.

On October 30, we were informed by Mr. Sidney Leiken, President, L & H Lumber Company, that they had retained Paul Hyde of the O.S.U. Forest Research Laboratories for consultation and recommendations, and that his report was expected within two weeks. Mr. Leiken stated that upon receipt of the recommendations it was their intent to proceed as rapidly as possible to relieve the situation to the best of their ability.

On December 3, we requested that plans covering the proposed modifications be forwarded to us for review, and that we be advised of the schedule for their installation. Mr. Leiken replied that about half of Mr. Hyde's recommendations had been installed over the Thanksgiving holiday and that all remaining recommendations would be installed over the Christmas Holidays, with the exception of the auxiliary burners. He further stated that he hoped improvement would then be sufficient to take care of the problem. No plans or the text of Mr. Hyde's recommendations were included with the transmittal.

On January 5, we advised the Company that excessive smoke emissions were still being observed, and reiterated our request for plans and an item by item schedule covering their installation. In reply, Mr. Leiken advised that Mr. Hydes recommendations had been followed and that auxiliary gas burners were to be installed by February 15. No plans or recommendations were included.

On February 20, the company forwarded to us a copy of Mr. Hyde's recommendations dated January 20, 1970, together with 6 sketches covering various items of construction.

On March 4 we advised the company that excessive smoke observations and citizen complaints indicated that the modifications thus far installed had not solved the problem. We forwarded a copy of our review criteria (copy attached) and requested that any items listed which had not been installed be incorporated as early as possible, and that a schedule for their installation be forwarded to us by March 16, 1970. We further requested that drawings and specifications covering this work be forwarded to us by no later than March 23.

On March 5, Mr. Leiken replied to the effect that some experimentation would be required to attain best results from extensive modifications which had been accomplished in February. He also advised that any information we wished regarding drawings and specifications we could obtain from Mr. Paul Hyde.

CURRENT STATUS

Our current information from Mr. Hyde is that the following modifications have been completed:

1. The burner shell has been repaired to present reasonably airtight integrity.

2. Forced overfire air blower nozzles have been installed.

3. Minor modifications to the underfire air system have been accomplished, but Mr. Hyde's recommendations are that additional underfire air volume will be necessary.

4. Baffles have been installed around the perimeter of the burner outlet.

Mr. Hyde's recommendations are that the following steps next be accomplished in the order of priority listed:

1. Modify underfire air system to provide additional air volume.

2. Install exit damper at top of burner.

3. Install auxiliary burners.

The company is currently negotiating for the sale of all sawdust and the possibility of selling the bark as well. If successful in both categories, further use of the burner should not be necessary.

DISCUSSION

It is the opinion of the staff that the attached criteria represent the best current state-of-the-art in wigwam burner combustion technology, and that only by modification in complete accordance with these criteria can a wigwam burner be made capable of performance within regulatory limits.

A step-by-step program of incorporating these modifications has been recommended to L and H Lumber Company by its consulting engineer for the stated purpose of reducing the investment to the minimum necessary to achieve compliance. Staff observations and citizen complaints indicate that the steps so far accomplished have resulted in little improvement.

The position of the staff is that those modifications necessary to completely satisfy our criteria should be accomplished as early as possible, and that drawings and specifications covering all modifications be submitted for our review and approval, as have been requested, prior to further construction.

STAFF RECOMMENDATION

The staff recommends that the Commission authorize legal counsel to draft an order stipulating:

(a) That L and H Lumber Company cease operation of its wigwam burner by no later than July 15, 1970 unless it has been modified in accordance with plans approved by the Department prior to construction, and thereafter operated in such manner as to comply with then applicable standards, provided

(b) That an automatic variance from the above terms be granted until September 1, 1970 if by that date complete termination of the use of the burner can be accomplished by approved alternative methods of disposal.

3/3/70

DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. Box 231, Portland, Oregon 97207 – Telephone: (503) 226-2161

WIGWAM WASTE BURNER PLAN REVIEW CRITERIA

The following is a brief outline of the criteria to be applied by the Department in the review of plans and specifications covering the construction or modification of wigwam waste burners. It is the experience of the staff that the potential capability of a wigwam burner complying with Oregon Administrative Rules pertaining to air pollution can only be realized by correctly engineered design and installation in accordance with these criteria, together with correct and conscientiously applied operational and maintenance practices.

1. Repair to the burner shell to provide reasonably airtight integrity, particularly in the upper portions of the shell. Suitable means shall be incorporated to reduce leakage at the point of conveyor entry to a minimum.

2. A damper at the top of the burner to provide adjustable area restriction to 100% closure.

3. Overfire air introduction by forced-air means, consisting of an arrangement of blowers and high velocity jets or nozzles of appropriate capacity discharging tangentially, with provision for convenient volume adjustment.

4. A forced underfire air distribution system to supply air to all portions of the base area of the fuel pile, of capacity appropriate to the burner size, with provisions for convenient volume adjustment. Individual air outlets must be of a design to provide maximum diffusion and to preclude plugging by ash or clinker.

5. Auxiliary burners, gas or oil fired, at least three in number, arranged to direct flame radially toward the fuel pile at ground level.

6. An automatic controlling-recording system to provide multi-step or modulating control of auxiliary burners and exit damper to maintain a burner exit gas temperature of 800 to 1200 degrees F. The temperature sensing element shall be of the chromal-alumel thermocouple type. From startup, control sequence shall provide the following:

   a) Auxiliary burner activation until exit temperature reaches 800°F. Manual restart.

   b) Automatic exit damper modulation or nulti-step control within the range to 800°F to 1200° F, depending upon fuel characteristics.

   Recorder may be circular seven day maximum, or strip chart - 30 day. Charts must be forwarded to the Department of Environmental Quality for their permanent records at the end of each month.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL STAFF

DATE : May 8, 1970 (For presentation at Meeting of May 22)

SUBJECT: STATUS REPORT, Round Prairie Lumber Co., Dillard

BACKGROUND

The wigwam waste burner at Round Prairie Lumber Co., is located approximately 11 miles south of Roseburg immediately adjacent to the Interstate Freeway and with its top about the same elevation as the southbound lanes of the freeway.

At the July 25, 1969 Commission meeting in Roseburg, Mr. Ralph Sanstede Manager, Round Prairie Lumber Company, presented a plan to eliminate use of the burner by utilizing the incinerated residues as fuel in a new boiler installation. He stated that an engineer had been retained to prepare designs for the installation.

Action of the Commission was then to request that the staff and Round Prairie Lumber Company present a progress report at the Commission's September meeting regarding: (a) design and installation of the boiler, and, (b) more efficient interim operation of the wigwam burner to reduce its emissions.

At the September meeting, it was reported that the only satisfactory solution appeared to be through sale of the sawdust and use of the remaining residue (bark) as boiler fuel; and that the company appeared to be progressing satisfactorily in its program to eliminate the burner by this means and to achieve interim improvement of the burner's operation.

CURRENT STATUS

On December 1, 1969, we were informed verbally by Round Prairie Lumber Company that the boiler installation was being held in abeyance due to lack of capital and that the plan was to bring performance of the burner into compliance with regulations by its modification in accordance with methods developed by the OSU Forest Research Laboratories. The company had retained Russ Bonlie, then of the Forest Research Laboratories, to prepare plans for the modifications, and Mr. Bonlie had guaranteed to achieve compliance with regulations.

Preliminary plans were received from Mr. Bonlie for our review on January 26, and our comments forwarded on January 27.

To date no further plans have been received, although the company has received a proposal and quotation from Mill Owner's Construction Company of Eugene, apparently based on the preliminary plans.

On March 17, the company was requested by letter to forward a definite program and schedule for the solution of the problem. We stated that the following schedule would be considered acceptable:

ITEM	COMPLETE BY (date)
Preliminary plan submittal	Completed
Final plan submittal	March 30, 1970
Installation complete	April 20, 1970
Check out and inspection	April 24, 1970

In subsequent transmittals Gordon G. Carlson, Attorney for Round Prairie Lumber Co. has advised that efforts to obtain plans have continued without success, and that the above schedule thus could not be met. We have in turn advised that resolution of this problem is the responsibility of Round Prairie Lumber Company, and that ample time has elapsed for its solution.

STAFF RECOMMENDATION

The staff recommends that the Commission authorize legal counsel to draft an order stipulating :

(a) That Round Prairie Lumber Company cease operation of its wigwam burner by no later than July 15, 1970 unless it has been modified in accordance with plans approved by the Department prior to construction, and thereafter operated in such manner as to comply with then applicable standards, provided

(b) That an automatic variance from the above terms be granted until September 1, 1970 if by that date complete termination of the use of the burner can be accomplished by approved alternative methods of disposal.

To: HMP
NWRO

GORDON G. CARLSON
ATTORNEY AT LAW
329 S. E. JACKSON STREET
ROSEBURG, OREGON 97470

Phone 672-4742

P. O. Box 357

May 13, 1970

Mr. Kenneth H. Spies, Director
Department of Environmental Quality
1400 S. W. 5th Avenue
Portland, Oregon 97201

Dear Mr. Spies:

Round Prairie Lumber Co. has asked me to reply to your letter of May 11.

Mr. Sandstede will attend your meeting at 9:00 a.m. on Friday, May 22.

In the memorandum addressed to the members of the Environmental Quality Commission from the Air Quality Control Staff, it is stated in the paragraph headed "Current Status" that "Mr. Bonlie had guaranteed to achieve compliance with regulations". Neither Mr. Bonlie, nor Mill Owners Construction, Inc., the company for whom Mr. Bonlie now is employed, has submitted plans nor submitted to Round Prairie Lumber Co. any meaningful guarantee. In a document accompanying a letter of March 17, 1970, Mill Owners Construction, Inc. stated that certain generally described equipment would be operating within the state air pollution standards when installation is complete. This statement is followed by the following language: "However, due to the fact that we have no control over the operation of this unit after installation, there is no guarantee of the results". Since Round Prairie will be operating the unit after its installation, the guarantee is meaningless unless it guarantees results after installation. Round Prairie would, of course, expect to follow manufacturer's instructions and would not expect the guarantee to be operative unless such instructions were followed, but would expect the guarantee to cover its operations if they complied with directions.

As I mentioned earlier in this letter, and as Mr. Sandstede and I have mentioned repeatedly in prior correspondence, there have been no plans submitted by Mill Owners Construction, Inc. or any other company, despite requests by Round Prairie, which could be submitted to your office for approval.

You will be happy to learn, however, that despite the problems with the burner equipment, the burner itself is causing very little problem at the present time. Hanna has contracted to purchase the saw dust, and the saw dust is now all being hauled away rather than burned. Mr. Sandstede estimates that the smoke and fallout have been reduced by about 90%.

Mr. Sandstede would like to have you or some other representative of the department visit the plant and see for yourself what wonders have been accomplished by eliminating the saw dust.

Mr. Sandstede is still attempting to dispose of the other refuse by some means other than burning. We will, of course, keep you advised as progress is made.

Very truly yours,

GORDON G. CARLSON

GGC/nc

cc: Ralph Sandstede
Round Prairie Lumber Co.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

DATE : May 7, 1970 for Meeting of May 22, 1970

SUBJECT: B & D PAVING, Hood River

Francis Catlett

This plant is located within two miles of the city limits of Hood River, and therefore is within a Special Control Area as defined by OAR 340, Section 26-010 (2)(d), and must comply with the process weight table which is a part of that regulation. The plant has a capacity of 60 tons per hour, so that its maximum allowable emission is 40 pounds per hour. The present emissions from the main exhaust are estimated to be between 150 and 200 pounds per hour. In addition, control of ancillary sources has been unsatisfactory.

The history of controls at this plant has been a matter both of getting devices installed and getting sufficient water to enable using efficient controls. There has been sufficient water since May 1969. The present controls are a pair of multiple-cyclone units and four sprays in the ductwork leading to the stack plus six more in the stack. No plans or overall program have ever been submitted for review and approval for any controls at this plant.

The plant was last inspected on March 10, 1970. After that inspection, the plant was requested (by letter dated March 30, 1970) to submit a proposal for an adequate scrubber, with a reply requested by April 15, 1970.

A letter from the company, dated April 15, 1970, has been received, stating that the control of ancillary sources has been completed, and also that the four sprays referred to above have been installed without prior review or approval. A request was made for a list of plants to "look at for reference".

CONCLUSIONS:

1. The plant in its present configuration is incapable of complying with the asphalt plant emission regulations.

2. The company has not engaged the services of a qualified consultant or submitted an acceptable proposal and schedule.

RECOMMENDATION:

That the Environmental Quality Commission issue an order for B & D Paving, at Hood River to submit a proposal for complete control of dust emissions by June 15, 1970, and to achieve compliance with OAR 340-26 by July 15, 1970.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPHILLIPS, Chairman
HERMAN MEIERJURGEN, Member
STORRS S. WATERMAN, Member
E. C. HARMS, JR., Member
GEORGE A. McMATH, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

George Green

DATE : May 7, 1970 for Meeting of May 22, 1970

SUBJECT: DON H. MORRIS CO. HOT MIX ASPHALT PLANT, LINCOLN CITY

This plant is located within six miles of the city limits of Lincoln City, and therefore is within a special control area as defined by OAR 340, Section 26-010(2)(d), and must comply with the process weight table which is a part of that regulation. The plant has a design capacity of 90 tons per hour, although the company has indicated it is generally operated at a rate of 25-30 tons per hour. Its emissions are therefore limited to no more than 40 pounds per hour.

The present emissions of this plant are estimated from the following expression, which was developed by a manufacturer of asphalt batching equipment:

(Production rate, tons/hour) x (% fines in raw feed) x (entrainment factor) equals the amount of dust emitted from the dryer.

The "% fines" is defined as the weight percent of the cold, raw feed which will pass the smallest (200 mesh) of a standard screen series.

The entrainment factor is based on the conversion from "tons per hour" to "pounds per hour", but altered to reflect the difference in amount of fine dust entrained by different gas velocities through the drier. Three ranges of operation are recognized, and the factors used are:

	Factor:
Low range, below design capacity and hence low gas velocity (600 feet per minute)	1025
Mid-range, at design capacity (700 fpm)	1530
Over capacity, high gas velocity through the drier (800 fpm)	2180

For this plant, running below design capacity, the expression is:

(30)(0.07)(1025) = 2150 lb/hr. from the dryer.

This dust is treated by one cyclone, of a size and type which may be expected to have a maximum efficiency of 70%. Hence the final emissions from the plant are:

(1.0 - 0.7) (2150) = (0.3) (2150) = 645 lb/hr.

That the emissions are grossly in excess of those allowed by the regulations is also indicated by the appearance of the plume when the plant is operating, in that the plume is of a Ringelmann 5 opacity.

The plant was first surveyed on April 14, 1969. By a letter dated May 6, 1969, the company was notified that the plant was not in compliance, and proposal for control was requested. No written answer was received, but from a phone call and subsequent office conference October 23, 1969, it was concluded that progress was being made toward a proposal. Office conferences on February 3 and March 19, 1970 revealed that no more progress had been made than there was in October 1969. The company was requested, by letter dated March 24, 1970, to submit a proposal by April 15, 1970. The staff's feeling was that if real progress in selecting controls had been made in the last year, it should be possible to summarize the decisions and present a proposal in the time allotted. No reply has been received.

CONCLUSIONS

1. This plant is in violation of OAR 340, Section 26 by emitting a greater amount of dust than is allowed by the Process Weight Table which is a part of that section.

2. The appearance of the plume violates OAR 340, Section 21-011, "Smoke Discharge".

3. The staff has been conciliatory and cooperative for a year with no improvement in emission control and no firm prospect for improvements in the foreseeable future.

RECOMMENDATIONS

That the Environmental Quality Commission issue an order for the Don H. Morris Co. to submit a proposal for controlling dust emissions from its plant by June 15, 1970, and that the project be complete by July 15, 1970.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION

DATE : May 20, 1970 for Meeting of May 22, 1970

SUBJECT: FIELD BURNING COMPLAINTS

Since the April 23rd Hearing, 22 letters regarding the proposed regulations have been received from farmers, and 45 letters have been received from Eugene area residents. The letters from the Eugene area residents in general request an immediate reduction in the acreage burned, while the growers' letters oppose any reduction in acreage until suitable alternative methods have been proven in the field. These letters are herewith offered in evidence to become a part of the record of this meeting.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

DATE : May 11, 1970 for Discussion at Meeting of May 21, 1970

SUBJECT: SUMMARY OF APRIL 23, 1970 HEARING ON PROPOSED FIELD BURNING SCHEDULE, AND STAFF REACTION

I. HEARING SUMMARY:

Attached for your review are a summary of the salient points of testimony at the hearing and copies of statements which were supplied to the Secretary at that time. Some additional letters from seed growers have been received. They presented the same points as the 141 letters received earlier and summarized at the hearing.

II. SUMMARY OF STAFF COMMENTS:

Although the basic conclusions presented by the staff in its report to the hearing remain the same, some comments on certain points of the testimony are warranted.

Comment on seed industry testimony

1. Regarding the proposal to base quotas on registered acreage, the "registered acreage" being that amount registered by the Seed Council in its local programs, the staff concludes that the best method of resolving possible inequities in quota allocation is to allow the Department to adjust quotas where it concludes such adjustments are justified, based on information available from the Seed Council, the County Extension Agent or Oregon State University. Such adjustments may result in either an increase or a decrease in the acreage quota for any given district.

2. Regarding a period of unlimited burning or a possible variance, the staff can only say it is in steadfast opposition to any uncontrolled burning at this time.

3. Regarding priority areas, the only need may be for some flexibility at the Department level in making decisions about which areas do or do not command a real "priority"for burning.

4. Some confusion and conflict remain in the area of cereal grain burning. The staff feels that as a practical matter, the grower who wants to burn cereal grain stubble to prepare a seedbed for seed grasses or legumes faces exactly the same situation as the grower who wants to burn his annual ryegrass straw in preparation for reseeding annual ryegrass. The priorities set forth in the statute, however, definitely place cereal grain burning below annual ryegrass burning, and the quotas set by the staff were designed to get the perennial and annual burned in a normal season with only a slight chance for burning any cereal grain.

Comment on Fire Chiefs testimony

1. Regarding weekend burning, it is felt that any day on which burning could be accomplished should be utilized. However, the staff agrees with the suggestion by the Fire Chiefs that weekend burning in priority areas should not be permitted.

Amendments to Proposed Schedule

Based on the testimony presented at the hearing, the staff discussions subsequent to the hearing, certain amendments have been made to the proposed schedule. Copies of the original and amended proposed schedule are attached for your consideration.

The amendments to the definitions of North and South Valley and to III 4.d are the result of legal points brought up by Senator Fadeley during the hearing recess.

The new section III 4.e under "Further Provisions" is proposed by the staff to allow some flexibility in making any necessary and justifiable adjustments in quotas or priority area boundaries.

PROPOSED SUMMER FIELD BURNING SCHEDULE, AS AMENDED

This Schedule and Regulation are adopted in lieu of Sections 28-020, 28-025, 28-030, 28-035, Chapter 340, OAR.

I. DEFINITIONS: As used in this regulation and schedule,

1. "Northerly winds" means winds coming from directions in the northern half of the compass.

2. "Southerly winds" means winds coming from directions in the southern half of the compass.

3. "South Valley" means all fire permit issuing agencies in Benton, Linn, or Lane Counties, with the exception of the Linn County portion of the Stayton Rural Fire Protection District.

4. "North Valley" means all other fire permit issuing agencies in the Willamette Valley.

5. "Priority Areas" means the following areas in the Willamette Valley:

   a) Areas in or within 3 miles of the city limits of incorporated cities of populations of 10,000 or greater,

   b) Areas within 1 mile of airports serving regularly scheduled airline flights,

   c) Areas within 1/4 mile of U. S. Interstate Highway 5, U. S. Highway 99W, U. S. Highway 99E, U. S. Highway 99, and State Highway 34.

   d) Areas in Lane County south of the line formed by U. S. Highway 126 and State Highway 126.

II. SCHEDULE OF METEOROLOGICAL CONDITIONS:

Class of Day	Meteorological Conditions
Prohibition:	Forecast of northerly winds and maximum mixing depth less than or equal to 3500 feet mean sea level (MSL).
Marginal Class S:	Forecast southerly winds.
Marginal Class N:	Forecast northerly winds and maximum mixing depth greater than 3500 feet MSL.

III. SCHEDULE OF EXTENT AND TYPE OF BURNING:

1. Burning Hours. Burning may begin at 9:30 a.m. PDT, and all fires must be out by sunset.

2. Priority for Burning. On any marginal day, priorities for burning shall follow those set forth in ORS 449.840, Section 2, which give perennial grass seed fields first priority, annual grass seed fields second priority, grain fields [redacted] and other burning [redacted] shall not be permitted.

3. Allowed Burning.

a) Prohibition:

Under prohibition conditions no burning shall be allowed except where a fuel such as propane is used such that combustion is essentially complete.

b) Marginal Class S:

North Valley: Burning in priority areas only.

South Valley: One or more basic quotas as authorized by the Department in accordance with Schedule "A" attached.

Priority Areas: Location, timing, and amount of burning shall be determined by the local permit authority, provided that no field shall be burned on the upwind side of any city, highway, or airport within priority areas. No weekend burning.

c) Marginal Class N:

North Valley: One or more basic quotas as authorized by the Department in accordance with Schedule "A".

South Valley: Burning in priority areas only.

Priority Areas: Location, timing , and amount of burning shall be determined by the local permit authority, provided that no field shall be burned on the upwind side of any city, highway, or airport within priority areas. No weekend burning.

