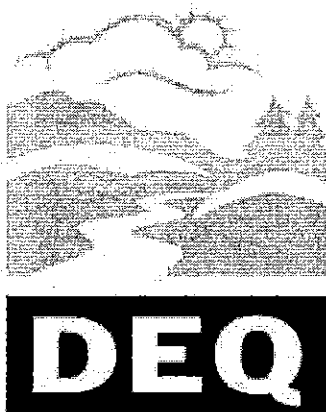


4/30/1973

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



**State of Oregon
Department of
Environmental
Quality**

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HMF

AGENDA

Environmental Quality Commission Meeting

April 30, 1973

Council Chambers, Civic Center

555 Liberty S.E.

Salem, Oregon

1:30 P.M.

- A. Minutes of April 2, 1973 EQC Meeting
- B. Project Plans for March 1973
- C. Lloyd Corp. Parking Facility, Portland
- D. Alder Manufacturing Co., Myrtle Point - Request for Variance to operate Wigwam Waste Burner
- E. Stayton Sanitary Service, Stayton - EQC Confirmation of MWVAPA Variance

2:00 P.M.

- F. PUBLIC HEARING to consider adoption of amendments to OAR Chapter 340, Div. 4, Sub-Div. 1 Standards of Quality for Public Waters of Oregon and Disposal Therein of Sewage and Industrial Wastes
- G. PUBLIC HEARING to consider issuance of Air Contaminant Discharge Permits to:
 - a) Redmond Tallow Co., Redmond
 - b) Southern Oregon Tallow Co., Eagle Point
 - c) Klamath Tallow Co., Klamath Falls
 - d) Ontario Rendering Co., Ontario
 - e) Bioproducts Inc., Warrenton
 - f) Asphalt Paving Co., Klamath Falls
 - g) Deschutes Readymix Sand & Gravel Co., Asphalt Div., Bend
- H. Continuation of PUBLIC HEARING from April 2, 1973 meeting to consider issuance of Air Contaminant Discharge Permits to:
 - a) Publishers Paper Co., Newberg Division
 - b) Publishers Paper Co., Oregon City Division
- I. Unified Sewerage Agency, Washington County - Sewerage Facilities Construction Program
- J. Sewerage Works Construction Priorities List Revisions
- K. Tax Credits

7:30 P.M.

- L. Continuation of PUBLIC HEARING from April 2, 1973 Meeting to consider issuance of Air Contaminant Discharge Permit to:
 - a) Boise Cascade Corp., Salem

AQC

April 11, 1973

ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. Morrison St.
Portland, Oregon 97205

There will be a regular meeting of the Environmental Quality Commission on Monday, April 30, 1973, beginning at 1:30 p.m. in the Council Chambers, Civic Center, 555 Liberty Street S.E., Salem, Oregon.

A public hearing will be convened at 2:00 p.m. to consider adoption of amendments to Oregon Administrative Rules, Chapter 340, Division 4, Sub-division 1, Standards of Quality for Public Waters of Oregon and Disposal Therein of Sewage and Industrial Wastes and to consider issuance of Air Contaminant Discharge Permits for the following industrial plants: Redmond Tallow Co., Redmond; Southern Oregon Tallow Co., Eagle Point; Klamath Tallow Co., Klamath Falls; Ontario Rendering Co., Ontario; Bioproducts, Inc., Warrenton; Deschutes Readymix Sand & Gravel Co. Asphalt Division, Bend.



DIARMUID F. O'SCANNLAIN
Director

MINUTES OF THE FORTY-FIFTH MEETING
of the
Oregon Environmental Quality Commission

The forty-fifth meeting of the Oregon Environmental Quality Commission was called to order by the Chairman at 1:30 p.m. on Monday, April 30, 1973, in the Council Chambers, Civic Center, 555 Liberty Street S.E., Salem, Oregon. All Commission members were present including B.A. McPhillips, Chairman, Paul E. Bragdon, Arnold M. Cogan, Dr. Morris K. Crothers and Dr. Grace S. Phinney.

Participating staff members were Diarmuid F. O'Scannlain, Director; E.J. Weathersbee and K.H. Spies, Deputy Directors; Harold M. Patterson and Harold L. Sawyer, Division Administrators; Harold H. Burkitt and Clint A. Ayer, Air Quality Control Engineers; L.D. Brannock, Meteorologist; B.J. Seymour, Information Director; and Rob Haskins, Legal Counsel.