4. Further Provisions.

a) Permits shall be issued on a day-to-day basis and each permittee shall have a current valid written permit for that day issued in accordance with this schedule and regulation.

b) The staff of the Department of Environmental Quality may authorize burning in excess of that permitted by the schedule where conditions in their judgment warrant it, or, by express written permit, burning on an experimental basis, and may also, or a fire district by fire district basis, issue limitations more restrictive than those contained in the schedule, when in their judgment it is necessary to attain air quality.

c) In no instance shall the total acreage of permits issued by each permit issuing agency exceed that of the schedule 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 acres 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 2 consecutive days.

d) All Willamette Valley fire permit issuing agencies not specifically named in Schedule "A", shall follow a 50 acre daily limitation.

e) The staff of the Department of Environmental Quality may designate additional areas as Priority Areas, and may adjust the basic acreage quotas of any permit jurisdiction, where conditions in their judgment warrant such action.

IV. Sections 28-020, 28-025, 28-030, and 28-035, Chapter 340 OAR, are hereby repealed.

SCHEDULE "A"

NORTH VALLEY

County and District	Basic Acreage Quotas for Specified Years			
	1970	1971	1972	1973
Clackamas				
Monitor	100	75	50	0
All other permit issuing agencies	50	50	50	0
Marion				
Aumsville	100	100	75	0
Marion #1 (Fourcorners, Brooks, Keizer)	100	75	50	0
Jefferson	100	100	75	0
St. Paul	100	75	50	0
Silverton	225	175	150	0
Stayton	200	150	125	0
Sublimity	200	150	125	0
Woodburn	75	75	50	0
All other permit issuing agencies	50	50	50	0
Polk				
Southeast Polk	225	175	150	0
Southwest Polk	100	100	75	0
Washington				
All permit issuing agencies	50	50	50	0
Yamhill				
McMinnville	75	50	50	0
All other permit issuing agencies	50	50	50	0

SOUTH VALLEY

Benton				
County jurisdiction	300	250	150	0
Corvallis	225	200	125	0
Monroe	275	250	150	0
Philomath	100	75	50	0
North Albany, Palestine	Included in Albany Quota			
All other permit issuing agencies	50	50	50	0

SOUTH VALLEY (Cont.)

County and District	Basic Acreage Quotas for Specified Years			
	1970	1971	1972	1973
Lane				
Alvadore	175	150	100	0
Coburg	150	150	100	0
Creswell	100	75	50	0
Junction City	425	375	225	0
All other permit issuing agencies	50	50	50	0
Linn				
Albany	875	775	500	0
Brownsville	750	675	425	0
Halsey-Shedd	1250	1100	695	0
Harrisburg	1275	1150	725	0
Lebanon	950	850	525	0
Scio	225	200	125	0
Tangent	600	550	350	0
All other permit issuing agencies	50	50	50	0

SUMMARY OF TESTIMONY - APRIL 23, 1970

FIELD BURNING HEARING - STATE CAPITOL, SALEM

The meeting was called to order just past 2:00 P.M. by Chairman McPhillips. Mr. F. Glen Odell of the Air Quality Control Division staff presented the staff report on field burning, which was made a part of the hearing record, and reviewed the proposed field burning schedule covering the period July 1 - October 31 for the years 1970, 1971, 1972 and 1973.

The Chairman offered some brief instructions to those who were to present testimony, asking that they keep their presentations short, and on the point of the proposed regulations. Testimony was then taken, and the major points made by those testifying are summarized below:

Mr. Orville Bernard, representing the Crimson Clover and Vetch Growers of Yamhill County expressed concern over the possible lack of consideration for cereal grain burning needs, and pointed out the need for time to devise an alternative for open field burning.

Mrs. Ralph Holzapfel, representing Women for Agriculture, told of public opinion polls of field burning. Overall, 1388 persons were polled, with a private concern conducting the polls in Linn County, and the Women for Agriculture polling in Salem and in Eugene. In Salem and in Linn County, 85% of those polled were against an immediate ban on field burning, and 15% were in favor. In Eugene, 72% were against an immediate ban, 25% were in favor of a ban, and 3% were undecided.

Mrs. Holzapfel said that her group was actively trying to interest industry in using the straw, and that straw was available free, shipping included, to any U. S. industry that wanted to try any idea for making good use of it. She expressed doubt that a solution to the field burning problem could be accomplished in 3 years, and asked for assurance that a variance be given for south valley burning if south winds fail to materialize, as well as consideration of possible night burning and burning on due west wind.

Mrs. Marian Frank, representing the League of Women Voters of Central Lane County, disagreed with the proposed regulations and opposed their adoption, since they do nothing but put the smoke elsewhere, and don't really guarantee that Eugene will be spared smoky days. She urged burning only of those fields in which it was a necessity as a disease control measure. She pointed out the value of maintaining agricultural lands and suggested tax incentives for purchase of field incinerators and loans or grants for straw utilization as positive alternatives. She stressed the urgent and immediate need for straw utilization.

Mr. Alvin Freeborn, representing the Polk County Farm Bureau, expressed concern over being able to burn any wheat stubble, and spoke of difficulties last season in trying to get permits to get cereals burned.

Mr. C. F. Colvin, representing McMinnville Industrial Promotions, asked that the Commission give the seed industry ample time to solve its problems.

Fire Marshal LaVerne Carey of Corvallis, representing the Oregon Fire Chiefs Assn., Field Burning Committee, read a letter from Wendell Wick, Chairman of that Committee. The letter presented two resolutions, the first asking that the afternoon advisory normally be issued no later than 1:00 P.M. PDT and preferably by noon PDT, and the second asking that field burning not be allowed on weekends in the north valley. The letter offered reasons for the resolutions, such as the need for time scheduling at the local level, and lack of funds to provide qualified personnel for weekend duty.

Mr. William Rose, representing the Oregon Seed Council, outlined the program of the Oregon Seed Council regarding field burning as follows:

a. Assist in establishing communications from DEQ-Fire Marshal-Fire District-Grower.

b. Establish local committees in each fire district to assist the fire chief in implementing the program.

c. Register fields by class (Per., annual, cereal) and map all priority areas that are to be burned.

d. Maintain up-to-date records, showing fields that are burned and fields yet to be burned.

e. Assist in setting up permit issuing agency where there are no fire districts.

f. Provide aircraft for observation purposes whenever needed.

g. Publicize and explain the smoke management program to all growers to assure cooperation. Hold meetings in individual fire districts, utilizing news letters, radio, telephone and personel contact.

However, he felt that some fire districts were given quotas which were too low, and suggested that quotas be based on a percentage of the registered acres, 3% for the north valley and 4½% in the south. He also asked that an emergency provision be included in the schedule to allow unlimited burning on three days, if needed, between August 20 and September 10.

Mr. Charles Kizer, representing the Oregon Seed Council, offered certain objections and proposed modifications to the schedule: In regard to priority areas, he suggested addition of DEQ capability to designate other areas recommended by local committees and approved by DEQ. He requested clarification of the south valley burning schedule to assure that 1 basic quota would be released in the morning and 1 or more basic quotas in the afternoon on south wind days. He objected to the lack of consideration for need to burn some cereal acreage, and suggested, as did Mr. Rose, a quota system based on registered acreage, 3% in the north valley counties and 4½% in the south. He recommended a quota of 1 or 2 percent be

authorized for burning in the south valley under conditions of mixing depth at least 3500 feet and winds less than 10 mph, such burning only on fields which are clipped or are to be backfired. He also requested consideration at the August 1970 EQC meeting of a possible 3 day variance, if conditions warrant it.

Mrs. Wicks Beal, representing the Eugene City Council, voiced grave concern about the proposed regulations, asking about meteorological information, field registration fees, reductions in acreage, and the Commission's position on field burning. She also said that the Council stood ready, if serious air pollution from field burning occurred, to take any and all necessary action to protect Eugene's citizens. She then introduced Mr. Arthur Johnson, an attorney, who asked questions, primarily regarding meteorological stations and data. The questions were answered by Mr. Snyder, staff meteorologist. Mr. Patterson pointed out to Mr. Johnson that the written permit requirements were still in the regulation, and would remain there.

Mr. Verner Adkison, representing the Lane Regional Air Pollution Authority, stressed the need for a reduction in acreage burned. He restated the possible detrimental effects of smoke on health, and expressed hope that, through real cooperation, a solution would be found.

Mr. Robert Davidson, representing the Linn County National Farmers Organization, felt that although the regulations aren't perfect, the farmers are at least getting a fair shake. He said his group welcomed the chance to make the regulations work.

Mr. Gaylen Mulkey, representing the Polk County National Farmers Organization, pointed out that his county has 2880 acres more grass this year than last, and that 2000 acres of grains need to be burned to plant legumes. He stated that there should be no priorities - every farmer should be treated alike.

Mrs. Margaret Patoine, representing Lane Regional Air Pollution Authority Advisory Council, referred to Dr. Service's report on health effects on field burning in Eugene last summer, and stated the only way to reduce the problem is to reduce the acres burned.

Mr. Robert Stevenson, representing the Oregon Wheat Growers League, expressed concern that quotas don't consider cereal grain acreage, listed needs for burning cereal grains in Willamette Valley, and asked for time to come up with an alternative to burning.

Mrs. Janet Talbert, representing a Eugene Citizens group, urged the Commission to consider strict regulations for burning, and only ryegrass (presumably perennial grasses were meant) be burned under strict control. She presented written testimony from Mrs. M. C. Pattison.

Mr. Paul Koblis, representing himself, criticized proposed regulations because it did not reduce this years cereal and other crops not needing burning for disease elimination. Suggested that now is the time to begin such reduction.

Mrs. Lois Jackson, representing herself, offered general criticism of proposed regulations, meeting place and time, and requested abolishment of burning of seed grass and small grains in Willamette Valley in 1970. She seemed quite upset by the reactions of the Commission and audience to her testimony, and said she felt that since the Department had spent so much time with the farmers so far this year, the public deserved a little time.

Mr. Robert Humphreys, representing growers in the Waldo Hills-Silverton area, supported the Seed Council statements, voiced opposition to the planned reduction in quotas, and questioned the applicability of a mobile incinerator to the hilly country. He asked that burning in his area be allowed under SW winds, and offered to not burn on weekends if quotas were upped from 3% to 5% in his area. He pointed out that different areas have different problems, and regulations should be set to meet these different conditions.

No more oral testimony was offered, so Chariman McPhillips noted that two telegrams and a petition had been received regarding the proposed regulations. Mr. Spies then read a letter from Member Ed Harms, who was unable to be present at the hearing, supporting the proposed regulations.

Chairman McPhillips then called a recess. After the recess, Mr. Spies read a letter from the Office of the State Fire Marshal opposing any midday advisories because of lack of funds to pay the personnel needed for the additional weekend duty. Another letter in support of the regulations, from C. D. Smith, Corvallis City Manager, was read. Mr. Spies then noted that 141 letters from concerned growers had been received regarding the regulations, and asked that the letters be made a part of the hearing record.

Mr. Waterman moved to defer action until May 22, unless the staff could assemble and distribute information so that the members could review it in time for earlier action. Mr. Meierjurgen seconded, and the motion passed.

Chairman McPhillips then adjourned the meeting.

CITY OF EUGENE, LANE CO. OREGON

C I T Y O F E U G E N E

LESTER E. ANDERSON
MAYOR

May 20, 1970

State Department of Environmental Quality
1400 Southwest 5th
Portland, Oregon

Gentlemen:

This is to request that copies of all permits issued for the burning of fields be filed with your Department as a routine matter, at the time such permits are issued. Such a procedure should provide valuable quantitative data for the Department in its studies of the effectiveness of this years burning regulations.

Will you be kind enough to advise us of your decision on this matter?

Sincerely,

Lester E. Anderson
Mayor

Hugh McKinley
Manager

WB:m

(3)

Statement made by Women for Agriculture at Public Hearing of D.E.Q.
April 23, 1970 Subject: Field Burning

Women for Agriculture have been conducting a public opinion poll concerning field burning and plan to continue to do so. We think the results to date are fitting testimony at this time.

A total of 1388 people were polled, 782 by a polling firm from Portland, by mail to a percentage of registered voters from all areas of Linn County; 435 by Women for Agriculture members at an exhibit in Salem and 171 by Women for Agriculture members at an exhibit in Eugene at the Valley River Center.

To the question Should field burning be halted immediately? the response was:

Eugene------72% no 25% yes 3% undecided
Salem--------85% no 15% yes
Linn Co.----85% no 15% yes

This gives an average of 80% of the 1388 people polled in favor of giving the seed industry time to find an alternative method of field sanitation and thermal treatment. Who answered this poll? In the Salem area 16 of the 435 people polled were in agriculture or ag-related occupations. In Eugene 6 out of 171 people polled were in ag-related jobs. The Linn Co. poll didn't give this information.

This testimony relates to the plan for a complete phase out of open field burning by 1973. We are diligently seeking solutions to the field sanitation problems of the grass seed industry for example: Women for Agriculture have formed a committee to assist the seed council and OSU in trying to interest industry in straw as a raw material. We hope to pass on the reports from the research and ship any company interested straw for their experimentation. We are confident that with a united effort a solution can be found but are not sure it can be done in 3 years. We ask the D.E.Q.

and E.Q.C. to consider the long range effects of their actions on the total environment, not just air quality, and hope that their policies are not meant to encourage urbanization and industry and discourage agriculture from staying in the Willamette Valley.

Women for Agriculture support the plans of the D.E.Q. with consideration of the afore mentioned timetable and ask with the Oregon Seed Council that assurance be given that a varience be granted if the South winds do not materialize. We wonder if burning will be allowed on a straight West wind? We also think there is merit in allowing burning at night.

THE LEAGUE OF WOMEN VOTERS OF CENTRAL LANE COUNTY

Affiliated with the League of Women Voters of Oregon and of the United States

Chairman McPhillips and Members of the Environmental Quality Commission:

We are indeed grateful to you for the many hours you devote to meetings, hearings and discussion in order to make informed judgements. We realize that the proposed regulations for field burning in the Summer of 1970 are the result of a great deal of research, testimony and consideration. However, we are not in agreement with them and oppose their adoption.

With the present methods of burning there will be smoke. Smoke, in the concentrations received in the Eugene-Springfield area in the past, is a health and an economic hazard. It is likely that we will have a few bad days even under the proposed regulations. Burning with winds blowing away from metropolitan areas does not solve the problem of smoke, it merely puts it elsewhere.

We urge you to allow burning only of those fields in which it is necessary to control disease. That would remove approximately 85,000 acres of cereal grains (30% of the crop) from the burning schedule. Some of the 90,000 acres of annual rye grasses might also be removed by the same reasoning.[1] These reductions would guarantee less smoke.

Recognizing the value of maintaining agricultural lands as well as preventing disastrous economic hardships for growers, we favor these positive alternatives to burning: 1. Tax incentives for the purchase of mobile field incinerators to be used in burning stubble; and 2. Loans and/or grants for straw utilization industries. These two alternatives are envisioned as one program whose efficiency depends upon concurrent implementation.

We agree with the seed grower who said "straw is too valuable to burn." Positive action towards straw utilization is necessary now.

Ruth Bascom

Ruth Bascom
President

Marian Frank

Marian Frank
Chairman
Air Pollution Committee

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1. Agricultural Burning in the Willamette Valley, Air Resources Center, Oregon State University, Corvallis. Revised January 1970. P. 1.

April 16, 1970

Mr. B. A. McPhillips, Chairman
Environmental Quality Commission
Department of Environmental Quality
Air Quality Control Division
State Office Building
1400 S.W. 5th Avenue
Portland, Oregon 97201

Regarding: Public Hearing; Proposed Summer Field Burning Schedule

The Oregon Fire Chief's Association Committee, considering the subject of field burning and its related problems met on April 13, 1970. As a result of that meeting, the following resolutions were adopted and are herein presented for the consideration of the commission.

Resolution #1:

That the proposed afternoon advisory normally be issued no later than 1:00 P.M. and preferably by 12:00 noon.

Reasons:

This would allow local fire permit agencies to schedule afternoon activities for the latter part of the day without fear of interference by the relatively late advisory as proposed. This would give permit issuing agencies an opportunity to to contact permittees prior to their leaving their phones for the afternoon.

Resolution #2:

That field burning not be allowed on weekends in the north valley and that priority area burning not be allowed on weekends in the south valley.

Reasons:

In order to maintain continuity of policy, familiarity with local problems, such as priority areas, type of crop produced, hazards associated with given field areas, type, quality, and amount of fire control equipment of growers, and anticipated local weather conditions such as whirlwinds, or other factors which closely affect necessary decisions based solely on experience and judgement, it is normal that one person is delegated the responsibility for administering the field burning for a local permit issuing agency. This person is usually a salaried employee who works Monday through Friday only. Weekend burning, in many cases, will necessitate that those persons so designated be required to return to work on Saturdays and Sundays at a time and one-half rate of pay. Few districts are capable of absorbing this extra cost.

By eliminating all weekend agricultural burning in the north valley, this problem would be removed and the seed growers would still enjoy a safe margin of burning days available.

By eliminating burning of priority areas in the south valley, the problem would be greatly relieved.

Because the number of burning days required to complete the south valley is nearly identical to the few days available, as predicted, the committee agreed that burning on any weekend day of "marginal class S" should be allowed.

Should conditions create an undue hardship, this policy could be reviewed and revised at a later time during the burning season.

Respectfully submitted,

Wendell Wick

Wendell Wick, Chairman

TESTIMONY OF BILL ROSE, before the DEQ 4/23/70

I. This plan proposed by the DEQ is based on utilizing wind direction, location of fields, smoke dispersal conditions and prevailing topography, to permit field sanitation with a minimum of nuisance to urban communities until the mobile incinerator or other alternative methods are developed.

II. With the changes outlined below under #III, the Oregon Seed Council will do everything possible to implement the program and agrees to provide the following services and equipment.

a. Assist in establishing communications from DEQ-Fire Marshall-Fire District-Grower.

b. Establish local committees in each fire district to assist the fire chief in implementing the program.

c. Register fields by class (Per., annual, cereal) and map all priority areas that are to be burned.

d. Maintain up-to-date records, showing fields that are burned and fields yet to be burned.

e. Assist in setting up permit issuing agency where there are no fire districts.

f. Provide aircraft for observation purposes whenever needed.

g. Publicize and explain the smoke management program to all growers to assure cooperation. Hold meetings in individual fire districts, utilizing news letters, radio, telephone and personal contact.

III. A. Since some fire districts are disportionately low in basic quotas, and accurate acreages have been impossible to attain in the past, it is felt that basic quotas should be based on 3% of actual acreage registered in the *N counties and 4½% in the *S counties.

B. As evidence, we submit Estacada with 2,500 acres with a 50 acre quota, Silverton with 11,000 acres with 225 quota, Sublimity with 8,900 and a 200 quota. These figures are still approximate but will be firm when mapping and registration is complete.

It is further felt, an emergency provision be included in case unusual weather or other unforeseen circumstances arise. This provision would be unlimited burning on the best 3 days between August 20 and September 10.

*N and S are defined in "Proposed Summer Burning Re." attached to this report.

TESTIMONY OF CHARLES S. KIZER, representing the
OREGON SEED COUNCIL, before the Environmental Quality Commission

4/23/70

Bill has just outlined some of the assistance we are prepared to furnish towards a successful smoke management program. However, a successful program requires that the needs of agriculture be recognized along with those of the city population. With this in mind we propose the following modifications to the schedule.

1 /// The definition of "priority areas" should include a section (d) "Other problem areas recommended by the local committee and approved by the DEQ" For instance Areas immediately South of towns of under 10,000 in the South Valley and North of these towns in the North Valley should be allowed discretion in burning to avoid direct smoke. Such protection demands that these areas be classed as "priority areas" also.

Oregon Highways 18 and 22 have some problems and under the schedule much of the acreage South of Eugene must be burned with a South wind. All the acreage South of Eugene should be treated as a priority area and could well be added to the definition at this time.

2 /// The quotas contained in schedule "A" for the South Valley are really only half quotas. The idea is to issue only half of a days quota in the morning so as to interrupt the burning should the day unexpectedly turn into a class N day.

While the Department's testimony earlier calls for two quotas in the South Valley on a Marginal class S day, we find no such provision in the schedule. We, therefore, recommend that the "allowed burning" (III,3, b, page 2) under Marginal Class S, South Valley be amended in this manner: "One basic quota in the morning and one or more basic quotas in the afternoon as authorized by the department in accordance with schedule "A." We understand that this is to be the practice and feel it should be so stated. The afternoon half of the days quota must be authorized by 12 noon or shortly thereafter.

3 /// The quotas listed under schedule "A" are based on 3% (in the North Valley) and half of 4.5% (in the South Valley) of the estimated perennial and annual grass

acreage in each district. We have two objections: (1) It does not take into consideration the need to burn some cereal acreage. (Mr. Christensen and Mr. Stevenson will make some specific recommendations on this matter).

(2) Estimates have a way of coming up with serious errors. We are going to register the acreages under consideration and will soon have factual information on actual acreages. Therefore we recommend that "schedule 'A', North Valley" be headed with a statement such as: "Basic quota year 1970 equals 3% of the registered perennial and annual grass acres in each district with a reasonable reduction for 1971, 72 and 73 based on the development of a feasible mobile incinerator, estimated to be as follows:" And a similar statement for the South Valley except that the appropriate percentage figures be used.

4 /// The best burning practice, both from the standpoint of agronomy and from the standpoint of smoke management, requires that some fields be clipped prior to burning. Timing of the clipping/burning operation is important. The proposed schedule does not recognize this need. Remember.....it is important to smoke management as well as crop culture.

In addition the proposed schedule does not make best use of the air resources of the valley. You will note (figure II, page 16, DEQ report) that substantial acreages were burned under prevailing North wind conditions on six days with no significant reduction in visibility and on four more days with only moderate, transient reductions. Therefore, we recommend that a quota of perhaps 1 or 2 percent be authorized for the South Valley on "good" North wind days. (3500' mixing depth and less than 10 mph wind) Such quota to be used on fields which have been clipped or are to be backfired. Remember, tests indicate backfiring reduces emissions by about 50%.