MINUTES OF APRIL 2, 1973 COMMISSION MEETING

It was MOVED by Mr. Cogan, seconded by Dr. Phinney and carried that with the addition of the following motion covering the action of the Commission regarding the Medford Corporation matter the minutes of the forty-fourth meeting of the Commission held in Portland on Monday, April 2, 1973 be approved as prepared and distributed: "It was MOVED by Dr. Crothers, seconded by Mr. McPhillips and carried that the Director's recommendation in this matter be approved." Dr. Phinney had pointed out that apparently this motion had inadvertently been left out of the original draft.

PROJECT PLANS FOR MARCH 1973

It was MOVED by Mr. Cogan, seconded by Dr. Phinney and carried that the actions taken by the Department during the month of March 1973 as reported by Mr. Weathersbee regarding the following 44 domestic sewerage, 12 industrial waste, 14 air quality control, and 5 solid waste management projects be approved:

Water Quality Control

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
<u>Municipal Projects (44)</u>			
3-7-73	Gresham	Majestic Pine Estates sewers	Prov. app.
3-7-73	Gresham	N.E. 199th and Burnside sewer	Prov. app.
3-7-73	Pendleton	Grecian Heights Subd. sewers	Prov. app.

Municipal Projects (44) continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-7-73	Canby	Big Fir Acres Subd. sewers	Prov. app.
3-7-73	Hillsboro (Rock Cr.)	Azalea East Subd. sewers	Prov. app.
3-7-73	USA (Cornelius)	Forest Hills Mobile Village sewer	Prov. app.
3-7-73	Gresham	Two change orders, sewage treatment plant contracts	Approved
3-7-73	Troutdale	Change Order No. 1 - Beaver Creek interceptor	Approved
3-7-73	Sheridan	Change Orders #1 and 2, lagoon contract	Approved
3-12-73	Willamina	Fifth Street sewer	Prov. app.
3-12-73	Oak Lodge San. Dist.	Change Order No. 2 to sewage treatment plant contract	Approved
3-14-73	Arlington	Sewage treatment plant expansion to secondary	Prov. app.
3-14-73	St. Helens	0.125 MGD activated sludge Cedar Oak Subd. - First Addition sewers	Prov. app.
3-14-73	St. Helens	Highway 30 sewer extension	Prov. app.
3-19-73	USA (Sherwood)	South Sherwood Blvd. sewer replacement	Prov. app.
3-19-73	Gresham	N.W. 12th sewer and Pinewood Subd. sewers	Prov. app.
3-19-73	USA (Aloha)	Honeywood Park Subd. sewers	Prov. app.
3-20-73	Sweet Home	Sewage treatment plant expansion report	Approved
3-21-73	Prineville	Interceptor & collector sewers	Prov. app.
3-21-73	Keizer	Northtree Estates Subd. sewers	Prov. app.
3-21-73	Wilsonville	Serene Acres Subd. sewers	Prov. app.
3-21-73	East Salem Sewer & Drainage Dist. I	Raintree Subd. No. 2 sewers	Prov. app.
3-21-73	Salem (Willow Lake)	Cherylee Drive & Lazy K Drive sewers	Prov. app.
3-21-73	East Salem Sewer & Drainage Dist. I	Briarwood Subd. sewers	Prov. app.
3-22-73	Troutdale	West Columbia trunk sewer	Prov. app.
3-22-73	Sweet Home	Stonebrook Subd. sewers	Prov. app.
3-22-73	Dallas	Bridlewood Estates Subd. sewers revised plans	Prov. app.
3-22-73	Canby	Country Club Estates Annex No. 2 sewers	Prov. app.
3-26-73	Coquille	Ferbasche Heights sewers	Prov. app.
3-26-73	Clackamas County	Oak Acres sewerage system - infiltration control plan	Prov. app.
3-26-73	East Salem Sewer & Drainage Dist. I	Jan Ree East Subd. sewer	Prov. app.
3-27-73	Ochoco West S.D.	L.I.D. No. 2 sewers	Prov. app.
3-27-73	Gladstone	Petite Court Subd. sewers	Prov. app.

Municipal Projects (44) continued

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-27-73	Gladstone	Hardrock Subd. sewers	Prov. app.
3-27-73	North Bend	Lincoln Avenue & Wall Street sewers	Prov. app.
3-27-73	Bear Creek Valley Sanitary Auth.	Midway service area sewers	Prov. app.
3-28-73	North Bend	Specificatons for Pony Creek interceptor	Approved
3-29-73	Gresham	N.W. 12th Street sewer	Prov. app.
3-29-73	Toledo	Sewer specification revision	Approved
3-29-73	USA (Sunset)	S.W. 85th Ave. san. sewer	Prov. app.
3-30-73	Waldport	Chlorine contact tank revisions	Approved

Industrial Projects (12)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-5-73	Dundee	Norpac Growers, Inc., wastewater facilities for nutmeat process	Prov. app.
3-5-73	Monmouth	Robert Ritz Turkey Farm, animal waste facilities	Prov. app.
3-5-73	Albany	Stokely-Van Camp, Inc., wastewater land disposal system	Prov. app.
3-6-73	Merrill	A. Levy & J. Zentner Co., wastewater treatment lagoon	Prov. app.
3-7-73	Albany	Western Kraft Corp., outfall and diffuser	Prov. app.
3-9-73	Salem	Boise Cascade Corp., emer- gency storage pond and piping layout connecting mill drain system to the emergency pond	Prov. app.
3-13-73	The Dalles	John Williams Farm, animal waste facilities	Prov. app.
3-14-73	Portland	Omark Industries, waste disposal system	Prov. app.
3-20-73	Portland	Ross Island Sand & Gravel Company, Vanport plant water clarification system	Prov. app.
3-21-73	Canby	Daniel Payzant Farm, animal waste facilities	Prov. app.
3-27-73	Willamina	Willamina Lumber Co., removal of log pond	Prov. app.
3-28-73	Albany	Georgia Pacific Corp., waste reuse and disposal system	Prov. app.

Air Quality Control

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-2-73	Multnomah County	Terminal Sales Bldg. Proposal to construct parking facility	App. with conditions
3-2-73	Klamath County	Columbia Plywood Corporation Plans to install gas-fired Coe-jet-veneer drier	Approved
3-6-73	Deschutes County	St. Charles Hospital Plans for installation of oil fired boiler	Approved
3-6-73	Jackson County	Medford Corporation Plans for modification of wigwam waste burner	Approved
3-8-73	Coos County	Georgia Pacific Corporation Plans for installation of Carter-Day baghouse and replace- ment of a cyclone and relay system at the hardboard plant	Approved
3-8-73	Jackson County	Reichold Chemicals Proposal to expand resin plant facilities	Req. additional information
3-12-73	Jackson County	Eugene F. Burrill Lumber Co. Plans to install three (3) cyclones for pneumatic conveyor systems for wood chips from a lily-pad chipper, chips from a chipper and bark from a hog	Approved
3-12-73	Douglas County	Smith River Lumber Co. Plans to modify wigwam waste burner	Approved
3-12-73	Jefferson County	Madras Airport Preparation of Noise Standards for Master Plan	Approved
3-22-73	Crook County	Prineville Forest Products, Inc. Plans for installation of Aerodyne fly ash collector on hog fuel boiler	Approved
3-22-73	Klamath County	Weyerhaeuser Company Plans to install cinder collector on the #5 hog fuel boiler	Approved
3-23-73	Umatilla County	Eastern Oregon Grain Plans to install a grain storage facility	Req. add. information
3-24-73	Umatilla County	Eastern Oregon Farms Plans to install alfalfa processing plant	Req. add. information
3-27-73	Klamath County	Weyerhaeuser Company Plans to install fuel preparation, fuel handling system and new hog fuel boiler	Approved

Solid Waste Management

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-9-73	Crook County	Crook County Landfill Existing garbage site short term permit (to be replaced by new regional sanitary landfill)	Prov. app.
3-15-73	Jackson County	Ashland Sanitary Service Landfill Existing garbage site (to be upgraded to sanitary landfill)	Prov. app.
3-16-73	Marion County	Boise Cascade Landfill Site New industrial waste landfill (Paper company clarifier sludge only)	Prov. app.
3-20-73	Douglas County	Sun Studs Inc. Landfill New industrial waste landfill (Log pond dredgings and cold deck waste only)	Prov. app.
3-22-73	Crook County	Consolidated Pine Inc. Existing industrial waste landfill (Cold deck cleanup only)	Prov. app.

LLOYD CORPORATION PARKING FACILITY, PORTLAND

Mr. Patterson presented the Department's report concerning the request of the Lloyd Corporation for approval to construct a 428 space, three level parking facility on the blocks bounded by N.E. Multnomah, N.E. Seventh, N.E. Holladay and N.E. Grand Avenues near the Lloyd Center in the city of Portland. The parking facility is to serve the 1100 occupants of a proposed new office building which is to have some 312,000 square feet of gross floor space.