5 /// We are all aware of the unpredictable nature of Oregon weather. Under the proposed schedule we are at the mercy of mother nature and an unusual year (are there other kinds in Oregon???) such as 1966 or 1968 could be disastrous. Therefore, we recommend that the commission give us assurance that our needs for field sanitation will be given serious consideration at your August meeting. If at that time it is

evident that the weather has been unfavorable with serious consequences to growers, we recommend that a three day variance be granted to permit necessary field sanitation.

Thank you for hearing us out - we stand ready to answer questions.

* * *

FOR RELEASE THRUSDAY, APRIL 23, at 2 p.m

STATEMENT OF THE EUGENE CITY COUNCIL

Before the Department of Environmental Quality
April 23, 1970, 2:00 p.m.
State Capitol Building, Salem, Oregon

The Mayor and the City Council of Eugene wish to thank the Department of Environmental Quality for giving us this opportunity to express our opinion of the proposed field burning regulations.

Our only interest in the new regulations is the hope that they will control the smoke that pours into our city every year during the field burning season. We are not meteorologists or air pollution experts and we are not farmers. The mechanics of the controls you are discussing toady are questions for experts, not laymen. You, Mr. Chairman, and the Commission and your staff are the experts in these areas, and you have the responsibility for administering the law, which is supposed to protect us. It did not protect us last year. You promise that this year's regulations will be better. We hope they are, but it is difficult for us to believe they will be.

We cannot conceal from you that we are seriously concerned about the proposed regulations because in our opinion -- and we speak only as laymen -- the new proposals represent a retreat from the staff recommendations adopted by the Commission last summer following the smoke crisis in Eugene, when we had to call upon the Governor for help. Last fall the stated intention of the Department was to outlaw all burning of cereal grains and all other fields except grass seed fields; to limit severely the burning of annual seed grass fields and to give priority only to perennial grass seed crops.

Moreover, we understood that you intended to study the consequences of prohibiting all burning in 1970, and that you had committed yourselves to the objective of eliminating all field burning in the Willamette Valley not later than 1972.

In addition, the Attorney stated to the House Task Force on Pollution last August -- and we quote from the minutes -- "That HB 1228 gives the Commission the power to do practically anything it needed to curb the pollution situation and he felt that the statute even allowed permanent banning if the Commission could justify its position."

It appeared to us, therefore, that the Commission had the power to abate pollution; that it shared our concern for perennial grass seed growers, as opposed to other farmers who burn only to destroy debris, because the economy of the perennial seed growers, so we have been told, is completely dependent on burning, and that of other farmers is not. But under the new regulations it now appears that, while perennial grass fields are given first priority and annuals a second priority, other grain fields are also included under a third priority, followed by a category listed as "other burning."

It is obvious to us that the total volume of burning -- the acreage to be burned during this coming summer -- will be as great, or even greater, than that burned last summer. We read with apprehension your statement in the summary of the proposals "As long as smoke is being generated in the magnitude resulting from field burning, air pollution will result somewhere in the state."

We hope it does not happen in Eugene, or indeed, in any other part of the state. We would not want another community to suffer as we did when, on August 12, the smoke was so heavy that it triggered the fire alarms in some downtown Eugene buildings.

At the first meeting between representatives of the city and the seed growers association, the growers proposed to ask the Department to place a meteorological station in Eugene, similar to that in Salem, in order to give this area better weather advice. We see nothing about this in the new proposals, and we would like to inquire if any progress has been made to provide such weather advice in this area.

The seed growers also suggested putting an acreage fee on burning permits to cover aerial monitoring costs and the costs of a communication system to transmit news of wind changes quickly and efficiently. Are these ideas still included in your plans?

Also, we would like to know what procedures have been established to make sure that there are no violations of the law -- that no one is permitted to burn without a written permit. We know that fire departments are not set up to monitor for air pollution; many are volunteers who would be unwilling to turn in firends and neighbors. Is DEQ responsible for seing that violations do not occur? Will the Department have the assistance of state police? Or will the farmers operate on an honor system? Is the Grass Seed Growers Association responsible for the enforcement of all agricultural burning? If not, who is?

Your whole plan seems to be based on the presumption of steady winds, whereas our observations would indicate that Willamette winds are extremely variable. And what if the wind shifts? Even if no new fileds are fired after the shift, smoke from fields already ignited could innundate the city. Who is willing to take the responsibility for this? The Department? The farmers whose fields are causing the smoke? Or the seed growers association? Who can we turn to when the hospitals begin to fill up? Is there anybody, anywhere, who can turn the smoke off?

We are sure that the officers of the Grass Seed Growers Association and the other farmers' groups who are represented here today are men of integrity and that they are committed to the idea of abating the nuisance and health hazard caused by field burning. But, if you will excuse a homely simile, there are always some rotten apples in the barrel. We are told that there were widespread violations of the burning laws last year -- and yet we did not hear of any convictions except for two men who were sentenced to a suspended $25 fine. If no monitoring system has been established, if penalties amount to a slap on the wrist, then anybody will be able to burn anything, anytime he wants, just so long as he calls himself a farmer.

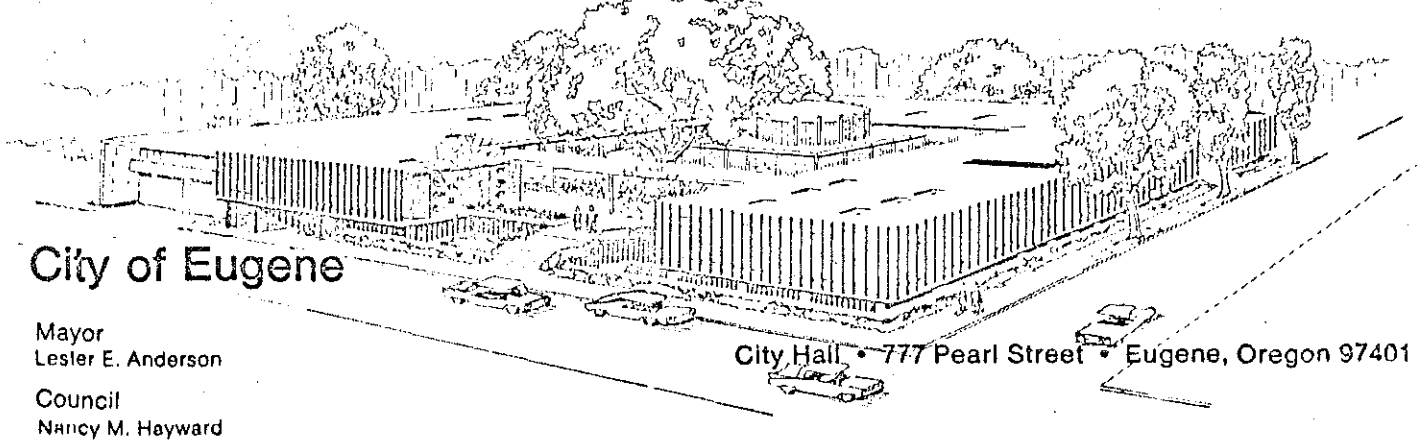
Mr. Chairman, the city of Eugene has done everything in its power to reduce other forms of air pollution within the city. We have outlawed all open burning; we have asked our city attorney to draw up an ordinance incorporating the state's automobile pollution regulations as soon as these are finalized, so that our police force can see that your regulations are strictly enforced within the city limits. We are investigating the possibility of converting city cars to propane gas. We have stood firmly behind the Lane Regional Authority in its efforts to reduce industrial and other pollution generated locally. But we have no control over pollution that blows into the city from outside. For that we must depend upon you and your staff. We do depend upon you, and we ask your protection.

For more than a year the position of the city of Eugene has been that there should be a substantial reduction in the volume of acreage burned this summer, a further reduction in 1971, and a complete cessation of all agricultural field burning in 1972 and thereafter. Last fall we had reason to believe that the Department shared our thinking. You have given us no reason for this about-face in your position.

Our own position remains unchanged. We believe that the only way to reduce air pollution caused by field burning is to limit the acreage burned. And we feel that without policing no burning controls can be effective.

It may be that your new regulations will succeed in keeping smoke away from Eugene. We did not come here to bargain, but to offer you cooperation. We are dubious, but we join you in hoping for good results if you put these proposals into effect. You can count upon us to help you in any way possible in carrying out <u>your</u> responsibility to give us pure air.

However, you will be the first to recognize that we have an obligation to the citizens of Eugene and to their right to breathe clean air. We shall be prepared, at the first sign of serious air pollution in Eugene from field burning, to take any and all steps necessary to protect and defend our citizens.



City of Eugene

Mayor
Lester E. Anderson

Council
Nancy M. Hayward
Glen L. Purdy
H. C. McDonald
George F. Wingard
Charles E. Teague
Wickes Shaw Beal
Ivan J. Gribskov
Fred J. Mohr

City Hall • 777 Pearl Street • Eugene, Oregon 97401

April 23, 1970

QUESTIONS FOR THE COMMISSION

1. Are there plans for locating a weather station in Eugene which can provide the same meteorological advice that the Salem station provides?

2. Will an acreage fee be assessed for burning permits? What will this fee be used for?

3. What steps are being taken to be sure that no one burns without a permit, and that the priority schedule set up by DEQ is followed? What are the Department's enforcement policies? Who is responsible if there is widespread violation of the burning laws?

4. In the event of serious pollution in Eugene caused by field burning, to whom do we apply for relief? What recourse is there for our people? Who can turn the smoke off?

LANE REGIONAL AIR POLLUTION AUTHORITY
ROUTE I, BOX 739 EUGENE, OREGON 97402
PHONE (503) 689-3221

April 23, 1970

Mr. Kenneth J. Spies, Director
Department of Environmental Quality
1400 S. W. Fifth Street
Portland, Oregon

Dear Mr. Spies:

Under normal summer conditions, Eugene is meteorologically indefensible of the smoke from any magnitude field burning source which would occur. We do not believe there is any immediate remedy of significance at this time that will lessen the degree of problems incurred by this added intrusion of pollution from field burning. Until such time as some physical or legal factor limits the amount of acerage burned, the degree of pollution is directly related to the counties immediately north of us and that part of Lane County north and west of Eugene.

We recognize the value of the effort both in dollars and hard labor put forth by the agricultural community in maintaining the economy of the Valley. There is no question regarding the sincerity of these people nine months of the year to maintain a crystaline environment along with the background and ascetic beauty of the Valley. Nevertheless, this major intrusion during three months of our best summer season, of such magnitude that it incurs physical insult to the eyes, nose, and respiratory system is indeed an added injury to those people who have aero allergic reactions and who have respiratory physical limitations.

The cities of Eugene, Springfield and Cottage Grove, and Lane County have joined in an effort through Lane Regional Air Pollution Authority to maintain and restore their own air resources. Any accomplishments made since 1952 have been nullified during the time field burning occurs by the overwhelming inundation of smoke and large particulate matter that limits outside exposure, ascetic qualities, as well as automobile and air transportation not only within Lane County, but the whole confines of the southern and central valley. Physical records, photos and actual police reports indicate past traffic accidents have been directly caused by reduced visibility — indeed it is a miracle that some mass air transportation tragedy has not occurred due to limited visibility at airports within the southern and central valley during this period.

The Lane Regional Air Pollution Authority sincerely hopes that the increased use of meteorological information within these regulations will assist in bringing relief to the Eugene-Springfield area. Now is the time for concerned men to become involved in the orientation of these regulations.

Sincerely,

Verner J. Adkison, Director
Lane Regional Air Pollution Authority

VA:rh

(15)

STATEMENT TO ENVIRONMENTAL QUALITY COMMISSION AT FIELD BURNING HEARING, April 23, 1970

The Lane Regional Air Pollution Authority Advisory Council appreciates the work and time spent by the Environmental Quality Commission on the field burning situation.

We realize the necessity of keeping the Willamette Valley farm lands and that the farmers are working and trying to alleviate the smoke problem by maning the rural fire departments, the use of the airplane observer program, etc. We hope the portable incinerator or the utilization of straw makes this problem of excessive smoke only a bad memory by 1972.

With this statement is a copy of the presentation made by Dr. William Service, a member of our advisory council, to the House Task Force Committee on Pollution. Ten physicians in the Eugene-Springfield area conducted a clinical survey to obtain an idea of the number of people being affected by air pollution during July and August. I will not read all of it now but do want to call special attention to the 131 man-days lost from the job by employed persons and to remind you again of the health problems caused by field burning.

These proposed regulations, while they do try to control where the smoke goes and keep it from populated areas, do nothing to limit the amount of smoke produced. It is our opinion that the only way to reduce the pollution is to reduce the number of acres burned.

Lane Regional Air Pollution Authority Advisory Council
Margaret Patoine, Secretary

Oregon Wheat Growers League

My name is Robert Stevenson. I am representing the Oregon Wheat Growers League, a statewide organization with a membership of over 1600 wheat growers.

Burning of grain stubble is not needed over the entire state, but only in the Willamette Valley, Union county, Jefferson county and the Klamath Basin. In these areas it is a common practice to continual crop rather than summer fallow every other year; also these areas are often under irrigation and some have a high rainfall amount resulting in a large amount of straw and residue on the ground.

The result of this heavy cover makes it impossible to establish crimson clover stands and other legume crops and perennial grass seed crops without burning.

When the residue of the cereal grains are worked into the ground, this often results in a very serious slug and mice problem plus damp off in vetch and peas. In the case of planting wheat following wheat for 2 or 3 years without burning the straw it has resulted in some very serious cases of the disease root-rot and take all.

In tests conducted where one-half of a wheat field was burned and the other half plowed under, the plowed under part yielded 50% less.

We are hoping research being done with pesticides and sprays will make it unnecessary to burn in the future, and ask of you to allow us time to perfect some alternate method.

Thank you for this opportunity to appear before your committee.

To the D. E. Q.

I ask that all field burning be abated in the Willamette Valley for the year 1970. Because---

Half of the listed number of grass seed and grain growers who burn live in Lane, Linn, and Benton counties, which directly affects Eugene residents.

Three-fourths of the perennial and annual rye grass seed is grown between Albany and Eugene. This directly affects Eugene!

And Eugeneans have had about all that can be had! Smoky days, end on end! Accusations of selfishness because we dared to suggest less burn- so that wemight cease our endless doctor bills, escape trips out of town, tiredness and general misery from aggravated pollution which lasted for days on end, and during which time not a single violater of the field-regulations was prosecuted; tho two were given suspended fines of $25! And this when the situation in Eugene was critical, and $1000 is the fine ceiling permitted.

In addition, we are told that the endless grants and subsidies given O. S. U. to work for the seed-growers good is now paying off, and that by 1971 a field incinerator will be workable.

We are also told that the 36,500 acres of blue grass and the 10,000 acres of orchard grass can be burned on alternate years without reducing the yield. And while about 1/3 of the small grain acreage, 85,000 acres, is burned in mid-valley, the remaining 2/3 around Portland is not burned, so I venture that is a matter of expediency and not necessity. Which brings us to the 90,000 acres of annual rye-grass, which has the highest straw volume, and for which a germicide is useable.

This brings us to the perrinial rye-grass, 93,500 acres, a far cry from the 315,000 acres we have been told are an economic must if our seed growers are to survive. We were not told the truth. This is only necessary if the seed grower is to continue at the same level as in the past, with as little expense and work as possible with the highest level of return. And even this perennial rye grass acreage can exist for a year with only a small reduction in yield if not burned.

I am a personal field-burning statistic--depleted physically by the smoke last summer anf Fall, still trying to recover from a bad bout of flu in early February--State Board of Health figures (Vol. 19--# 14.) show 1970 Oregon flu cases 2½ times the 5-year media, withe Lane County double the cases to be expected from our population (5 times the 5-yr. media), and with only 1/10 the state!s population we had more than a third of all the 1970 strep infections! Are we less hardy? If so, why?

I ask again that all field-burning be abated completely for the year 1970, that the grass seed and small grain growers prove their good faith by taking a reduction in profit for this year, even as we in Eugene have been penalized by a reduction in business because people from out of town refused to shop in our smoke or buy homes in an area that permitted this situation. We need both a health and a financial break!

In the event that D. E. Q. cannot comply with this request, I ask that they confine the Burning to the perennial rye grass only--that a daily list of names and burning times on permits issued be published in local papers, even as the weather forecast, and that the names of the violaters and the disposition of their cases likewise be published in the same section. This information should be supplied to the three regional air authorities, and released by them to the news media.

I also ask that the permits be strictly enforced, and that all violaters be remanded to a state agency, where conflict of local interest and law would be less.

Mr. Charles kizer stated that in 1970 about 15,000 acres will be burned on a day of southerly winds--if this wind changes, as they often did last summer, Eugene will once more be the centerof a holocast! His statement that field-burning is less harmful to society than other choices open may be true in general , but does nothing to rectify the situation for Eugene, whose citizens of necessity are paying the entire penalty, without subsidies of any sort, and apparantly even without recognition of this fact by D. E. Q.--which is our state board of appeal!

Mrs. Wiley of Women for Agriculture does not differentiate between grass-seed growers and agriculture in her speeches, and if she lived in Eugene would not call us complainers, but people trying just as hard to preserve our health and livelihood, and that of our children, as the grower is his!

Asking for more time to solve the problem comes annually, just like the fourth of July, and does not help the situation. In the meantime, the 50,000 acres burned in the early 1940!s when this all began have grown over six times. Quite a jump! And with all this time, no solution!

And field burning problems do not stop with the burning of the fields, for Eugeans, and are not confined to the six weeks Mrs. Wiley repeats. Last year it started July 13, and went on into the Fall. With our inversion pattern in Eugene-- one batch had not cleared before another arrived.

And the problems from the smoke this summer is to invade our mountains and lovely Eastern Oregon, even as Los Angeles pollution soills into Palm Springs. Are we truly so ignorant that we can let this happen?

I appeal to you to put aside sympathy & emotion for a look at the cold hard figures of the situation , apply the same logic to our situation in the south end of valley, that you use on the seed-growers situation, and arrive at a more liveable and equatable solution for our living.

Mrs. M. C. Pattison

Mrs. M. C. Pattison
351 W. 12th Ave.
Eugene Oregon.

Mr McPhillips - Chairman DEQ Commission

Gentleman: It is interesting this hearing was scheduled during Earth Week when many concerned citizens of Eugene are busy with projects to clean our environment and unable to work on this one phase. I appreciate the fact the DEQ spends so much time for the benefit of this one industry. It disturbs me because it leaves little time for thoughtful approaches to other problems, creating a burden on their limited budget. The advance publicity has lulled many nto believing your new rules were to be an improvement. Our Sun paper stated written data could be mailed to your Sal. ofc.--do you have one? Last nites paper had a better item but that was rather late. This reminds me of the confusion existing during the burning last summer. Who in the DEQ office is responsible for receiving our complaints and how many were received? It is most unfortunate this meeting is being held 70 miles from the area most affected and on a day which prohibits attendance by anyone who works for his living. Was this planned?

It is most depressing your proposed rules include no reduction in pollution! Industry has been spending money for pollution control and can't understand why the seed grower is exempt. They spend 50$ on abatement and he spends 1/10 of 1% (in grain) The 1967 legislature gave him tax credit for pollution control which he has never used, he cannot afford pollution abatement? He goes to our Emergency Board who cannot afford a similiar $75,000 for the Ptld Medical School, who each year turns away young men--this is in age when health care is a problem! He speaks of his $30.000,000 industry as a gross product--this is low--any gross product has +$ and -$. He receives the +$ and we spend the -$. He moves from the industrial world to the agricultural to collect his huge lobby power, he 3% loans which banks are eager to give--we the taxpayers pay them this subsidy on interest. Agricultural? does he grow good? He tills little soil with his economical burning practices/ He spends thousands on public education, his Belgian market.

I am tired of his education--his wife says let them burn just a little longer(it's been 25 yrs) a solution is near--they nedd to make money to send children to college--while we are trying to make money to pay Dr. bills. How many can afford to send their children to college? Now his wife says save their industry for environmental reasons. This green belt or black blet, she wants pay for is every bit as dangerous to the 10% of the population with allergies as if it were 330,000 acres of ragweed which we eradicate. Do you realize medical treatment or so called allergies which are an increasing health problem nationwide, is considered preventative? In other words people with hospital ins. are not covered nor welfare people--yes, it hits the poor the hardest, they have no funds for this needed medical help unless on death bed. This concentrated pollen comes to us(41%) 4 mos prior to the 3 mos of smoke, this smoke which collects many pollutants enroute--sometimes it takes 2 days to reach us and then we have a double load of air pollutants. For 7 mos each year we have subsidized them and now it is suggested our winter health is also jepordized--Check your State Board of Health for per capita illness this winter in our county of Lane.

Gentlemen, I know you don't conive to plan a disaster for thousands of people but in affect you are--if you pass the proposed rules . There is nothing these rules to prevent a disaster from happening to us in Eugene. We are frightened?

Allergies take toll

- 1969

By GAY PAULEY
Of United Press International

NEW YORK — Ah-choo! In the day's mail came some statistics that make the rounds this time of year and start us sneezing just by reading them.

The pollen is flying the hay fever season is upon millions of us. The facts:

- One out of every 10 persons, or about 22 million, suffers from some sort of allergic disease. Most—some 16 million—are victims of asthma-hay fever. Five million of the 16 million are children.

- Allergies are the leading chronic disease of children, accounting for one-third of all chronic conditions in youngsters under 17.

- Children under 17 lose over 36 million school and play days each year and spend about 13 million days in bed because of allergic disorders.

- Some 5,000 persons die each year of asthma, about half of them in the working age group.

- More than $135 million is the cost to allergy victims for medicines prescribed by their physicians.

- Time lost from work by adults with allergies amounts to some 23 million man days per year, costing industry more than $400 million.

- Five per cent of the nation's population is said to be allergic to pollens. This allergy kills about 50 each year.