Mr. Patterson stated that plans and specifications for the garage ventilation system had already been submitted by the Corporation to the Columbia-Willamette Air Pollution Authority for review and approval. He stated further that both the Department and CWAPA staffs have concluded that this project alone will not result in any violations of ambient air standards but that there is some concern about the impact on air quality of it in combination with other developments which may be undertaken by the Lloyd Corporation in the future. He said that in order to avoid future air quality problems in this area of the city it would be advisable to analyze at this time the possible impact on air quality of the other projects which the Corporation may undertake between 1973 and 1980.

After considerable discussion of this matter by all Commission members it was MOVED by Mr. Cogan, seconded by Mr. McPhillips and carried that approval be granted for construction of the proposed parking facility but only upon the condition that the Corporation submit a parking plan and transportation strategy for the entire Lloyd Corporation development in the Lloyd Center area. Dr. Crothers voted against the motion.

ALDER MANUFACTURING INC. VARIANCE REQUEST

Mr. Burkitt presented the Department's report covering the request of the Alder Manufacturing, Inc. for a variance to operate for a period of six months an unmodified wigwam waste wood burner at its existing closed-down Myrtle Point sawmill. He said that in order to keep its White City cut-stock plant operating the Corporation finds that it is necessary to resume operation of its old Myrtle Point sawmill until a new sawmill facility can be built, that because of the remote location of the old sawmill, the limited time duration of the requested variance and the relatively small amount of wood waste residues that will be produced, the Department has concluded that operation of the unmodified wigwam burner pursuant to the requested variance would not create air pollution problems.

Mr. Stan E. Sherwood, President of Alder Mfg. Inc., was present and stated that equipment for the new sawmill has already been ordered with some of it already on hand and the remainder to be delivered in 60, 90 and 180 days. He claimed there should be no danger of their not being able to complete the new mill by the stated deadline. He offered to make a progress report in August.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that as recommended by the Director the variance requested by the Alder Manufacturing, Inc. be granted with the following conditions and an appropriate order entered:

1. The operation of the existing sawmill waste burner under this variance order shall be terminated on or before December 31, 1973.
2. Construction of the new facility in accordance with Department approved plans and specifications shall be completed and placed in operation on or before December 31, 1973.
3. Every effort should be made by the company to sell or dispose of the wood waste residues to outside sources during interim operation of the existing mill under this variance in order to limit the use of the wigwam waste burner as much as possible.

4. The unmodified wigwam waste burner shall be maintained and operated in a manner so as to reduce visible emissions to the lowest practicable level.
5. The company shall report, in writing to the Department, the date of the start of operation at the existing sawmill facility.
6. The company shall submit a progress report of the construction of the new sawmill facility to the Department on or before November 1, 1973.
7. All operation at the existing sawmill shall be phased-out as soon as the new facility is placed in operation.

MWVAPA VARIANCE TO STAYTON SANITARY SERVICE

Mr. Brannock reviewed the Department's analysis and recommendations regarding the variance granted by the Mid-Willamette Valley Air Pollution Authority to the Stayton Sanitary Service to open burn at the Fern Ridge site only wood, timbers, cardboard and paper from industrial sources, for a two-month period from April 1, 1973 to May 31, 1973, while alternative systems of disposal are evaluated.

Concern was expressed by the Commission members that the Stayton Sanitary Service might request an extension of the variance if a suitable alternative solution is not developed by May 31, 1973.

After further discussion it was MOVED by Mr. Cogan, seconded by Mr. Bragdon and carried that as recommended by the Director the variance granted by MWVAPA under the date of March 28, 1973 to the Stayton Sanitary Service be approved as submitted.

PUBLIC HEARING RE: PROPOSED WATER QUALITY STANDARDS AMENDMENTS

Pursuant to the requirements of the new Federal Water Pollution Control Act, passed by Congress on October 18, 1972, the Region X Office of EPA by letter dated January 18, 1973, notified DEQ that certain revisions needed to be made in the water quality standards which had been adopted by the state of Oregon in 1967 for its interstate waters. The revisions considered necessary by EPA included (1) temperature, (2) total dissolved gas concentrations, (3) definition of mixing zones and (4) specification of analytical testing methods to be employed. EPA also urged that in developing the necessary revisions there be close coordination with bordering states (Washington and Idaho) to minimize inconsistencies in standards among contiguous states. Similar notification relative to Oregon's intrastate waters was received from EPA under the date of March 13, 1973.

Having developed in response to the above notifications proposed revisions to the water quality standards for both the interstate and intrastate waters of Oregon and having given proper notice as required by state law and administrative rules the public hearing regarding the proposed adoption of such revisions was called to order by Chairman McPhillips at 2:15 p.m. on Monday, April 30, 1973 in the Council Chambers, Civic Center, 555 Liberty St. S.E., Salem, Oregon with all Commission members being present.

Mr. Sawyer read the Department's report dated April 18, 1973 in this matter including background information, a discussion of the proposed amendments, summary and conclusions, and the Director's recommendations. In his report he also discussed some further changes in the proposed amendments which had been made by the Department staff since distribution of the original proposal. A copy of the full staff report has been made a part of the Department's files in this matter.

Mr. Sawyer also read into the record of this hearing a letter dated April 17, 1973 and submitted by Roger H. Tutty, Director of Public Works for the city of Klamath Falls. In his letter Mr. Tutty expressed concern about the proposed definition of "mixing zones" and also about the reference to "combination with other wastes or activities." (Note: The latter is included in the standards adopted in 1967.)

The Commission members had no questions to ask of Mr. Sawyer following his presentation of the staff report.

Mr. Daniel L. Petke, representative of EPA, read a brief general statement on behalf of that agency. He made no substantive comments regarding the specific proposals of the Department. (Note: In their January 18, 1973 letter EPA had proposed that serious consideration be given to adopting for all salmonid fishery waters a temperature standard which allows no measurable increase in stream temperature as a result of the discharge of thermal effluents, with the term "measurable increase" being defined as no more than a 0.5°F rise in temperature as measured immediately outside of the established mixing zone. In addition, EPA proposed that when ambient water temperatures equal or exceed 58°F in fresh waters and 55°F in marine waters all major point sources of thermal effluent discharges, such as from thermal power plants, be subject to specific controls for reduction of heat loads. With regard to the dissolved gases standard EPA

proposed that Oregon adopt a criterion which would not allow more than 110% of saturation due to man-made causes.)

No questions were asked of Mr. Petke by the Commission members.

The next witness was Mr. Jim Haas of the Oregon Fish Commission. He read a joint statement dated April 30, 1973 from the Fish Commission of Oregon and the Oregon State Game Commission. He made reference to a report entitled "Relationship of Temperature to Diseases of Salmonid Fish" by Drs. J.L. Fryer and K.S. Pilcher, Department of Microbiology, Oregon State University. Based on the results of that research study he indicated that no additional sources of heat should be allowed to enter the Columbia River. He made no comment regarding the proposed dissolved gases standard.

Mr. Wendell E. Smith, Environmental Affairs Director, read a prepared statement for the Idaho Power Company, owners of the Brownlee, Oxbow and Hells Canyon dams and power projects on the Snake River. He contended that sufficient knowledge about the actual effects of gas supersaturation upon the fishery resources of the Columbia and Snake is not available at this time to promulgate with any degree of reliability gas saturation standards. He spoke strongly in favor of uniform standards for all three states of Oregon, Idaho and Washington and expressed concern that if the latter two states adopt a standard of 110%, which it appears they will do, and Oregon a standard of 105%, it will then be necessary for the federal government to establish the standard for all the states.

Mr. Larry Williams read a prepared statement for the Oregon Environmental Council which supported in general the Department's proposed water quality standards amendments. He proposed that a provision be added to define more precisely when spills at the dams would be necessary because of excessive flood flows.

Dr. Max Katz, Research Director of the Seattle Marine Laboratories, 4122 Stone Way North, Seattle, Washington, was the next person to make a statement. He claimed that the proposed dissolved gases standard of 105% is unrealistic and meaningless and that to implement it would require the expenditure of funds in the magnitude necessary to land a man on Mars and the almost complete elimination of anadromous fish species from Bonneville Dam upstream. He claimed further that no scientific studies have shown a standard of 105% to be necessary for protection of the fishery resources of the Columbia and Snake Rivers but that certain studies have

indicated the saturation should not exceed 110 or 115%. He said he doubted that a standard of 105% could be realized on the Columbia even if no dams were present.

In response to a question by Mr. Cogan, Dr. Katz intimated that any data used to support the proposed 105% standard are in his opinion questionable from a scientific standpoint.