* Reference--Agricultural Field Burning in the Wullamette Valley--1970

pag 1 I. Annual ryegrass and cereal grains burnt only to lower production costs. This is 55% of of total acreage burnt--2/3 of tonnage burned. (done for economic removal of residue)

pag 4—a. Subsequent crops planted without cost plowing or other seedbed preparation. (Who pays for this economy? We in the lower end of valley.

pag 4—b. Fosters increase of harmful insects by destroying other parasites and predators, insectivorous birds and small rodent which provide natural controls.

c. Harmful to wildlife.

pag 5-6 d. Heavy use of nitrogen fertilizers increase residue volumes (5-6 tons per acre where normal is 1½ to 2½ tons) I am suggesting since burning increases seed yield it also increases weed yield creating him more problems with weeds.

pag 6—e. No burning of these 300,000 acres grown adjacent to Portland--only 85,000 burnt in mid-valley. Why?

~~*~~ Reference--Agricultural Field Burning Research, Nov. 6, 1969

Seed Perennial	170,000	
" Annual	90,000	
	260,000	
pg 6—	- 30,000	(15,000 produced out of valley--15,000 plowed under old seedlings, creeping bentgrass.
	~~230~~,000	
	+ 85,000	Small grains burned only mid-valley
	315,000	Total acreage burned
	- 85,000	Small grains removed
	230,000	Small grains removed
pag 2	- 10,000	(orchard grass (can burn alternate yrs without yield reduction and can be incinerated next year)
	220,000	
pag 2	36,500	(blue grass (alternate yr burn without yield reduction and can be incinerated next year)
	183,500	
pag 3	90,000	(Annual grass-Paraquat is effective herbicide on germinated weeds, at most would delay seeding into fall. Under 25% reduction in yield)
	93,500	

For the regulation of burning these 93,500 acres I am asking the following rules be strictly enforced. Statistics prove the perennial reygrass grower would not be forced out of business even if he couldn't burn for 3 years!

1. Burn only on South wind. Your suggested burning on North winds protects Portland and Salem who have never had a problem and gives Eugene no relief.
2. Don't wast time and money on priority areas, 3 miles or 1 mile is no degree of safety--and suggests planes are more important than people.
3. Burn only on days with ceiling at least 5000 feet.
4. Daily record of burning permits,: including name of grower, address and acreage burned to be given to the Local Regional Pollution Authority for public record!
5. Strict enforcement of all rules. Fines assessed at maximum and not turned over to local county courn where there is a conflict of interest but administrated at State level at which level you issue the advisory. This will give the majority of law abiding growers a better reputation.
6. No issuance of fire permits by local fire chief. They have no knowledge applicable to this responsibility and are caught with conflicting interests.

Gentlemen: We can purify our water but no air filter removes the hazardous chemicals from our air--we can leave a smoke filled room from cigaretts but cannot escape earth's atmospere which some experts believe has already reached it's capacity..the only way we can survive is to stop pollutants at source before they reach the air.

Lois Jackson

Written 1967 (4½ pg)

HEALTH ASPECTS OF AIR POLLUTION

by Dr. Lyman J. Morris
Chief, Pulmonary Disease
Vets Hospt., Reno

The problem of air pollution in Oregon, as in any of the continental states, is varied, being influenced by differences in geography, sources of air pollution, and weather. This in turn will have a varying impact upon individual human health. This article will be concerned only with the structural or functional health effects, not with those affecting the human spirit such as smell and impairment of scenic vistas.

The areas of the human body exposed to potential damage from air pollution are the skin, eyes, and the respiratory system. The skin is not believed to be significantly damaged at existing levels of air pollution. Eye irritation has occurred primarily in sunny areas such as Los Angeles, where photochemical smog can cause nuisance and temporary impairment of normal visual function. No permanent eye injury has been established despite repeated irritation.

Thus, the main target area of the body exposed to air pollution is the respiratory system, which represents a sort of invagination of the skin, communicating freely with atmospheric air through ventilation. It consists of the upper airway: nose, throat, and larynx; and the lower portion: the trachea, bronchi, and lungs. The bronchi and lungs are of major concern because they are vitally involved in the respiratory exchange of oxygen and carbon dioxide. Possible damage may take the form of acute or chronic changes. Acute bronchitis would be manifested by excessive coughing, with or without producing sputum. This results from irritation of the nerve endings in the mucous membrane lining the bronchial tree. With removal from a polluted atmosphere, the acute irritative process should subside.

The major health concern is how much chronic damage can be done to the bronchial and lung tissue. The two conditions in which air pollution has been implicated are lung cancer and chronic obstructive lung disease, chiefly chronic bronchitis and emphysema. According to the U. S. Public Health Service, these represent the two fastest growing causes of death in the U. S.

The presence of hydrocarbons, particularly known carcinogens such as benzpyrenes, in the polluted atmosphere plus the higher prevalence of lung cancer in city dwellers have suggested a possible cause and effect. Thus far, the population studies and the present levels of exposure suggest that community air pollution contributes little to the occurrence of lung cancer. The Surgeon-General's Advisory Committee on Smoking and Health declared in 1964, "Cigarette smoking is causally related to lung cancer .... and outweighs all other factors." But with increasing air pollution, there is no logical reason why it may not play an increasing role in causing lung cancer in nonsmokers as well as smokers.

"Summary of Atmospheric Emission Data from Grass Field Burning Tests" by R.W. Boubel, 1968 Prof-Sch. of Engr., page 35-38 of "Agricultural Field Burning in the Willamette Valley" lists the various components I've ched in red on this appendix. (No evidence of health hazards when no one even knows how much smoke comes to us (ie some stubble being green or wet, estimates based on good conditions)

pg 7 – 1970

Chronic bronchitis and emphysema represent the most common lung disease complex at this time, affecting up to 40 million Americans. Chronic bronchitis is defined as a disorder characterized by persistent cough and sputum extending over months to years. It results from continued irritation of the mucous membrane lining the bronchial tree. With resulting thickening of this membrane plus the presence of sticky secretions, the consequence is narrowing of the airway. This causes an increased effort to move air in and out of the lungs.

Emphysema is a disease of the lung tissue itself in which the delicate air sacs (alveoli) are distended and ruptured. The unfortunate results are less surface area available for exchanging oxygen and carbon dioxide with the blood, and poor support of the smallest airways, the bronchioles. These small tubes tend to collapse during forced exhalation. The resulting symptom is excessive shortness of breath during physical exertion. In the majority of cases, both chronic bronchitis and emphysema are present.

The inhalation of irritating material over a prolonged period of time is believed to be the principal cause of both chronic bronchitis and emphysema. At the present time, tobacco smoke appears to be mainly responsible. The ingredients of tobacco smoke consist of liquid particles with the potential as irritants and carcinogens, and gases which may act as irritants or interfere with oxygenation of the blood. Many of these chemicals are also found in urban air and industrial pollution. The closer relation of cigarette smoking to chronic lung disease may be due to inhalation through the mouth rather than the nose, and the intense concentration of irritant chemicals in tobacco smoke. But like lung cancer, it seems inevitable that increasing the severity of community air pollution will produce chronic lung damage leading to physical disability. The damp climatic conditions of England's urban areas and the use of high-sulfur coal have combined to produce a dangerous air environment. The occurrence of lung cancer and chronic obstructive lung disease seem to be related to the nature and degree of British air pollution. Studies in our own Pacific Northwest as well as elsewhere in the U. S. indicate a combined deleterious effect of cigarette smoking and air pollution.

The effects of air pollution upon the pulmonary system vary partly due to great differences in individual susceptibility. People who suffer from asthma, an allergic disease causing spasmodic and reversible narrowing of the bronchioles, are probably the most susceptible to increases in air pollution. Those individuals with considerable chronic bronchitis and emphysema may have severe aggravation in their breathing difficulty during periods of increased air pollution. This in turn may throw an intolerable burden upon a weakened heart. If the exposure gets sufficiently bad, even normal individuals will develop respiratory insufficiency. That such severe acute exposure may lead to permanent lung damage is suggested by follow-up examinations of people affected during the Donora, Pennsylvania disaster of 1948.

Most of our information regarding the impact of air pollution upon human health comes from three sources:

1. Unplanned disasters when a sudden increase in air pollution results in excessive illness and death.
2. Experiments involving both animals and human volunteers.
3. Population studies of the effect of certain variables upon human breathing function and disease.

Except for the disasters, most of the relatively small amount of information suggests that cigarette smoking at present overshadows air pollution as a cause of severe lung disease. Again, quoting from the Surgeon-General's Committee Report, "The lung may be damaged by noxious agents found either in tobacco smoke or atmospheric pollution. In the U. S., the noxious agents from cigarette smoking are much more important in the causation of chronic bronchopulmonary disease than are those present as community air pollutants. In the United Kingdom, persons who smoke cigarettes and are exposed frequently to atmospheric pollutants are at greater risk of developing disabling respiratory disease and death than those exposed to either alone."

Yet, the trend is that if allowed to proceed, air pollution will be increasingly responsible for causing lung cancer, chronic bronchitis and emphysema. These diseases are insidious in their beginning and gradual in worsening, requiring perhaps 8 to 12 years to become evident by producing symptoms such as annoying cough, sputum, chest pain, coughing up blood or undue loss of weight. Because of this, we cannot wait "until all the facts are in." Steps to control air pollution should not await final and absolute proof of the exact mechanisms and relationships between air pollution and human illness. If air pollution continues to worsen at the present pace, our effluent society may end, not with a bang, but with a wheeze.

JAMES F. MORRIS, M.D.

APPENDIX

Components of Air Pollution

PARTICULATES - may be liquid or solid with great variety of size and chemical composition. Many are similar to those found in cigarette smoke. Large particles, usually solid hydrocarbons, tend to fall out from air, or be filtered out in the nose. Those of 1 to 3 micra in diameter may adsorb other more damaging chemicals and thus permit their deeper penetration to lung areas. They may cause increased obstruction to breathing, and are potentially carcinogenic.

CARBON MONOXIDE - commonly result from burning of fossil fuels (coal, oil and gasoline.) A concentration of 100 parts per million (ppm) is presently considered the upper limit of safety. Above this level, symptoms of headache, weakness and dizziness appear. The most serious effect results from the greater affinity of CO for blood hemoglobin than oxygen. It actually displaces oxygen from the hemoglobin molecule. Crowded freeways may cause 4-5% of auto occupants' hemoglobin to be made up of abnormal carboxyhemoglobin. This may be superimposed upon the carboxyhemoglobin (up to 12%) resulting from heavy cigarette smoking, with greatly impaired mental function. It does not accumulate in the body, and does not cause chronic poisoning, only acute.

CARBON DIOXIDE - our atmosphere contains only 0.03%, although there is 5% in our exhaled breath. The level in our city air may rise to 1000 ppm, but over 5000 is considered a toxic level. Excessive atmospheric concentration could interfere with loss of heat from earth, possibly even melting polar ice.

SULFUR COMPOUNDS - these occur mostly as oxidized forms; sulfur dioxide (SO_2), sulfur trioxide (SO_3), and sulfuric acid (H_2SO_4). They can affect anyone, but even small amounts may narrow the bronchioles of persons with asthma, chronic lung or heart diseases. It is believed responsible for the disasters in Donora, London, and Meuse, Belgium. Hydrogen sulfide and mercaptans, commonly emitted from kraft paper mills, create an obnoxious odor but in the usual concentrations produce no bodily damage. With sudden increase in concentration serious harm results, such as the episode in 1950 at Poza Rica, Mexico where 22 deaths occurred.

PHOTOCHEMICALS - the action of sunlight upon some airborne chemicals causes molecular changes to more irritating substances. Los Angeles smog is the best example. Some of these chemicals are oxides of nitrogen, ozone, peroxyacyl nitrate, formaldehyde, and acrolein. They are chiefly responsible for the eye and bronchial irritation suffered in Los Angeles.

OXIDES OF NITROGEN - chiefly caused by combustion of coal, oil, gas or gasoline. Nitric oxide results which is oxidized in the air to the more toxic nitrogen dioxide. This is an acutely irritating substance. Experimentally, NO_2 can cause chronic pulmonary disease, chiefly fibrosis of lung tissue with impairment of exchange of oxygen and carbon dioxide. Silo-fillers disease is an occupational illness in which chronic pulmonary fibrosis is caused by excessive exposure to NO_2.

METALS - lead is the most important and is a common gasoline additive. Lead blood levels have been determined to be higher in city dwellers and cigarette smokers. It may be widely distributed in the body, damaging the gastrointestinal tract, brain, kidneys, and blood hemoglobin. Except for beryllium, there is no present evidence of tissue damage by other atmospheric metals.

FLUORIDES - cause surface irritation to skin and mucous membranes. Little is known as to its inhalation effects. Damage to plants and forage-eating livestock is well known, but human hazards are not well documented.

RADIOACTIVE PARTICLES - presently a global and political problem, resulting from nuclear weapons testing. Strontium-90, cesium-137, carbon-14, and iodine-131 have been of chief concern. Gastrointestinal absorption by the food-chain route appears to be of potentially greater bodily and genetic hazard than by inhalation at present levels. Increased use in medical testing and industry may pose new air pollution problems.

OTHA
9/67

(20)

Public Hearing of Environmental Quality Commission on proposed Field Burning regulations for 1970 season
Salem, Oregon
April 23, 1970

Chairman McPhillips and Members of the Commission:

My name is Robert Humphreys, I am a perennial grass seed grower from the Waldo Hills. The seed growers of the Waldo Hills, Silverton Hills, Silver Falls area, and the Hills area of the Stayton RFPD, who have been working on the field burning problem felt that it would be better to have one spokesman present their feelings than to have many give substantially the same testimony.

This foothills area, on the Eastern side of the valley, close to the Cascade mountains, grows about 25,000 acres of bentgrass, 8,000 acres of fine fescues, as well as small amounts of other perennials, no annual grasses, and a very small acreage of cereal grains. The elevations of the area are approximately 700 to 2,000 feet, well above the floor of the valley.

That there is intense interest in the proposed regulations is evident by the large number of farmers present today from this area, most of whom make their entire livelihood from perennial grass seed production. The Hills area is ideally suited to seed production for a number of reasons, with which I am sure you are familiar.

We appreciate help and/support financially the efforts of the Oregon Seed Council in attempting to help the seed industry through this difficult period of adjustment.

We would like to go on record to the Commission as not agreeing to the proposed reductions of quotas in 1971 and 1972 and the cut-off in 1973, as applied to the Hills areas for the following reasons:

We understand that part of the thinking in the quota reduction is based on the phasing out of annual and cereal burning. As already pdnted out, these areas have no annuals and almost no cereals. The other reason, as we understand it, is that it is expected that the mobile field incinerator will be operational to the extent that it can pick up the quota reduction and take over completely in 1973. Our very serious concern is that the machine as being worked out now is not adapted to usage in the Hills areas. It is probable that it may work out quite well on the valley floor, but it seems to us extremely doubtful if it will be practical for operation on our steep hill ground without extensive modification. In spite of the great efforts being made and large amounts of funds expended, we do not feel that an incinerator can be available for our areas by 1973. Unfortunately this Hill ground is not at all adapted to anything but grass production. We would sincerely hope that this cut-off date would not be applied indiscriminately.

We would like to point out to the commission that the foothills area, while certainly involved in the burning problem, has not been a major problem insofar as smoke in heavily populated areas is concerned. At the time of the burning crisis last summer, to my knowledge, not one acre of bentgrass, which makes up the major portion of the Hills burning, had been burned.

It is our feeling that this area could very well be allowed to burn with a S.W. wind as well as under the conditions outlined in the proposed regulations. Burning here with a S.W. wind would not affect populated areas. Because bentgrass is the last of the grass seed crops to be harvested, there is normally a very limitee time in which it can be burned before the fall rains. We quite often have southerly winds at that time of year. If this grass

can be burned before a rain there will be much less smoke than after it has been rained upon, and perhaps only partially dried.

It is our feeling that Saturday and Sunday burning, as allowed in the proposed regulations, could cause a problem in our area. Our fire departments are volunteer departments--many times on Saturday and Sunday the firemen may not be available if needed. There is normally increased traffic on weekends. There has been some concern about smoke in the Silver Falls Park and the Cascade recreational areas, which are heavily used on weekends. Therefore the Hills areas would be willing voluntarily not to burn any at all on weekends until after Labor Day weekend, providing the daily quotas would be raised for this area from 3 to 5 percent, which would result in approximately the same acreage burned in a week.

We would also hope that on days of favorable conditions we might have some assurance that quotas could be increased in the area.

It is certainly true that different areas in the valley and surrounding areas do have different conditions and problems and we believe that regulations could well be applied to meet these differing conditions. It is our hope that all growers will use good judgment in burning in hazardous areas in order to minimize the problems.

We are not unaware of the tremendous pressures on the Commission, and we want to work with the commission in every way we can. We are tremendously concerned about the possibility of having our means of making a living for ourselves and our families taken from us.

May we thank you for the opportunity of testifying on the proposed regulations.

2983 Camrose
Eugene, Oregon
May 11, 1970

Chairman
Department of Environmental Quality
State Office Building
Salem, Oregon

Dear Sir:

As residents of Eugene we demand a reduction in the number of acres of grassland to be burned this summer.

We, who reside in the southern end of the Willamette Valley, look ahead to the "burning season" with both fear and disgust.

Fear, because there were times last summer when visibility in Eugene was reduced to a block, breathing was difficult, and many people who suffer from allergies and lung diseases had to be hospitalized. We wonder how much worse it will be this year.

Disgust, because a minority of seed growers make the late summer and early fall intolerable for a majority of the people. In addition to the health hazard there are other important considerations. Patios and driveways are covered with the black residue of burning grasses, outdoor furniture is ruined, and it is impossible to enjoy any of the traditional summer activities.

We also protest on aesthetic grounds. This lovely valley is hidden under a smoke haze which turns the blue sky an ugly gray and covers the sun with a murky film.

We intend to support all legislators who are striving to bring about an end to open field burning. A reduction in acreage burned is a must for this year.

Sincerely yours,

William L. Walkenshaw
Margery N. Walkenshaw

Margery N. Walkenshaw
William L. Walkenshaw

mnw

Richard E. and Irmgard L. Jones 3230 Marvin Drive Eugene, Oregon 97402

May 10, 1970

Kenneth Spies, Director
State Department of
Environmental Quality
State Office Building
Portland, Oregon

Dear Mr. Spies,

As residents of Eugene, my wife and I are appalled at the prospect of still another summer of unlimited field burning. Through all the information available to us last year, particularly in late August and through September, we were led to hope for at least some improvement by this summer, not by 1971 or 1972.

It appears that we "city folks" have become the victims of a well organized power play by the seed farmers, who have watch-dogged every move of those governmental agencies who are supposed to act in the interest of a clean environment. Their pressures have been most effective. We are now told to place our trust in that most unpredictable of all Oregon elements, the weather. If the southern winds blow, someone else will get the smoke. If they don't, pressures will be brought to bear, and the burning will continue.

Why must we in the city of Eugene take all the risk? Why not at least say to the farmers, "look, averages say you can burn a large portion of your acreage during six to nine days of southern winds. If they don't materialize, you will have to accept the consequences." Why let the farmers have it both ways, while the only thing we can expect is another summer just like the last.

Sincerely yours,
Richard E. Jones
Irmgard L. Jones
Richard E. Jones
Irmgard L. Jones

2050 Mahlon St.
Eugene, Oregon
May 10, 1970

Chairman,
Department of Environmental Quality
State Office Building
Salem, Oregon

Dear Sir:

I would like to urge you and your committee to do all in your power to reduce the acreage to be field-burned during the summer of 1970. I realize that the growers of rye grass and other perennial type grasses must now burn to control disease & the grass seed, but this does not apply to growers of many types of annual grass or other crops, which can be burned mainly as a matter of convenience. I see no reason why the latter should be allowed to be burned when the burning causes such great discomfort to many thousands of people.

Having previously lived in the urban areas of Boston and New York, I find that the air pollution in the Eugene area during the mid and late summer is much worse than back East. The air despite the fact that our population in this area is 100,000, compared with up to 15 million in the New York metropolitan area! I find that I suffer from bronchitis and other throat troubles much more during the burning season than ever before. Last year, pollution from field burning reached crisis proportions. I can do not let that happen again this summer.

Yours truly,
Arthur L. Rich

SUMMARY

1969 FIELD BURNING SEASON AND PROPOSED 1970 POLICY

This summary of findings from a study of the 1969 season and proposals for 1970 is excerpted from a major staff report being prepared for the April, 1970 hearing on new field burning regulations.

Examination of field burning acreage records, visibility, and meteorological data during the period July 21 - September 16, 1969, leads to the following conclusions:

1. In the absence of field burning, Eugene would have experienced few, if any, days of visibility restrictions (6 miles or less) during the period studied.

2. Whenever more than 500 acres are burned in Linn, Lane and Benton Counties under a prevailing north wind, Eugene has a 75% chance of undergoing a visibility restriction. Based on limited 1969 experience, Eugene will not be adversely affected when acreages in excess of 10,000 acres are burned under prevailing and steady southerly winds. See attached graph.

3. Mixing depth is not generally a useful meteorological parameter for controlling an open burning source of this magnitude, although it may be useful in identifying extremely poor dispersion conditions when all burning should be prohibited.

4. None of the three DEQ control programs attempted during 1969 were significantly more effective than the others, primarily due to the common failure to account for the wind direction factor. Eugene experienced smoky conditions on 55-60% of all burning days under each attempted schedule.

These conclusions result in a relatively simple proposed schedule for 1970: Allow burning in the southern end of the Valley only when winds are from the south, and burn in the north end only when winds are from the north. Daily acreage quotas will be much larger in the South than in the North, because of the relative infrequency of south winds. In four seasons examined (1965, 1966, 1967, 1969), from 10 to 17 days with an average of 13 days, were characterized by persistent southerly winds and no precipitation.

In order to allow burning of fields adjacent to major population centers, airports, and heavily-traveled highways under conditions which will minimize effects on these areas both from public health and public safety aspects, priority areas have been set up. These areas will be allowed to burn under any marginal condition, based on local priority systems established and administered at the discretion of the fire permit issuing authority in each fire district.

A daily quota of 15,000 acres in Linn, Lane and Benton Counties will allow the burning of all perennial grass seed fields and 85% of the annuals in the minimum season, and all fields of both species in the average season.

Fifteen thousand acres is equivalent to about 9% of the total acreage in these three counties. It is proposed that this percentage be halved to give a basic quota of 4.5% with the explicit understanding that one such basic quota will be released for burning based on a morning forecast of southerly winds, and another 4.5% released in the afternoon if the winds have materialized and are forecast to persist. This will lend the program flexibility and to a limited extent minimize the effect of a faulty forecast. The afternoon advisory will be issued at 2 p.m. PDT.

Prohibition of burning in the North Valley under southerly winds will create a buffer zone and minimize the chance of smoke penetration into the Portland area. Under northerly winds, a single basic quota will be issued for the North Valley. The 1970 quota based on 3% of perennial and annual grasses should allow ample burning days to complete all grass seed field burning.

This proposed policy will probably have the effect of shifting the field burning smoke pollution problem away from the Valley's population centers and into the recreational areas in the Cascades. As long as smoke is being generated in the magnitude resulting from field burning, air pollution will result someplace in the State. Since the only way to curtail smoke pollution is to eliminate the burning, and in keeping with the stated objective of the EQC of ending all open burning in the Willamette Valley, the phased reduction of acreage quotas is included in this proposed 1970 regulation. The effect of the various quotas is as follows:

1970 - Reasonably assures that all perennial and annual grass seed fields will be burned.

1971 - Provides a small possible reduction in acreage burned to account for large-scale field testing of field incinerator in annual ryegrass fields. Most fields will still get burned, however.

1972 - Would allow most, if not all, perennial grasses to be burned, with little opportunity for any annual grass seed fields to be burned. Seed Council spokesmen have indicated that widespread utilization of a field incinerator should be feasible by 1972.

1973 - Scheduled phaseout of all field burning, with field incinerator utilization, and other alternative cultural practices being fully effective.

INTRODUCTION:

The burning of grass seed and cereal grain fields for straw disposal and field sanitation during the summer of 1969 created the most intense and prolonged public concern of any air pollution incident in the history of Oregon. Over 4300 citizen complaints regarding field burning and its effects were recorded by the Department of Environmental Quality and other pollution control authorities between July 20 and September 20, 1969.

Field burning, like all agricultural practices, is exempt from the general air pollution laws of the State of Oregon. The Department of Environmental Quality does, however, attempt to regulate field burning in the Willamette Valley under the provisions of HB 1228 (ORS 449.840) adopted by the 1969 legislature. This statute directs the Environmental Quality Commission to establish a meteorological control program to regulate the type and extent of burning done on various classifications of days. It also states that the Commission "shall weigh the economic consequences of scheduled burnings and the feasibility of alternative actions, and shall consider weather conditions and other factors necessary to protect the public health and welfare...".

The effect of field burning in 1969, and the public response to them, provide ample evidence that the program of the Department as applied during 1969 was inadequate to protect the "public health and welfare. This report has therefore been prepared in order to provide general background information and full documentation of the 1969 season, and an explanation of the policy and program the Department proposes to apply to field burning during 1970, 1971 and 1972, until 1973 when it is proposed that open field burning as it is now practiced be completely eliminated.

BACKGROUND INFORMATION:

Acreages

A survey conducted by the Air Resources Center of Oregon State University during the 1969 season indicates that the 1969 acreages of grass seed and cereal grain fields grown and burned in the Willamette Valley, exclusive of Washington County, were as follows:

Species	Acreage Grown	Acreage Burned	Percent Burned
Perennial grasses	135,000	135,000	100%
Annual ryegrass	101,000	75,000	75%
Cereal grain	121,000	9,000	7%
Total	356,000	219,000	62%

Distribution of species and acreages is notably uneven in the Valley, with over 60% of the perennial grasses and 85% of the annuals being grown in the three southernmost counties (Linn, Lane and Benton).

Residue Amounts

The amount of smoke generated in field burning depends on many factors, the most important of which being the residue density per acre. The estimated density of residue, acreage burned, and resulting total straw tonnage for various species is estimated as follows:

Species	Density, ton/acre	Total Valley Acreage	Total Valley Tons burned
Annual ryegrass	5	75,000	375,000
Perennial ryegrass	4	48,000	192,000
Blue grass	2.5	8,300	20,800
Bent grass	2	20,000	40,000
Fescue	3	29,000	87,000
Other grass	3	29,000	87,000
Grain	3	9,300	27,900
Total		219,000	829,700

Air Contaminant Emissions

Four classes of air contaminants are considered to be of greatest importance in considering the air pollution impact of field burning. A brief description of these contaminants, in order of importance, is as follows:

1. Particulates are extremely small particles of solid or liquid matter, and make up the visual part of smoke and are responsible for visibility reduction in the affected area. Field fire smoke particles are predominantly from 0.1 to 1 micron in size, approximately the optimum size for retention in the lungs when inhaled.
2. Hydrocarbon gases include eye irritants and those compounds giving smoke its characteristic odor, and may also combine photochemically with nitrogen oxides to give secondary contaminants such as ozone.
3. Nitrogen oxides include nitrogen dioxide, a brown-colored gas which contributes to visibility reduction. Nitrogen oxides are a major component in photochemical smog reactions.
4. Carbon monoxide is a colorless gas most generally associated with heavy motor vehicle traffic in congested urban areas.

Research directed by Dr. R. W. Boubel at Oregon State University has resulted in a reasonable knowledge of air contaminant volumes emitted per ton of typical residues. These emission factors, together with corresponding

estimates of average pounds emissions per acre and total emission in the Valley are as follows:

Contaminant	Emission lb/ton	Average lb/acre	Total 1969 Emissions from Field Burning
Particulate	15.6	60	13,000,000 lb.
Carbon monoxide	101	380	84,000,000 lb.
Hydrocarbons	25	95	21,000,000 lb.

Comparative Source Strength of Field Burning

A comparison between field burning and other contaminant source types is valid only if specific air contaminants are considered. Since particulate has been identified as the most significant emission, the following comparisons are most significant.

Wigwam Waste Burners - The average burner emits about 7 lb. of particulate per dry ton of wood waste consumed, and might burn 60 tons per day. Its total particulate emissions per day would thus be about 420 pounds, equivalent to about 7 acres of the average Valley grass field. On August 12, 1969 (known as "Black Tuesday), 18,000 acres were burned in Linn, Lane and Benton Counties.

Using the 7 acre equivalent, these 18,000 acres were equivalent to about 2500 wigwam burners operating in the Upper Valley.

Kraft Pulp Mills - The two kraft pulp mills operating in the Valley during 1969 emit a total of about 30,000 lb/day of particulate, equivalent to about 500 acres of field burning. Hence, the 18,000 acres of fields burned on "Black Tuesday" could be said to be equivalent to 72 additional kraft mills operating in the Upper Valley for one day.

Automobiles - All the automobiles in the Willamette Valley, including the Portland Metropolitan area, emit about 30,000 lb/day of particulate matter, thus being equivalent to about 500 acres of field burning. To produce the same tonnage of particulate matter from automobiles as was produced by field burning on "Black Tuesday" would require an endless belt 225 lanes of traffic wide stretching from Eugene to Albany, packed bumper-to-bumper with 10,000 automobiles per lane moving at an average speed of 25 miles per hour for 24 full hours.

Mailed 5-12-70

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

DATE : May 12, 1970 for May 22, 1970 Meeting

SUBJECT: PROPOSED REGULATIONS FOR REGISTRATION, PLAN REVIEW, SAMPLING, AND PARTICULATE EMISSIONS

INTRODUCTION

Testimony received at the Public Hearing on April 24, 1970 has been reviewed and evaluated. Certain additional revisions to the regulations have been made, and adoption of the revised regulations is recommended.

An explanation of the suggested changes and additional discussion of the testimony is as follows:

REGISTRATION, APPROVAL OF PLANS, SAMPLING AND TESTING

Subdivision I: Registration

Item II(3)(e) has been changed to require that the plot plan show the height of air contaminant sources rather than buildings, as in the initial draft. This change was one of several suggested by the Association of Oregon Industries relating to information required to be submitted by registrants.

No change has been made in the re-registration requirements. However, a short re-registration form will be prepared and mailed out annually to each registrant by the Department, minimizing the administrative inconvenience to industry.

Subdivision II: Notice of Construction and Approval of Plans

The only change in this section is to include height of air contaminant sources rather than height of buildings in the list of required information. As for AOI's objection to item II(2)(c), which defines "a significant increase in process capacity" as "new construction", etc., it is the opinion of the staff that this item is perhaps redundant with respect to items (a) and (b), but adds clarity to the definition. It should be noted that an increase in process capacity, not production is specified; hence there will always be some physical change involved in the increase. There is no intention here to require notification of every fluctuation in a firm's production schedule.

Subdivision III: Sampling and Testing

No changes have made made in this section.

GENERAL EMISSION STANDARDS FOR PARTICULATE MATTER

No changes are recommended in the Visible Emissions or Fuel Burning Equipment limitations. In the absence of concrete quantitative data submitted by industry, the Staff reiterates its judgment that the standards proposed are technically feasible and enforceable. As was mentioned in the initial staff presentation, the Regional Authorities concur in this judgment.

The question was raised at the hearing regarding the consideration given to wood-fired boilers. Two major factors are involved here: first, the technical feasibility of hogged fuel boilers complying with Ringelmann No. 1; and second, the overall balance of wood residues disposal in Western Oregon. Based on conferences with the Regional Authorities and a limited extent of field investigation, it appears that a well-controlled wood-fired boiler can meet Ringelmann No. 1 when operating well below rated maximum capacity, but not at full load conditions, when Ringelmann 1½ to 2 can be achieved.

It is generally agreed that combustion of wood residues in a well controlled boiler is preferable to disposal in a wigwam burner. There has been a tendency for companies to convert hog fuel boilers to natural gas or oil when faced with a demand to reduce emissions, thus eliminating a needed residue market. Unfortunately, the Staff does not have information available to properly evaluate current trends in boiler application and residue utilization, and it seems a reasonable approach to proceed cautiously for the time being. Compliance with a Ringelmann No. 2 as proposed will take care of the really offensive boilers, while the No. 1 required of new installations will assure that new boilers will be built to maximum technical standards.

The language of Section V of the standards, "Refuse Burning Equipment" has been substantially modified, partly in response to AOI suggestions. Specific reference to wigwam waste burners has been deleted, with wigwam burners now included as equipment designed to burn more than 200 pounds per hour of refuse. Standards for this general class have been upgraded to coincide with the previously proposed standards for wigwam burners, i.e. 0.2 grains/scf for existing and 0.1 grain/scf for new sources. Department of Environmental Quality standards for larger incinerators are thus identical with those of the Mid-Willamette and Lane Regions.

In administering the grain loading standard for refuse burning and fuel burning equipment, the Department will not consider modifications to existing equipment solely for the purpose of meeting air quality standards to constitute change of the source's status to that of "new". Thus existing wigwam burners, including modifications to achieve compliance, must meet 0.2 grain/scf, while brand new ones must comply with 0.1 gr/scf.

CONCLUSION - ADDITIONAL TESTIMONY

Most of the above comments have dealt with the testimony of Associated Oregon Industries, chief industry spokesman at the public hearing. Additional testimony was received from the Southern Oregon Timber Industries Association, which generally endorsed the AOI statement. In common with AOI, SOTIA raised the question of tax relief for wigwam waste burner modification, requesting an EQC policy statement on the matter. They also requested uniform enforcement of EQC regulations.

Western Wood Products Association presented testimony in opposition to the visible and particulate emission standards applied to wigwam waste burners, claiming they are unattainable. Mr. Stanley Corder, of the Oregon State University Forest Research Laboratory, called the Commission's attention to the experimental waste burner program. Staff evaluation of this project indicates that visible emissions below Ringelmann No. 1 and particulate emissions below 0.2 grain/scf are achievable with application of the recommended modifications.

The Oregon Environmental Council presented a statement in support of the proposed standards, but urged the Commission to continue to press for complete phaseout of wigwam waste burners. It is the opinion of the staff that the requirements of the proposed emission standards will provide considerable incentive for companies to find residue markets and phase out burners rather than install costly burner modifications.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

May 4, 1970

PROPOSED REGULATION FOR REGISTRATION, APPROVAL OF PLANS, AND SAMPLING AND TESTING OF AIR CONTAMINANT SOURCES

SUBDIVISION I: REGISTRATION

I. Registration in General - The following air contaminant sources, not under the jurisdiction of a regional air pollution control authority, shall register with the Department no later than ~~January~~ March 1, 1971 and annually thereafter as required by this section:

1. Aluminum Reduction plants
2. Hot Mix Asphalt plants
3. Rendering plants
4. Kraft and sulfite pulp mills
5. Installations operating wigwam waste burners
6. Plywood, particleboard and fiberboard plant sites
7. Open burning refuse disposal sites receiving more than 500 tons/year of refuse
8. Thermal-electric power generating plants

Other contaminant sources shall register with the Department when so requested.

II. Registration Requirements:

1. Registration shall be completed within 30 days following the mailing date of the request by the Department.
2. Registration shall be made on forms furnished by the Department and completed by the owner, lessee of the source, or agent.
3. The following information shall be reported by registrants:
   a. Name, address and nature of business.
   b. Name of local person responsible for compliance with these rules.
   c. Name of person authorized to receive requests for data and information.
   d. A description of the production processes and a related flow chart.
   e. A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.
   f. Type and quantity of fuels used.

g. Amount, nature and duration of air contaminant emissions.

h. Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.

i. Amount and method of refuse disposal. Keep

III. Re-Registration:

1. Once a year upon the annual date of registration, a person responsible for an air contaminant source shall reaffirm in writing the correctness and current status of the information furnished to the Department. mailing or dept

2. Any change in any of the factual data reported under Section II-3 shall be reported to the Department, at which time re-registration may be required on forms furnished by the Department.

IV Effective Date Sept 1, 1970

SUBDIVISION II: NOTICE OF CONSTRUCTION AND APPROVAL OF PLANS

I. Requirement:

No person shall construct, install, or establish a new source of air contaminant emission of any class listed in Subsection II(1) and not under the jurisdiction of a regional air quality control authority without first notifying the Department in writing.

II. Scope:

1. This regulation shall apply to the following classes of sources of air contaminant emissions:

a. Air pollution control equipment

b. Fuel burning equipment rated at 400,000 BTU per hour or greater

c. Refuse burning equipment rated at 50 pounds per hour or greater

d. Open burning operations

e. Process equipment having emissions to the atmosphere.

2. New construction, installation or establishment includes:

a. Addition to or enlargement or replacement of an air contamination source.

b. A major alteration or modification of an air contamination source that may significantly affect the emission of air contamination.

c. A significant increase in process capacity. should also include problem

III. Procedure:

1. Notice of Construction

Any person intending to construct, install, or establish a new source of air contaminant emissions of a class listed in Subsection II(1) shall notify the Department in writing on a form supplied by the Department.

2. Submission of Plans and Specifications

The Department may within 30 days of receipt of a Notice of Construction require the submission of plans and specifications for air pollution control equipment and facilities and their relationship to the production process. The following information may also be required.

a. Name, address and nature of business.

b. Name of local person responsible for compliance with these rules.

c. Name of person authorized to receive requests for data and information.

d. A description of the production processes and a related flow chart.

e. A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.

f. Type and quantity of fuels used.

g. Amount, nature and duration of air contaminant emissions.

h. Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.

i. Amount and method of refuse disposal. Agreed MW

The Department may require corrections and revisions to the plans and specifications to insure compliance with applicable rules, orders and statutes.

3. Notice of Approval

a. The Department shall upon determining that the proposed construction is in the opinion of the Department in accordance with the provisions of applicable rules, order, and statutes, notify the person concerned that construction may proceed.

b. A Notice of Approval to proceed with construction shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

4. Order Prohibiting Construction

a) If within 60 days of receipt of the items set forth in Subsection III (2) the Environmental Quality Commission determines that the proposed construction is not in accordance with applicable statutes, rules, regulations and orders, it shall issue an order prohibiting the construction, installation or establishment of the air contamination source.

b) Failure to issue such order within the time prescribed herein shall be considered a determination that the proposed construction, installation, or establishment may proceed, provided that it is in accordance with plans, specifications, and any corrections or revisions thereto, or other information, if any, previously submitted, and provided further that it shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

5. Hearing

Pursuant to law, a person against whom an order prohibiting construction is directed may within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, state the grounds for hearing, and be mailed to the Director of the Department of Environmental Quality. The hearing shall be conducted pursuant to the applicable provisions of ORS Chapter 183.

6. Notice of Completion

Within thirty (30) days after any person has constructed an air contamination source as defined under Subsection II(1), he shall so report in writing on a form furnished by the Department, stating the date of completion of construction and the date the source was or will be put in operation.

SUBDIVISION III: SAMPLING, TESTING AND MEASUREMENT OF AIR CONTAMINANT EMISSIONS

I. Program:

As part of its coordinated program of air quality control and preventing and abating air pollution, the Department of Environmental Quality may:

1) Require any person responsible for emissions of air contaminants to make or have made tests to determine the type, quantity, quality, and duration of the emissions from any air contamination source.
2) Require full reporting of all test procedures and results furnished to the Department in writing and signed by the person or persons responsible for conducting the tests.
3) Require continual monitoring of specified air contaminant emissions and periodic regular reporting of the results of such monitoring.

II. Methods:

1. Any sampling, testing or measurement performed under this regulation shall conform to methods on file at the Department of Environmental Quality or to recognized applicable standard methods approved in advance by the Department.
2. The Department may approve any alternative method of sampling provided it finds that the proposed method is satisfactory and complies with the intent of these regulations and is at least equivalent to the uniform recognized procedures in objectivity and reliability, and is demonstrated to be reproducible, selective, sensitive, accurate and applicable to the program.

III. Department Testing:

The Department, instead of requesting tests and sampling of emissions from the person responsible for an air contamination source, may conduct such tests alone or in conjunction with said person. If the testing or sampling is performed by the Department, a copy of the results shall be provided to the person responsible for the air contamination source.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

May 4, 1970

PROPOSED REGULATION FOR REGISTRATION, APPROVAL OF PLANS, AND SAMPLING AND TESTING OF AIR CONTAMINANT SOURCES

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h. Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.

i. Amount and method of refuse disposal.

III. Re-Registration:

1. Once a year upon the annual date of registration, a person responsible for an air contaminant source shall reaffirm in writing the correctness and current status of the information furnished to the Department.

2. Any change in any of the factual data reported under Section II-3 shall be reported to the Department, at which time re-registration may be required on forms furnished by the Department.

IV Effective Date
The effective date of this section shall be Sept 1 1970

SUBDIVISION II: NOTICE OF CONSTRUCTION AND APPROVAL OF PLANS

I. Requirement:

No person shall construct, install, or establish a new source of air contaminant emission of any class listed in Subsection II(1) and not under the jurisdiction of a regional air quality control authority without first notifying the Department in writing.

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1. This regulation shall apply to the following classes of sources of air contaminant emissions:

a. Air pollution control equipment

b. Fuel burning equipment rated at 400,000 BTU per hour or greater

c. Refuse burning equipment rated at 50 pounds per hour or greater

d. Open burning operations

e. Process equipment having emissions to the atmosphere.

2. New construction, installation or establishment includes:

a. Addition to or enlargement or replacement of an air contamination source.

b. A major alteration or modification of an air contamination source that may significantly affect the emission of air contamination.

c. A significant increase in process capacity.

III. Procedure:

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d. A description of the production processes and a related flow chart.

e. A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.

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b. A Notice of Approval to proceed with construction shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

4. Order Prohibiting Construction

a) If within 60 days of receipt of the items set forth in Subsection III (2) the Environmental Quality Commission determines that the proposed construction is not in accordance with applicable statutes, rules, regulations and orders, it shall issue an order prohibiting the construction, installation or establishment of the air contamination source.

b) Failure to issue such order within the time prescribed herein shall be considered a determination that the proposed construction, installation, or establishment may proceed, provided that it is in accordance with plans, specifications, and any corrections or revisions thereto, or other information, if any, previously submitted, and provided further that it shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

5. Hearing

Pursuant to law, a person against whom an order prohibiting construction is directed may within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, state the grounds for hearing, and be mailed to the Director of the Department of Environmental Quality. The hearing shall be conducted pursuant to the applicable provisions of ORS Chapter 183.

6. Notice of Completion

Within thirty (30) days after any person has constructed an air contamination source as defined under Subsection II(1), he shall so report in writing on a form furnished by the Department, stating the date of completion of construction and the date the source was or will be put in operation.

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2) Require full reporting of all test procedures and results furnished to the Department in writing and signed by the person or persons responsible for conducting the tests.
3) Require continual monitoring of air contaminant emissions and periodic regular reporting of the results of such monitoring.

II. Methods:

1. Any sampling, testing or measurement performed under this regulation shall conform to methods on file at the Department of Environmental Quality or to recognized applicable standard methods approved in advance by the Department.
2. The Department may approve any alternative method of sampling provided it finds that the proposed method is satisfactory and complies with the intent of these regulations and is at least equivalent to the uniform recognized procedures in objectivity and reliability, and is demonstrated to be reproducible, selective, sensitive, accurate and applicable to the program.

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The Department, instead of requesting tests and sampling of emissions from the person responsible for an air contamination source, may conduct such tests alone or in conjunction with said person. If the testing or sampling is performed by the Department, a copy of the results shall be provided to the person responsible for the air contamination source.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

May 4, 1970

GENERAL EMISSION STANDARDS FOR PARTICULATE MATTER

I. Definitions:

1. "Existing source" means any air contaminant source in existence prior to June 1, 1970.
2. "Fuel burning equipment" means equipment, other than internal combustion engines, the principal purpose of which is to produce heat or power by indirect heat transfer.
3. "New source" means any air contaminant source installed, constructed, or modified after June 1, 1970.
4. "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background.
5. "Particulate matter" means any matter, except uncombined water, which exists as a liquid or solid at standard conditions.
6. "Refuse" means unwanted matter.
7. "Refuse burning equipment" means a device designed to reduce the volume of solid, liquid, or gaseous refuse by combustion.
8. "Ringelmann Smoke Chart" means the Ringelmann Smoke Chart with instructions for use as published in May, 1967, by the U. S. Dept. of Interior, Bureau of Mines.
9. "Standard conditions" means a temperature of 60° Fahrenheit and a pressure of 14.7 pounds per square inch absolute.
10. "Standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from fuel or refuse burning, "Standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 50% excess air.

II. Special Control Areas:

The following areas of the State are established as Special Control Areas, and are deemed applicable to these Regulations and to Emission Standards for Industrial Processes.

a) Willamette Valley, defined as all areas within counties of the State under the jurisdiction of a regional air pollution control authority as of June 1, 1970, including:

1) The Columbia-Willamette Air Pollution Authority, which includes the counties of Clackamas, Columbia, Multnomah and Washington,

2) The Mid-Willamette Valley Air Pollution Authority, which includes the counties of Benton, Linn, Marion, Polk and Yamhill,

3) Lane Regional Air Pollution Authority, which includes Lane County.

b) Umpqua Basin, defined as the area bounded by the following line:

Beginning at the SW corner of Sec. 2, T19S, R9W., on the Douglas-Lane County lines and extending due South to the SW corner of Sec. 14, T32S., R9W, on the Douglas-Curry County lines; thence Easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine and Jackson County lines; thence Easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Sec. 32, T32S, R3W, thence Northerly on the Umpqua National Forest boundary to the NE corner of Sec. 36, T25S, R2W, thence West to the NW corner of Sec. 36, T25S, R4W, thence North to the Douglas-Lane County line, thence Westerly on the Douglas-Lane County line to the starting point.

c) Rogue Basin, defined as the area bounded by the following line:

Beginning at the NE corner of T32S, R2E, W.M.; thence South along Range line 2 E to the SE corner of T39S, R2E; thence West along Township line 39S to the NE corner of T40S, R7W; thence South to the SE corner of T40S, R7W; thence West to the SE corner of T40S, R9W; thence North on Range line 9W to the NE corner of T39S, R9W; thence East to the NE corner of T39S, R8W; thence North on Range line 8W to the SE corner of Sec. 1, T33S, R8W on the Josephine-Douglas County line; thence East on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1 W; thence East along township line 32S to the NE corner of T32S, R2E to the point of beginning.

d) Within incorporated cities having a population of four thousand (4000) or more, and within three (3) miles of the corporate limits of any such city.

III. Visible Air Contaminant Limitations:

1. Existing Sources Outside Special Control Areas:

No person shall cause, suffer, allow, or permit the emission of any air contaminant into the atmosphere from any existing air contaminant source located outside a Special Control Area for a period or periods aggregating more than 3 minutes in any one hour which is:

a) As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, or

b) Equal to or greater than 40% opacity.

2. New Sources in All Areas and Existing Sources Within Special Control Areas:

No person shall cause, suffer, allow, or permit the emission of any air contaminant into the atmosphere from any new air contaminant source, or from any existing source within a Special Control Area, for a period or periods aggregating more than 3 minutes in any one hour which is:

a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, or

b) Equal to or greater than 20% opacity.

3. Exceptions to III(1) and III(2):

a) Where the presence of uncombined water is the only reason for failure of any emission to meet the requirements of Sections III(1) and III(2), such sections shall not apply.

b) Existing fuel burning equipment utilizing wood wastes and located within Special Control Areas shall comply with the emission limitations of Subsection III(1) in lieu of Subsection III(2).

IV. Fuel Burning Equipment Limitations:

No person shall cause, suffer, allow, or permit the emission of particulate matter, from any fuel burning equipment in excess of:

a) 0.2 grain per standard cubic foot for existing sources; or

b) 0.1 grain per standard cubic foot for new sources.

V. Refuse Burning Equipment Limitations:

No person shall cause, suffer, allow, or permit the emission of particulate matter from any refuse burning equipment in excess of:

a) For equipment designed to burn 200 pounds of refuse per hour or less, 0.3 grain per standard cubic foot; or

b) For equipment designed to burn more than 200 pounds of refuse per hour,

1) 0.2 grain per standard cubic foot for existing sources, or leave

2) 0.1 grain per standard cubic foot for new sources.

VI. Section 21-011, Smoke Discharge, OAR Chapter 340, is repealed, except as applicable to 21-020

NOTICE OF INTENDED ACTION

AND OF

PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Department of Environmental Quality intends to present to the Environmental Quality Commission, for their adoption, certain proposed regulations to be added to OAR Chapter 340. The proposed regulations establish new air contaminant emission limitations for industrial processes other than fuel burning and refuse burning and those industries already regulated under other specific emission standards.

Copies of the proposed new standards and regulations may be obtained upon request from:

Department of Environmental Quality
Air Quality Control Division
State Office Building
1400 S. W. Fifth Avenue
Portland, Oregon 97201

Telephone: 226-2161, Extension 230

Any person desiring to express written views or data on this matter may do so by forwarding them to the above stated address before 5:00 p.m., May 21, 1970, or may appear and be heard orally or submit any written data or views at a public hearing regarding the adoption of the proposed regulations, to be held in Room 36, State Office Building, Portland, Oregon on May 22, 1970, beginning at 2:00 p.m. DST. The Presiding Officer at the Hearing will be Mr. B. A. McPhillips, Chairman, Environmental Quality Commission, or his authorized representative.

Dated this 30th day of April, 1970.

Kenneth H. Spies

Kenneth H. Spies, Director
Department of Environmental Quality

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION STAFF

DATE : May 11, 1970 for May 22, 1970 Meeting

SUBJECT: PROPOSED EMISSION STANDARDS FOR INDUSTRIAL PROCESSES, FOR PUBLIC HEARING ON MAY 22, 1970

The attached proposed regulation represents another part of the updated particulate emission standards that the Staff deems necessary to achieve needed reductions in particulate emissions throughout the State. In concert with the visible emissions, fuel burning, and refuse burning emission standards considered at a Public Hearing on April 23, 1970, the Emission Standards for Industrial Processes will provide objective mass emission standards for the sources of 85% to 95% of non-seasonal particulate emissions in the State.

With adoption of these regulations, the only remaining major source left uncovered by specific Department of Environmental Quality regulations will be open burning of solid waste at refuse disposal sites. Staff of the Air Quality Control Division and the Solid Waste Program are preparing a revised open burning regulation for public hearing in the near future to replace the current limited standard.

The emission standards under consideration at the present time apply to all industrial particulate emission sources other than fuel and refuse burning equipment, and other than kraft pulp and hot mix asphalt plants now covered by specific regulations. Available emission inventory data for the Willamette Valley indicate that the proposed regulation will cover the source of approximately 39% of the annual particulate emissions, and about 24% of the particulate categorized as "fine" - of a size to contribute to atmospheric suspended particulate. Among the major industries subject to the regulation are plywood, particleboard, primary and secondary metals, and cement manufacture.

The attached Informational Report provides a description of the technical and administrative aspects of the proposed regulation. The regulation is similar in concept and uses the same process weight table as standards adopted or proposed by Regional Authorities, but in many circumstances the proposed Department of Environmental Quality standard becomes more stringent in application. As the Informational Report points out, this comes about as a result of applying the process weight table to an entire plant site (process unit), rather than to individual items of process equipment within the plant site.

In developing and evaluating the proposed regulation, the staff worked extensively with the Mid-Willamette Valley Air Pollution Authority, and has also consulted with the Joint Coordinating Subcommittee of the Regional

Authorities and the Environmental Quality Commission. It was primarily at this latter body's suggestion that the deadline of January 1, 1975 was set for full compliance by sources currently in compliance or proceeding on a schedule of compliance with any less stringent Regional standard.

It is hoped that the use of the term "less stringent" and "more stringent" as used herein is not misleading, for neither application of the process weight table is a permissive standard. The process weight standard applied on a process equipment basis has been used in Los Angeles since 1948, and is used today by a number of state and local agencies. The level of control it requires is substantial.

There are some problems with the conventional process weight standard, however, which the proposed DEQ regulation is intended to remedy. One problem is the ambiguity inherent in determining what constitutes a single item of process equipment, which in some instances logically should comprise more than one piece of hardware. The Informational Report deals briefly with this problem, and it appears that any one given agency could work out a consistent policy for applying the regulation. There is some doubt, however, that the four agencies controlling air pollution in Oregon could all arrive at exactly the same interpretation in every instance, making consistent application of the law impossible.

Another problem with the process weight standard applied on an equipment basis is that it can be met by many sources by application of somewhat less than maximum technology, and therefore frequently falls short of maximizing the reduction of emissions. Improvements in control technology since the 1950's when Los Angeles first began using the standard have made possible considerable improvements in the control of certain source types.

The Staff has examined a number of industries with respect to the proposed standard, and concluded that application of the process weight table on a process unit basis is technically feasible and in most cases has the effect of requiring the application of highest and best treatment, which usually means installation of bag filters or electrostatic precipitators of 99% to 99.5% efficiency. Included in the survey of industries were primary and secondary metals plants, cement, and particleboard plants. For some of the plants currently in compliance with the conventional process weight standard, relatively simple additions to improvements to existing equipment would be required to upgrade the system, while others would presumably have to scrap existing equipment and start from scratch.

One source for which it appears the proposed standard is not technically feasible at the present time is the kraft pulp industry. The 1975 standard for particulate emissions from kraft pulp mills total to 5.5 lb/ton for the aggregate of recovery furnace, lime kiln, and smelt tank. For a 500 ton a day mill this results in an allowable emission of 115 lb/hr. Allowable emissions if computed according to the process weight table applied on a

process unit basis would be about 45 lb/hr. Since early results from the kraft mill sampling program indicate that achievement of the 5.5 lb/ton presents somewhat of a challenge under current technology, decreasing the allowable emissions to somewhat less than half that amount does not appear feasible at this time. For that reason kraft mills, as well as hot mix asphalt plants (which are currently operating under a generally more stringent regulation) are specifically exempted from the proposed standard.

The Staff recognizes that there may be other instances in which full compliance with the proposed standard either is technically not feasible or is economically impractical. No such case has as yet been clearly identified, but the possibility cannot be ruled out. The expectation is that any company that believes the standard to be impractical for its specific case will apply to the Commission for a variance, as provided for in the law. The staff would recommend granting such a variance only if it determines that highest and best practicable treatment is being applied. While recognizing that public acceptance of variances from pollution standards is in short supply these days, the Staff feels strongly that a stringent general standard, with provisions for variances, adopted now, is highly preferable to a less stringent standard adopted now and updated later. Consideration of every possible difficulty and inequity, or the development of specific standards for individual industries, would create an unacceptable delay in providing needed abatement tools and clear guidance to industry regarding the level of emission control that will be required in the future.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

May 1970

INFORMATIONAL REPORT

PROPOSED EMISSION STANDARDS FOR INDUSTRIAL PROCESSES

INTRODUCTION

The proposed Emission Standards for Industrial Processes is a highly technical and, at first glance, rather confusing regulation. While it is true that much of the difficulty with the regulation lies in the legal language, the various provisions themselves are somewhat complicated. This report has been prepared in order to more fully explain the terms and provisions of the regulation, and provide examples of its application.

THE CONCEPT OF THE PROCESS WEIGHT TABLE

The concept of basing a particulate emission standard upon the weight rate of process materials introduced into an industrial process is not completely new to air pollution control in Oregon. The currently proposed regulation is similar in concept to the hot mix asphalt plant regulation in that a maximum allowable emission rate is based upon the rate of materials input to the process, according to a table of corresponding process weight and allowable emissions. The major differences between the proposed standard and the asphalt plant standard are the following:

1. The proposed standard applies to all industrial processes except for asphalt plants, kraft pulp mills, fuel burning for indirect heating, and refuse disposal.

2. Whereas asphalt plants are limited to a maximum of 40 pounds per hour, the proposed general standard allows additional emissions, at a lower rate of increase, for process weights in excess of 60,000 lb/hr. See Figure 1.

3. The proposed regulations provides for two ways of computing process weight and applying the emission standard, resulting in two levels of control for application according to whether a source is new or existing, and within or outside a Special Control Area.

It is these latter provisions which require a detailed explanation.

"PROCESS UNIT" vs. "PROCESS EQUIPMENT"

Two key definitions must be clearly understood before the proposed regulation can become comprehensible. The term "process unit" and "process equipment" are the tools by which the above mentioned two levels of control are distinguished.

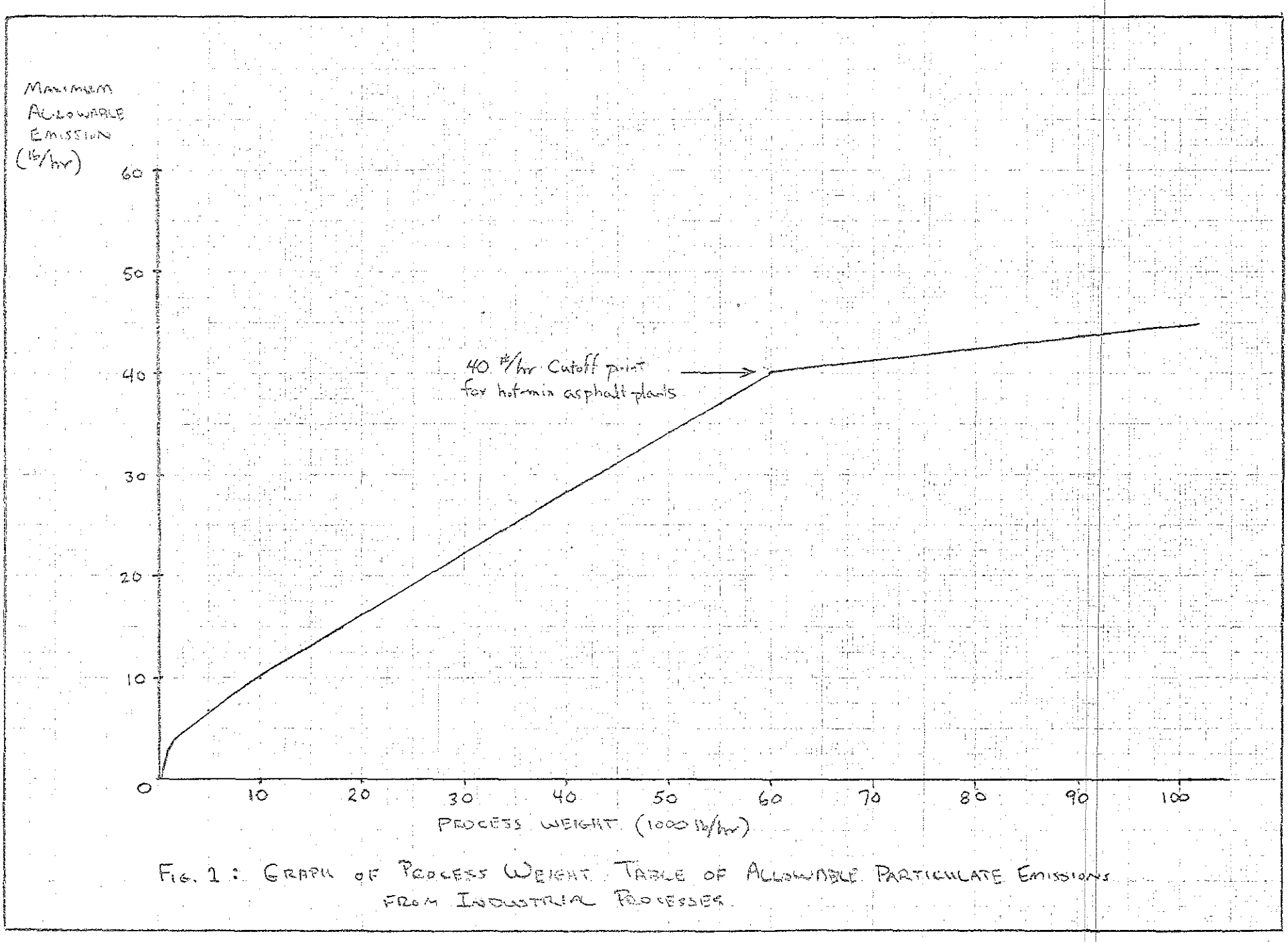


FIG. 1: GRAPH OF PROCESS WEIGHT TABLE OF ALLOWABLE PARTICULATE EMISSIONS FROM INDUSTRIAL PROCESSES

FGO 5-11-70

"Process equipment" is simply defined in the regulation as "any equipment used in a manufacturing or materials handling process." It can be a dryer, a cyclone or group of cyclones, an electric arc furnace, or any other piece of equipment. Application of the process weight emission standard on the basis of process equipment is straightforward with each individual piece of process equipment within a plant site allocated a certain maximum allowable particulate emission according to the input of process materials.

"Process unit" is in most respects a synonym for "plant site", and for all practical purposes is composed of the aggregate of process equipment within a plant site. Application of the process weight emission standard on a process unit basis means that a single total hourly emission limit is established for a plant site, regardless of the number of individual pieces of process equipment, according to the total hourly rate of input of process material to the plant site.

The complicating factor in the process unit definition results from the need to allow for the existence of more than one major economic activity located at the same physical premises. A common example of such a case would be an integrated timber products plant, which actually comprises essentially separate economic units, such as a lumber mill, plywood mill, and a particleboard plant. The definition of process unit, plus some additional qualifications in the General Provision section (II(5)), allows for each unit in such installations to be treated as a separate plant site.

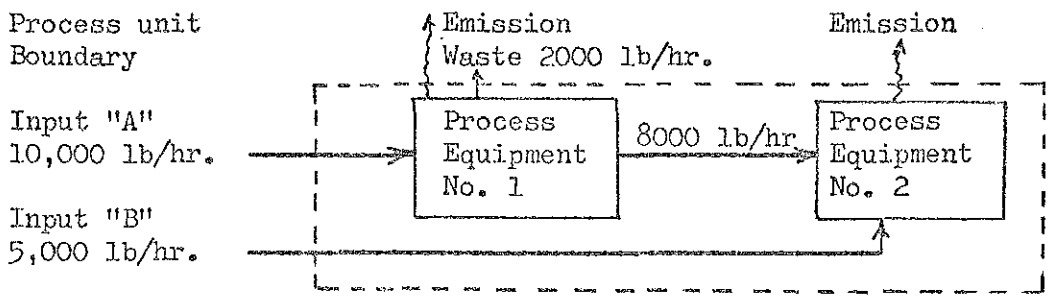
The two levels of control established by the regulation are essentially the following:

Less stringent: Process weight table applied individually to each piece of process equipment within a process unit.

More stringent: Process weight table applied to the process unit as a whole.

That the process unit application of the process weight table is more stringent than the process equipment application can be clearly pointed out by considering several simplified and hypothetical examples of process units with more than one piece of process equipment.

Consider an industrial operation consisting of two basic operations with process material flows as shown schematically below:



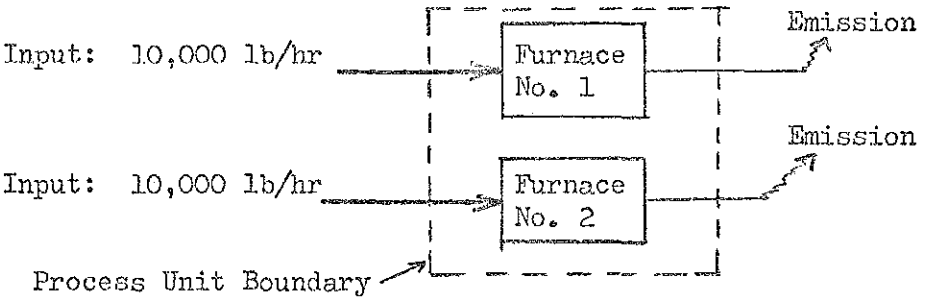
The computation of allowable emissions for this hypothetical industry on a process equipment and process weight basis would be as follows:

Process Equipment Basis:	Equipment	Process Weight	Allowable Emission
	No. 1	10,000 lb/hr	10.00 lb/hr
	No. 2	13,000 lb/hr	11.89 lb/hr
	Total plant		21.89

Process Unit Basis: Process weight = 15,000 lb/hr
Allowable emission = 13.13 lb/hr

Thus the total allowable emissions from this particular hypothetical plant site are 67% greater when computed on a process equipment basis than on a process unit basis (21.9 lb/hr compared to 13.1 lb/hr).

The above example demonstrates the case of multiple processes in series. A more subtle case, in which the process unit application is also more stringent than the process equipment method, is the case in which the process equipment is in parallel. Suppose a steel foundry has two electric furnaces, each of which receives 10,000 lb/hr of raw materials; the schematic diagram and comparative computations of allowable emissions would be as follows:



Process Equipment Basis:	Equipment	Process Weight	Allowable Emission
	No. 1	10,000 lb/hr	10.00 lb/hr
	No. 2	10,000 lb/hr	10.00 lb/hr
	Total plant		20.00

Process Unit Basis: Process weight = 20,000 lb/hr.
Allowable emission = 16.19 lb/hr.

In this particular case the total allowable emission for the plant site would be about 25% greater computed on the process equipment basis than on the process unit basis, an indication of the nature of the process weight table. The incremental increase in allowable emissions gets smaller and smaller as the process weight increases.

BASIC ELEMENTS OF THE PROPOSED REGULATION

Subsections II(1) and II(2) of the regulation set forth the emission limitations for new and existing sources (June 1, 1970 is established as the criterion for determining whether a source is "new" or "existing") inside and outside Special Control Areas. The Special Control Areas referred to are the same ones included in the visible emission and grain loading standards being adopted at the present time.

Emission limitations are established using the process weight table applied on either the process equipment basis or process unit basis. The following table shows the basic provisions:

APPLICATION OF PROCESS WEIGHT TABLE

		Inside Special Control Areas	Outside Special Control Areas
Existing Sources	Before Jan.1,1975	Process equipment basis with exceptions as noted	Process equipment basis
	After Jan.1,1975	Process unit basis	Process equipment basis
New Sources		Process unit basis	Process unit basis

An important exception to the basic rate for existing sources inside Special Control Areas is that any source not already in compliance with the emission limitation on a process equipment basis or on an accepted schedule for such compliance, must install sufficient controls to go all the way to compliance with the more stringent process unit limitation. This is a logical step in view of the requirement that all sources inside Special Control Areas comply with the process unit emission limitation by no later than Jan. 1, 1975. Similarly, any modifications or additions to existing plants located within Special Control Areas will require that the entire unit be brought into compliance with the more stringent limitation.

NOTES ON ADMINISTRATION OF THE REGULATION

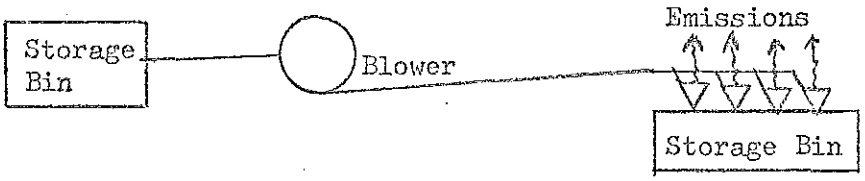
As with any complex regulation designed to cover a wide range of circumstances, the proposed Emission Standards for Industrial Processes will be subject to different interpretations by various parties in some circumstances. Two areas of most probable disagreement are in determining when a plant site consists of more than one process unit, and in defining the various process equipment within a process unit. It is the intention of the Department of Environmental Quality to apply in either circumstance a common sense interpretation of the regulation, treating each individual case on its own merits.

For determining when two divisions within a plant site are to be considered separate process units, the criteria used is basically a consideration of the difference in products of the two divisions. For example, a plant consisting of two buildings, each housing equipment for producing particleboard, would be considered a single process unit. On the other hand, if one of the buildings houses a plywood mill, then two process units would be defined.

The formal means provided in the regulation for delineating process units is the Standard Industrial Classification (SIC). In the case of a particleboard plant and plywood mill located side by side, the particleboard plant would be classified as SIC No. 2499, "Wood Products, Not Elsewhere Classified", while the plywood mill would be given SIC No. 2432, "Veneer and plywood".

The two activities therefore have separate SIC Nos., are not ordinarily associated (though they may be associated) with one another at common plysical locations, and in combination do not fit under a single industrial classification; hence they meet the regulation criteria for consideration as separate process units.

In defining various process equipment within an existing process unit, problems occasionally may arise in interpreting what physically constitutes an "equipment". Generally, the more pieces of process equipment that can be defined, the higher the total allowable emission will be. For example, consider a pneumatic materials handling system conveying grain, sawdust, or some similar product from one place to another. Such a system might consist of a blower, a pipe, and a number of cyclones used to separate the product from the air by which it is conveyed. Suppose the system included four identical cyclones side by side in parallel:



The question that arises is whether each of these cyclones is to be given an allowed emission based on 1/4 of the total amount of product being conveyed, or whether the transfer system is to be considered as a whole, with an allowable emission for the four cyclones in combination computed on the basis of the total rate of material handled. Two considerations will be given in determining the solution. First, multiple equipment whose function could be equally performed by a single similar unit, following accepted engineering practice and at approximately equal cost, will generally be considered as a single piece of process equipment, with allowable emissions computed accordingly. This would probably be the case in the example of the materials handling cyclones.

The second consideration that may be applied to such cases is the level of emission control required by one interpretation or the other. This consideration, legally justified by Subsection II(3) of the regulation, "Higher Treatment and Control", gives the Department needed latitude in assuring that reasonable control of major pollution problems is not circumvented merely by a lax interpretation of the process equipment definition. Thus, if the cyclones in the example are contributing a local problem which could be alleviated by improving them to comply with an emission limitation based on an interpretation of the transfer system as a whole constituting a single "process equipment", then the tendency will be to make such an interpretation.

In conclusion, it should be emphasized that the Department recognizes the difficulties inherent in administering a regulation as complex and in some respects ambiguous as the proposed Emission Standards for Industrial Processes. It is confident, however, that by meeting the difficulties head on and resolving each situation on its own merits and in consultation with the concerned parties, that the regulation can be applied. While it is certainly not claimed to be the last word in emission standards, the proposed regulation is considered to be a major improvement over existing standards and a needed step toward achieving the air quality that Oregonians demand.

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CONTROL DIVISION

May 4, 1970

EMISSION STANDARDS FOR INDUSTRIAL PROCESSES

I. Definitions:

1. "Process equipment" means any equipment used in a manufacturing or materials handling process.
2. "Process unit" means the aggregate of all process equipment within an economic unit which produces goods or services at a single physical location and is engaged in one, or predominantly one, type of economic activity for which a Standard Industrial Classification code is applicable.
3. "Process weight per hour" means the total hourly rate at which process materials, including solid fuels but excluding liquid and gaseous fuels, are introduced into a process unit or process equipment.
4. "Standard Industrial Classification" means the type of classifying and assigning codes to economic units by type of activity, as enumerated in the "Standard Industrial Classification Manual" published by the Executive Office of the President--Bureau of Budget, 1967, issued by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.
5. "Existing process unit" means any process unit in existence prior to June 1, 1970.
6. "New process unit" means any process unit installed, constructed, approved completed or modified after June 1, 1970.
7. "Special control areas" means those areas of the State specifically described in the General Emission Standards for Particulate Matter, Section II(a) through II(d), as adopted on May 22, 1970 by the Environmental Quality Commission Order No._____, and duly filed with the Office of the Secretary of State.

II. INDUSTRIAL PROCESS EMISSION LIMITATIONS

1. Outside Special Control Areas

a) For existing process units, no person shall cause, suffer, allow, or permit the emission of particulate matter into the atmosphere from any process equipment in excess of the amount prescribed for the process weight per hour allocated to such process equipment, as set forth by Table I, marked Exhibit "A" and by reference incorporated specifically herein,

b) For new process units, no person shall cause, suffer, allow, or permit the emission of particulate matter to the atmosphere from any process unit in excess of the amount prescribed for the process weight per hour allocated in such process unit, as set forth by Table I.

2. Within Special Control Areas

a) Except as provided in Subsection II(2)(b), for all existing process units, no person shall cause, suffer, allow, or permit the emission of particulate matter into the atmosphere from any process equipment in excess of the amount prescribed for the process weight per hour allocated to such process equipment, as set forth by Table I.

b) For the classes of existing process units listed below, no person shall cause, suffer, allow or permit the emission of particulate matter into the atmosphere from any process unit in excess of the amount prescribed for the process weight per hour allocated to such process unit, as set forth by Table I:

1) Process units not in compliance with the emission limitations set forth in Subsection II(2)(a) as of June 1, 1970,

2) Process units not on an established program of control accepted by the Department prior to June 1, 1970,

3) Process units which construct, install, or modify process equipment such that air contaminant emissions are significantly affected.

c) All existing process units shall comply with the emission limitation set forth in Subsection II(2)(b) by not later than January 1, 1975.

d) For new process units, no person shall cause, suffer, allow, or permit the emission of particulate matter to the atmosphere from any process unit in excess of the amount prescribed for the process weight per hour allocated to such process unit, as set forth by Table I.

3. Higher Treatment and Control

a) Generally - The limitations set forth in Subsections 1 and 2 of this section are the minimum emission requirements permitted for all process units and equipment within the State.

b) ORS 449.765 declares it to be the public policy of the State of Oregon to restore and maintain the quality of the air resources of the State in a condition as free from air pollution as is practicable, consistent, within the overall public welfare of the State. To carry out this policy, ORS 449.770 states that the purpose of the air pollution laws of Oregon is not only to control and abate existing air pollution but to prevent new air pollution. As a result of this policy declaration and purpose statement, the Department of Environmental Quality may require the application of the highest and best practicable treatment and control currently available for all new and existing process units.

4. Exclusions

a) This section applies to any operation, process, or activity except the burning of fuel for indirect heating and the burning of refuse in which the products of combustion do not come into direct contact with the process materials.

b) Subsections 1, 2 and 3 do not apply to those industries or plants regulated and controlled by other specific regulations. (See Sections 26-005 to 26-030 and 27-005 to 27-045, Chapter 340 OAR.)

5. General Provisions

a) Where a single physical location encompasses two or more distinct and separate economic activities for which different Standard Industrial Classification codes are applicable, such activities shall be treated as separate process units, provided it is determined that:

1) Such activities are not ordinarily associated with one another at common physical locations; and

2) No single industry description in the Standard Industrial Classification includes such combined activities.

b) The process weight per hour shall be based upon the process materials introduced into the process unit or process equipment in one complete operation or cycle and the time required to complete that operation or cycle, excluding any time during which the process unit or equipment is idle.

c) The process weight per hour referred to in this section shall be based upon the normal maximum operating capacity of the process unit or process equipment; and if such normal maximum capacity should be increased by process or equipment changes, the new normal maximum of capacity shall be used as the process weight in determining the allowable emissions.

TABLE I

Particulate Matter Emissions Standards for Process Units and Process Equipment

Process Lbs/Hr	Emission Lbs/Hr	Process Lbs/Hr	Emission Lbs/Hr	Process Lbs/Hr	Emission Lbs/Hr
50	0.24	2300	4.44	7500	8.39
100	0.46	2400	4.55	8000	8.71
150	0.66	2500	4.64	8500	9.03
200	0.85	2600	4.74	9000	9.36
250	1.03	2700	4.84	9500	9.67
300	1.20	2800	4.92	10000	10.00
350	1.35	2900	5.02	11000	10.63
400	1.50	3000	5.10	12000	11.28
450	1.63	3100	5.18	13000	11.89
500	1.77	3200	5.27	14000	12.50
550	1.89	3300	5.36	15000	13.13
600	2.01	3400	5.44	16000	13.74
650	2.12	3500	5.52	17000	14.36
700	2.24	3600	5.61	18000	14.97
750	2.34	3700	5.69	19000	15.58
800	2.43	3800	5.77	20000	16.19
850	2.53	3900	5.85	30000	22.22
900	2.62	4000	5.93	40000	28.30
950	2.72	4100	6.01	50000	34.30
1000	2.80	4200	6.08	60000	40.00
1100	2.97	4300	6.15	70000	41.30
1200	3.12	4400	6.22	80000	42.50
1300	3.26	4500	6.30	90000	43.60
1400	3.40	4600	6.37	100000	44.60
1500	3.54	4700	6.45	120000	46.30
1600	3.66	4800	6.52	140000	47.80
1700	3.79	4900	6.60	160000	49.00
1800	3.91	5000	6.67	200000	51.20
1900	4.03	5500	7.03	1000000	69.00
2000	4.14	6000	7.37	2000000	77.60
2100	4.24	6500	7.71	6000000	92.70
2200	4.34	7000	8.05		

Interpolation and extrapolation of the data for process unit weight rates in excess of 60,000 lb/hr shall be accomplished by the use of the equation:

$E = 55.0P^{0.11} - 40$, where E = rate of process unit emission in lb/hr and P = process weight in tons/hr.

TESTIMONY OF ASSOCIATED OREGON INDUSTRIES
TO THE ENVIRONMENTAL QUALITY COMMISSION

May 22, 1970

Re: proposed "Emission Standards for Industrial Process."

Our technical committee has reviewed this proposal and makes the following observations:

1. With regard to the definition of "Process unit," we know of no other jurisdiction that uses such a definition. The usual application of process weight standards is based on process equipment. Los Angeles, where the standards were originally formulated, applies process weight on a process equipment basis. The Bay Area Code (San Francisco, Oakland) also applies their process weight on a process equipment basis as does the more recently adopted Puget Sound Code. The effect of such a definition is to place on Oregon industry the responsibility of meeting this proposed standard without any prior experience anywhere to guide them or your staff in meeting the standard.

2. The theory of process weight was adopted originally by the Los Angeles Air Pollution Control District based primarily on emissions from metal melting operations. The standard was developed in one geographic area for industry located in that area. While other jurisdictions are adopting these standards on a process equipment basis for general application and you have adopted the process weight concept for asphalt plants, we doubt the technical justification for the proposed process unit standard when applied statewide to the broad variety of Oregon industry. We therefore believe that on application to all Oregon industry, it will cause requirements which cannot be achieved by equipment available in the foreseeable future.

3. We further believe that application of the process weight concept as proposed will definitely limit the size of future industrial operations in this

state, and will cause the proliferation of smaller plants designed to achieve compliance with the more tolerant process weights allowed for the smaller processes. For example, 10 process units of 10,000 lbs. per hour process weight would each be allowed 10 lbs. of emission per hour or a total of 100 lbs. per hour for the 10 units; but one process unit of 100,000 lbs. per hour process weight would only be allowed 44.60 lbs. per hour - a net reduction of 55.40 lbs. per hour. If the smaller units were located in a limited geographic area you would have achieved little. This kind of rule does not appear to make either economic or air quality control sense.

It appears to us that economic size limitation of industry or control of plant design which will encourage small plants will result. If this is a valid assumption this board should clearly understand it and speak directly to the point and not allow this effect by default by the adoption of a highly confusing process weight table which admittedly defies reasonable administration.

4. The process weight table arbitrarily assumes that large industry or multiple industrial units can handle high efficiency collection more economically than smaller units. We believe this to be a patently false assumption. However, in many instances, the process weight regulation approach is too elaborate for a small organization which is not financed adequately. Checking the performance of a process weight regulated installation is expensive and time consuming, and, if trained personnel are not available, this type of regulation is difficult to enforce.

5. Reason dictates that control programs should be designed to achieve ambient air qualities rationally selected on the basis of established criteria. In view of the lack of experience with the process weight program as proposed, we recommend that if you do adopt a standard of this type that it be allowed on a process equipment basis until such time as another basis can be justified.

6. If the proposed standard is adopted in any form and you do in fact determine that on application it cannot be met by an existing Oregon plant or industry, then you could only grant a variance for the continued operation of such a plant or industry. In order to avoid the difficulty posed by variance granting we suggest that you might wish to consider something like the following language as a new subsection (6) of II:

"If in the application of this rule to any source or class of source the Department determines that strict compliance with the rule would be unreasonable or impractical due to special conditions or because no other reasonable alternative, facility or method is currently available to meet this standard, the Department shall promulgate such additional standards for such source or class of sources that are compatible with their ability to achieve particulate matter emission control."

7. We recommend that II (3) (b) is surplusage that should be deleted from the regulation. A regulation has the force and effect of a statute and should be a proper interpretation of the law. We are concerned with a statement contained in a rule that purports to interpret two statutes and then arrives at a conclusion of law that creates an uncertain standard. If adopted, Oregon industry will be required to meet a process weight standard. But to allow the Department to change the requirements at any time as suggested in the proposed rule makes the entire standard so ambiguous and potentially arbitrary as to make it meaningless. As a matter of law we conceive no justification for such a statement in a general standard and urge its deletion.

8. As you adopt regulations which require ever greater information from industry either to directly comply (such as registration) or to show compliance (process weight) the greater becomes the necessity for fully understanding and applying the confidentiality provisions of the statute -

ORS 449.702 (3), 449.707 (3) and 449.800. We believe these statutes should be stated in your rules to provide wider knowledge of these provisions. Further, the staffs of all pollution control agencies should be fully aware of their responsibilities under these provisions.

Support Letter

MICHAEL D. ROACH
Director

MID WILLAMETTE VALLEY
AIR POLLUTION AUTHORITY

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

May 21, 1970

Environmental Quality Commission
State Office Building
1400 Southwest Fifth Avenue
Portland, Oregon 97201

Attention Mr. B.A. McPhillips

Re: Proposed Emission Standards for Industrial Processes

Gentlemen:

The Mid-Willamette Valley Air Pollution Authority wishes to speak in favor of the proposed emission standards for industrial processes. Through experience, the Authority knows the pressing need for a mass rate emission standard. We have clearly demonstrated in our region that certain processes that meet the Authority's concentration or grain loading standard have consistently exceeded the ambient air standards.

Specific note should be taken of the more important and desirable factor of this standard and that is its potential application on a plant site basis. The primary objective of this Commission and all air pollution control authorities is to protect their communities' air supply. This standard provides a degree of this protection by preventing circumvention by the installation of multiple process lines or additional stacks. At the same time the standard becomes significantly more stringent the larger the process.

I would like to quote the National Air Pollution Control Authority on their review of the Authority's revised regulation which includes a similar standard as the one before you for consideration: "The new provision concerning separate process units are especially noteworthy since the process weight rule can be applied with a measure of certainty and the circumvention of the rule by building multiple units and substantially deteriorating air quality at a site is avoided."

As indicated the Authority included a very similar standard in its revised regulations which has been to two public hearings in March and April of this year. The Authority's standard was developed jointly with the staff of the Department of Environmental Quality. At the public

hearings no adverse comments were received from industry though they were well represented at the meetings. This lack of opposition to what is considered a significant standard is attributed to the Authority's forewarning two years ago in the Authority initial enforcement effort that such a standard would be required in the future. Approximately one year ago, the Authority staff held meetings with the most effected industries to receive their comments and explore reasonable process weight standards. Prior to the Authority's public hearings, representatives of AOI reviewed the standard and expressed their support with minor modification. This modification provided for existing particleboard plants to be in compliance with the regulation by 1973. Due to the preliminary work by the Authority, the 1975 date is not required for our region.

The Board of Directors of the Mid-Willamette Valley Air Pollution Authority adopted the revised regulations with the emission standard for industrial process as proposed. The Authority urges the adoption of the standard under consideration today to provide a degree of consistent application between the regions and the State of Oregon. The Authority feels the proposed standard is a significant step forward in the control of particulate matter in the Willamette Valley.

Sincerely yours,

Michael D. Roach

MICHAEL D. ROACH
Director

MDR:ds

WAH CHANG ALBANY CORPORATION
P. O. BOX 460
ALBANY, OREGON 97321
(503) 926-4211

A TELLDYNE COMPANY

May 21, 1970

Mr. B. A. McPhillips, Chairman
Department of Environmental Quality
P. O. Box 571
McMinnville, Oregon 97128

Dear Mr. McPhillips;

Under the proposed process weight standard, efficiently integrated plants probably would not be built in the future. Rather, it would be far easier to build each unit operation as a separate entity, such that the product of one would become the raw material for the next processing step. Such a system would multiply the weight of "raw material" by the number of steps through which it passed, thereby drastically altering the total of legally allowable emissions under the proposed regulations.

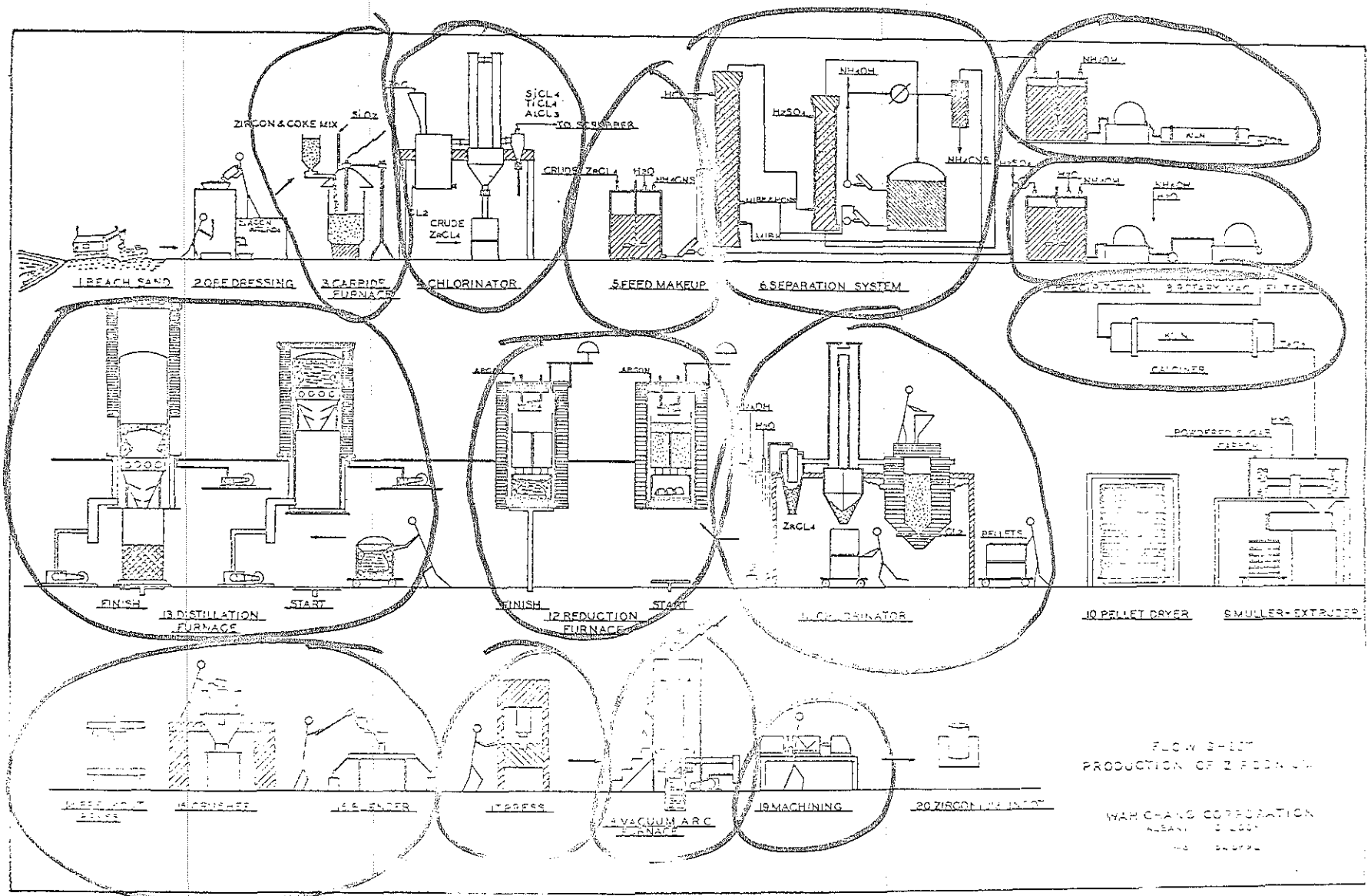
An example of the extreme lengths to which such a scheme might lead is shown on the two attached flowsheets of the zirconium production process. I have circled those steps which could, from a process standpoint, stand alone. Obviously, such breakdown would result in less economical operations with less efficient control systems. Our industry and most likely the public would surely support with enthusiasm more equitable regulations which have greater obvious relevance to the air quality of our state than do such tools as a general process weight standard based on process units as defined by the proposed regulations.

I would appreciate your consideration of these factors in reaching your conclusions.

Sincerely,

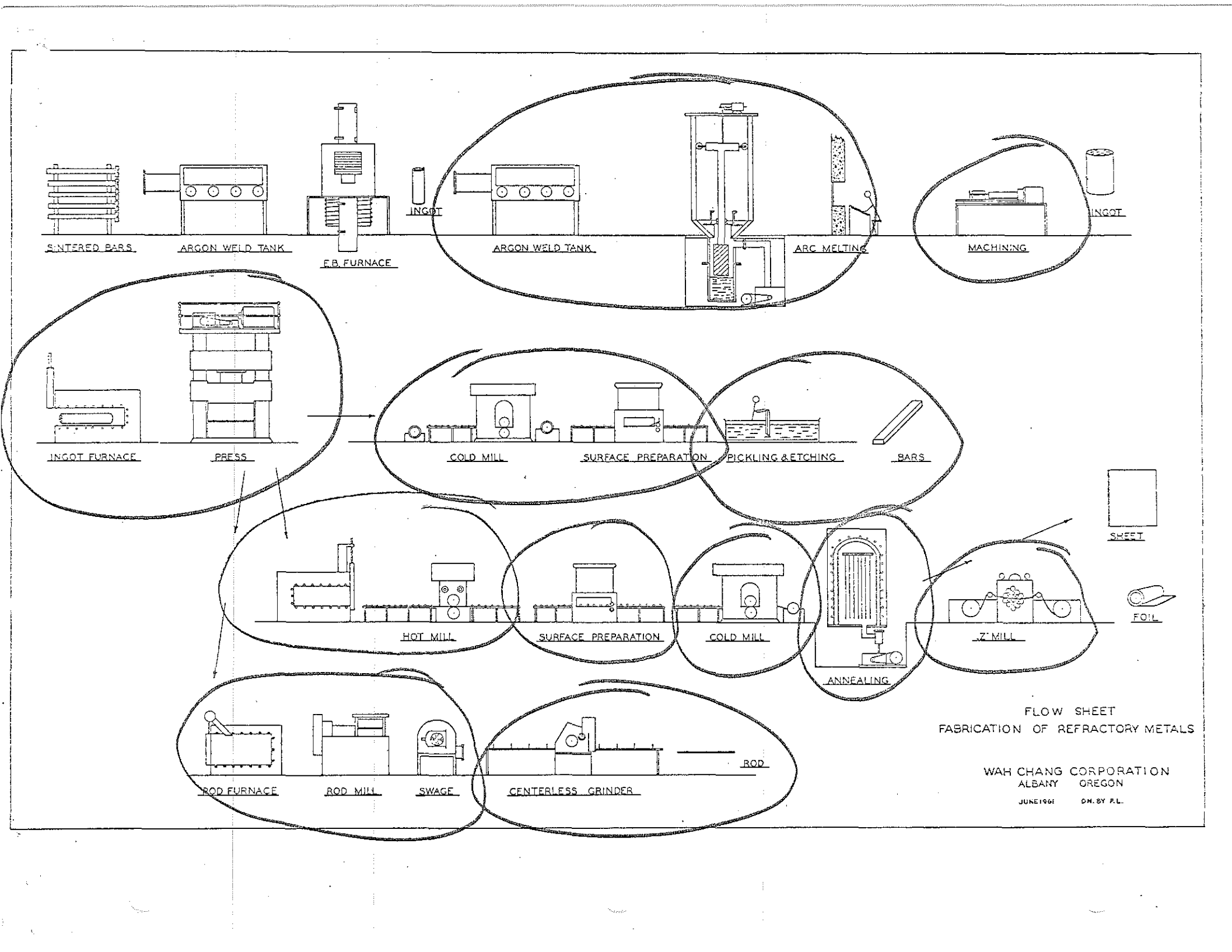
W. A. Aschoff
Chief Engineer

WAA:eh
Attachment



FLOW SHEET
PRODUCTION OF ZIRCONIUM

WAH CHANG CORPORATION


SINTERED BARS
ARGON WELD TANK
E.B. FURNACE
INGOT
ARGON WELD TANK
ARC MELTING
MACHINING
INGOT
INGOT FURNACE
PRESS
COLD MILL
SURFACE PREPARATION
PICKLING & ETCHING
BARS
SHEET
HOT MILL
SURFACE PREPARATION
COLD MILL
ANNEALING
Z' MILL
FOIL
ROD FURNACE
ROD MILL
SWAGE
CENTERLESS GRINDER
ROD
FLOW SHEET
FABRICATION OF REFRACTORY METALS
WAH CHANG CORPORATION
ALBANY OREGON
JUNE 1961
DN. BY P.L.

ASPHALT PAVEMENT ASSOCIATION OF OREGON'S

Presentation to
State Board of Health
Department of Environmental Quality Control (Air)
Portland, Oregon

Introduction

The Asphalt Pavement Association of Oregon is an association consisting of 28 asphalt plant owners and 12 equipment dealers and asphalt sales companies, all dedicated to the use of asphalt for road construction and to protecting the integrity and image of the industry. This image naturally includes the cooperation of the industry in maintaining clean air.

We are appearing before your Board explain some of the problems of the industry and to ask you not to adopt the proposed set of rules at this time and to take a new approach to rules for asphalt plants. We ask you to take this new approach for the following reasons:

Operation of an Asphalt Plant is an Intermittent Operation

The emissions from asphalt plants are both particulate and gaseous. As such, we are classified with other industries whose emissions are either particulate or gaseous. However, let us explain that very few asphalt plants run continuously (more that 10 to 12 hours per day) but rather are operated intermittently each day. The daily operation is intermittent because weather conditions, specifications, mixing and laydown requirements restrict us to a fixed tonnage per plant per day.

Our production season is normally a full five months from June through October, with a small production in May and November, and virtually nothing from December through April.

How, then, can you regulate our industry with the same regulations as a 24-hour-per-day and a 365-day-per-year plant? Our contribution to the air pollution problem can never be as great as those plants whose operations are steady, rather than intermittent.

Plant Location (Fixed Plants)

Many of our plants have a fixed location and are in such a location that meteorological and topographical factors determine the extent to which contaminants emitted into the air from a source will disperse and become diluted.

Each fixed plant should be judged in this nature--not by a blanket set of rules applicable to all within a 3-mile radius of a town with a population of 4,000. It is conceivable to sit within a few blocks of town and cause no problems and, on the other hand, to sit outside the 3-mile limit and let havoc reign for miles around.

Portable Plants

Many portable plants are put in locations designated by the bidding agency or locations dictated by the rock source or the nearness to the project. These plants should not be judged by a standard set of rules that applies to the City of Portland the same as to the sagebrush country of Harney County.

Adverse Effects

The adverse effects of air pollution are:

1. Esthetics
2. Economic effects
3. Safety
4. Personal discomfort
5. Interference with normal bodily functions
6. Illness (accute or chronic)
7. Death

Based on an analysis of the above 7 items, the determination of the extent of air pollution equipment necessary should be made. It should never be the same for each location because the problems and adverse effects will not be the same.

Temporary Permits

Permits for temporary installation of portable equipment should be issued, based on the adverse effects relative to the site and the availability of water and gas and portable air pollution equipment to do the job. We have in Oregon now--by a regional authority--a restriction preventing a plant from entering any of its area without meeting the entire code. The job is 8,000 tons (no more than 10 to 12 days of work), and the site is near a town of less than 3,000 people.

How can the plants who merely indicate they will conform by 1972 continue to operate 24 hours a day for the next two years, while we cannot operate ten days? An executive order limiting the rate of production would solve the whole affair.

Present Rules Are More Than Sufficient

In 1969, in your protective area of the state, you had a variable number from 30 to 40 plants operating which produced in the

neighborhood of 2,000,000 tons. You received a total of 5 citizen complaints, 0 complaints from city or county government, and you filed a total of 0 complaints yourself. These are the facts furnished by your Portland office. These results are based on your 1969 rules. Why, then, should your 1970 rules be more restrictive?

In the testimony from your staff at the hearing in Salem on April 24, 1970, it was indicated that all the other regional authorities wanted a change. The Lane Authority's latest amendment was May 13, 1970. Mid-Willamette has one under consideration now, and the Columbia-Willamette's latest amendment was January 1, 1970.

If the new Ringleman proposal suggested by your authority was necessary for these authorities, why did they omit them from these most recent amendments?

Plant Improvements

An inventory of our plants reveals that a total expenditure of $425,000 has been made on 17 reporting plants; and of that amount, a total of $315,000 was made in 1969 or 1970, all for air pollution control equipment. Give this equipment a chance.

As we stated before, we agree with the clean-air concept--as long as the rules are rational and applied in a uniform manner to all industries.

Summary

1. We feel that our industry should be governed by a set of rules based on an intermittent operation.

2. We feel that rules should be applied, based on plant location taking into consideration meteorological and topographical conditions together with relation to populated areas.

3. We feel that portable plants should be handled with temporary permits issued for a job duration, with due consideration of location, availability of water and gas, and hardships involved and length of the job.

4. We feel the present rules of all regional authorities and the state authority--as applied to the asphalt plants--are sufficient at this time.

5. We feel the improvements our industry has made in 1969-70 deserve a chance under the present rules before additional restrictions are passed.

6. We feel if the public is really concerned about air pollution, they will provide you with sufficient staff and operating expense to actually determine and isolate the true causes of air pollution so that conforming industries will not be penalized.

We wish to thank your staff for their prompt and courteous time alloted our industry in receiving these matters last week, and we wish to thank you for taking time away from your jobs to serve the public in your present capacity as Board members.

We hope you will consider these proposals in the vein in which they are offered--neither one of rebellion nor one of disagreement with the clean-air concept but rather in the light of understanding our particular industry, the manner in which it operates, the special problems involved, our minor contribution to the total problem and our major attempt to control air pollution within the asphalt plant industry.

Respectfully submitted,

ASPHALT PAVEMENT ASSOCIATION
OF OREGON

by: Mike Huddleston, Manager

db

HARVEY Aluminum
INCORPORATED

P. O. Box 711 The Dalles, Oregon 97058

Telephone: 296-6161

May 19, 1970

Environmental Quality Commission
State Office Building
1400 S. W. Fifth Avenue
Portland, Oregon 97201

Gentlemen:

Please accept the following comments on the proposed "emission standards for industrial processes". It may be proper to review the development of the process weight table which is proposed to be the basis of the particulate emission regulation. In 1949 the then newly formed Los Angeles County Air Pollution Control District, together with the Los Angeles Chamber of Commerce, employed Kaiser Engineers to sample emissions from metallurgical and other dust and fume producing installations that were characteristic of the Los Angeles County area. The engineering consultants provided the data to the Air Pollution Control District and these data were used by the district to develop a mass rate table for the control of dust and fumes. At that time there was no single source in Los Angeles County that would release more than 34/hr. if controls in the range of 80 to 90% efficiency were applied to them. The tendency to apply this table or extensions of it, such as the San Francisco Bay area table, to other areas without a critical determination as to whether the regulations being applied meet the local need or are necessary to achieve the air quality goals set should be resisted. The adoption of such a process weight table for an entire state seems to me to be unreasonable. Difficulties can arise from the adoption of such tables in the failure to recognize the specific needs of specific communities, either in terms of source reductions required or the technological or economic feasibility of local industrial compliance.

The concept of applying the process weight to an entire site, as it is the apparent intention of the definition of a "Process unit", Section I, Item 2, is applied in no jurisdiction that I know of. The Bay area applies it to an emission point, i.e. a stack. Early on a rational decision was made in the Los Angeles District, that in the case of four open-hearth furnaces to be treated with a single electrostatic precipitator would be considered as four sources and not one. The corollary of this

decision, of course, is that if the four open-hearths had been equipped with four distinct control units they would still be considered as four sources. This interpretation has been up till now universally recognized. Dr. John Middleton personally disavowed the concept promulgated in Section I, Item 2, "Process Unit" in a meeting on September 5, 1969 with representatives of the steel industry.

In any case, the application of such a process weight table to a process such as an aluminum reduction plant is technological nonsense. If the proposed aluminum reduction plant regulation, upon which a hearing has already been held, is not adopted, presumably unless specifically exempted, reduction plants would come under this regulation. There is no way that the Harvey Aluminum Reduction plant at The Dalles could comply with this regulation as written even with the installation of electrostatic precipitators operating at a 99% efficiency level.

If the Commission does in fact adopt the proposed regulation, I strongly urge that the concept of applying this standard to an entire industrial complex be deleted.

Very truly yours,

HARVEY ALUMINUM

Joseph L. Byrne

Joseph L. Byrne

JLB/vk

Hanna Nickel Smelting Company

Riddle, Oregon 97469

May 20, 1970

Mr. B. A. McPhillips, Chairman
Environmental Quality Commission
Department of Environmental Quality
P. O. Box 231
Portland, Oregon 97207

Dear Mr. McPhillips:

It has come to our attention that the Air Quality Control Division will recommend "Emission Standards for Industrial Processes" to the Commission for adoption at the EQC Meeting scheduled for Friday, May 22. For the past several months, we have been conducting emission tests and engineering studies at our Riddle, Oregon, nickel plant with the objective of determining the highest and best possible means of controlling emissions from the plant. The results of these studies have indicated the maximum control which we can expect, utilizing the best equipment available. We have determined that it will be impossible for us to meet the proposed "Emission Standards for Industrial Processes" utilizing the highest and best possible control methods.

Based on our findings, we respectfully urge the Commission to consider seriously the implications that these proposed standards will have on our industry, as well as other industries in the state with similar problems. We recommend that industries with impossible technological problems be controlled under special regulations or, at the very least, the proposed standards should be modified to take into account such special problems.

Thank you for your consideration.

Respectfully yours,

HANNA NICKEL SMELTING COMPANY

E. J. Maney
Manager, Riddle Operations

pb

cc: H. M. Patterson
K. H. Spies

May 5, 1970

Willamette Industries, Incorporated
Albany Division (Duraflake)
1002 Executive Building
Portland, Oregon 97204

Attention: Mr. A. R. Morgans, Financial Vice President

Gentlemen:

Re: Tax Relief Application No. T-97

At its meeting on April 24, 1970, the Environmental Quality Commission considered the staff report and recommendations regarding your application for certification of three cyclones and a conveyor installation as a pollution control facility for tax relief purposes. After considerable discussion, the Commission decided to defer action on your application until the next meeting of the Commission and request that a representative from the Company appear at that time to answer questions and present such additional information as may be necessary to convince the Commission that the claimed facilities were in fact installed principally for pollution control.

The next meeting of the Environmental Quality Commission will be held on May 22, 1970 in Room 36 of the State Office Building, Portland, Oregon, beginning at 9:00 a.m.

Very truly yours,

E. J. Weathersbee, Deputy Director
Department of Environmental Quality

HLS:mjb

cc: Mr. Walter W. Affolter
cc: Air Quality Control Division

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION

DATE : April 13, 1970 for Meeting of April 24, 1970

SUBJECT: APPLICATION FOR CERTIFICATION OF POLLUTION CONTROL FACILITY NO. T-97

This application was initially received on September 15, 1969. Additional information was received on January 13 and April 6, 1970. A summary of the application and results of the staff review are given below:

1. Applicant: Willamette Industries, Inc.
Albany Division (Duraflake Company)
1002 Executive Building
Portland, Oregon 97204
Mr. A. R. Morgans, Financial Vice President
Phone: 227-5585

The Company produces particle board at the plant located on Old Pacific Highway, Albany, Oregon.

2. The facility claimed consists of three large cyclones, a covered belt conveyor and related electrical equipment. The facility is located at the Albany plant site. Installation of the facility was completed and operation commenced on June 15, 1969.

3. The total installed cost of the facility is $40,710.21. An accountant's certification of this figure is attached.

4. Staff Review:

An initial portion of the particleboard process involves drying the wood particles. Duraflake does this by contacting them with hot boiler exhaust gases in three rotating kiln devices. The air-particle mixture leaving the driers is lifted by blowers and separated by large cyclones. The air is then exhausted to the atmosphere and the dried particles are advanced in the process by belt conveyor. The exhaust air contains very small wood particles which are considered to be air contaminants.

The previous system consisted of two cyclones in series followed by a belt conveyor for each of the three driers. Installation of the claimed facility (a new cyclone for each drier and one covered belt conveyor) lowered air pollution primarily by reducing the number of emission sources. Incidental reduction by improved cyclone performance is only a possibility since insufficient data are available.

The Company claims that the principal purpose for installing the claimed facility was the reduction of emissions to the atmosphere. Although the Company did submit some evidence to support this claim, the staff still has some reservation toward certifying the facility. The staff could not establish sufficient evidence for recommending against certification. Mid Willamette Valley Air Pollution Authority has indicated that in their opinion these facilities were installed for pollution control.

5. Staff Recommendation:

The staff recommends that a "Pollution Control Facility Certificate" bearing the actual cost of $40,710.21 be issued for the facility claimed in Application No. T-97.

PEAT, MARWICK, MITCHELL & CO.
CERTIFIED PUBLIC ACCOUNTANTS
1010 STANDARD PLAZA
PORTLAND, OREGON 97204

September 8, 1969

Exhibit E

Mr. A. R. Morgans, Financial Vice President
Willamette Industries, Inc.
1002 Executive Building
Portland, Oregon 97204

Dear Mr. Morgans:

In connection with your application to the Oregon State Sanitary Authority for certification of pollution control facilities for tax relief purposes, we have examined the costs for the dust control cyclones in the dust control dryer building at the Albany division (as detailed in the respective Exhibit C of the application). In making our examination, we have relied upon such detail as being complete itemization of labor and materials devoted to the construction of the facility described. Our examination consisted of a detailed inspection of vendors' invoices and other documentation of disbursements. We have also traced the costs shown into the plant and equipment accounts of the Company.

In our opinion, Exhibit C of the application, detailing the costs for the dust control cyclones, amounting to $40,710.21, fairly presents the actual costs incurred by Willamette Industries, Inc. in the construction of the facility.

Very truly yours,

PEAT, MARWICK, MITCHELL & CO.

R M Alexander

R. M. Alexander, Partner

RMA:OL

E X H I B I T C

Carothers Sheet Metal Company	
Furnish and install three new cyclone collectors for Heil dryers and related items as per quote	$25,703.00
Additional work not covered in initial quotation	1,685.13
Salem Metal Fabrication Company	
Fabricate 42" x 87'-0" long conveyor & drive equipment	6,982.00
Miscellaneous Electrical Equipment	2,197.49
Miscellaneous	2,690.20
Internal Plant Payroll	1,452.39
	$40,710.21

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
E. C. Harms, Jr., Member
George A. McMath, Member

FROM : AIR QUALITY CONTROL DIVISION

DATE : December 17 for December 19, 1969 Meeting

SUBJECT: CARBON MONOXIDE AMBIENT AIR STANDARD

The staff has reviewed the testimony given at the public hearing on November 20, 1969, and recommends adoption of the Carbon Monoxide Ambient Air Standard as presented.

The criteria document which was distributed to interested persons discusses in considerable detail the problems relating to and effects of carbon monoxide and this report is still available. Because it is felt there was less emphasis on factors influencing uptake of carbon monoxide, the following points from the report should be mentioned.

The report recognizes that a relatively small concentration of carbon monoxide in inhaled air can tie up significant quantities of hemoglobin as carboxyhemoglobin; that the amount of carbon monoxide within the body is related to both its concentration in the air and length of time the individual is exposed; the biologic response time for carbon monoxide is quite different from response time for an odorous or irritant gas; and that the uptake and excretion of carbon monoxide is an exponential function at low concentrations.

The report points out that an equilibrium condition is established between the carbon monoxide in the air breathed and that in the blood; and that the process of absorption or excretion will be substantially complete in two to twelve hours. For example, the amount of carbon monoxide in cigarette smoke varies between 1% and 2.5% by volume. If the heavy smoker has a 7% carboxyhemoglobin concentration (20-30 cigarettes per day gives a range of 3-10% with an average of 5%) and is exposed to 25 ppm of carbon monoxide, he will actually excrete carbon monoxide. If exposed to 50 ppm, there will be no uptake, and if exposed to 100 ppm, the uptake will be quite slow. Parallel examples can be made for smokers or non-smokers alike entering or leaving higher level areas.

Implementation Program

It is the conclusion of the staff that an immediate short-term program to reduce emissions of carbon monoxide in urban areas is neither technically or economically feasible, nor warranted by the seriousness of the problem at the present time. No public health emergency is considered to exist at the present time. Independent estimates of Department staff and consultants in the Federal government have indicated that total carbon monoxide emissions in urban areas are currently decreasing at a rate of approximately 6% per year as a result of 1968 and 1970 Federal emission standards for motor vehicles.

TO : MEMBERS OF THE ENVIRONMENTAL QUALITY COMMISSION

B. A. McPhillips, Chairman
Herman Meierjurgen, Member
Storrs S. Waterman, Member
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