Mr. Wesley J. Ebel, fisheries research biologist for the National Marine Fisheries Service, presented a prepared statement for the Columbia Basin Fishery Technical Committee which consists of representatives of the federal and state fisheries agencies in the Columbia River Basin. He strongly supported changing the present standard for dissolved nitrogen to a standard for total dissolved gases but he too claimed that past and present research studies have not indicated a need for a standard of 105% of saturation. He said present data indicate that a total gas saturation standard of 110% is reasonable and defensible and therefore he recommended that Oregon adopt a standard of 110% of saturation for total dissolved gases.

In a letter dated April 24, 1973 addressed to Robert S. Burd of EPA, Mr. Terence M. McKiernan of the North Pacific Division, U.S. Corps of Engineers, argued that neither 105% or 110% can be considered as realistic standards for dissolved nitrogen. He suggested that the standard should be 115% both from the standpoint of effects of dissolved gases on fish life and the standpoint of a realistically attainable goal. He stated that the Corps recognizes the seriousness of the gas supersaturation problem associated with spillway operations, and is doing everything within its power to alleviate it.

In a letter dated April 27, 1973, addressed to Russ Fetrow, DEQ District Engineer, and signed by John D. Findlay, Regional Director for the U.S. Bureau of Sport Fisheries and Wildlife, pertinent comments were made by the latter agency regarding the proposed amendments pertaining to mixing zones, temperature and dissolved gases. The letter supported the general guideline mixing zone policy proposed by DEQ but suggested certain additional conditions or limitations. The letter also supported the temperature standard proposed by EPA rather than the one proposed by DEQ. In addition, it suggested when the ambient temperature of fresh water is 58°F or more or of marine water is 55°F or more that all

sources, not just major sources, of thermal discharges be subject to specific controls for reducing heat loads. With regard to the dissolved gases standard the Bureau recommended 110% rather than 105% saturation. It also suggested that a standard be included for residual chlorine levels.

There was no one else present at the hearing who wished to make a statement.

After Mr. Petke had indicated that EPA would not object to an additional short delay in final adoption of the proposed standards revisions, it was MOVED by Mr. Cogan, seconded by Dr. Phinney and carried that the record in this matter be kept open for another 10 days to allow additional time for submission of written testimony, that the staff make an analysis of all the testimony submitted, and that a decision be made at the next meeting of the Commission scheduled for May 29, 1973.

The hearing in this matter was adjourned by the Chairman at 3:25 p.m.

Copies of the aforementioned letters and prepared statements have been made a part of the Department's permanent files.

PUBLIC HEARING RE: PROPOSED AIR CONTAMINANT DISCHARGE PERMITS

Proper notice having been given as required by statutes and administrative rules, the public hearing in the matter of proposed issuance of air contaminant discharge permits to (a) Redmond Tallow Co., Redmond, (b) Southern Oregon Tallow Company, Eagle Point, (c) Klamath Tallow Co., Klamath Falls, (d) Ontario Rendering Co., Ontario, (e) Bioproducts Inc., Warrenton, (f) Asphalt Paving Co., Klamath Falls, and (g) Deschutes Readymix Sand and Gravel Co., Asphalt Division, Bend was called to order by the Chairman at 3:30 p.m. on Monday, April 30, 1973 in the Council Chambers, Civic Center, 555 Liberty St. S.E., Salem, Oregon, with all Commission members being present.

Mr. Burkitt presented the staff reports and discussed the proposed permits for each of the aforementioned applicants. He submitted additional special conditions and a compliance schedule to be included in the permit for the Klamath Tallow Company. He also reported that complaints had been received recently regarding the operations of this company. Copies of the staff reports, the proposed permits and the additional conditions for the Klamath Tallow Company have been made a part of the Department's permanent files.

Mr. Burkitt said it was the Director's recommendation that the proposed permits be issued with any changes that might be appropriate based on testimony received at this hearing and including certain wording changes suggested by the Attorney General's staff for purposes of clarity.

Representatives of the Redmond Tallow Co., Southern Oregon Tallow Company and Klamath Tallow Company were present but had no objections to the conditions contained in their respective proposed permits. No statements were submitted by other witnesses.

It was MOVED by Dr. Crothers, seconded by Mr. Bragdon and carried that as recommended by the Director and in response to Application No. 0009 the air contaminant discharge permit as proposed be issued to the Redmond Tallow Company, Inc. for its rendering plant located on O'Neill Way 6 miles from Redmond.

It was MOVED by Mr. Bragdon, seconded by Dr. Crothers and carried that as recommended by the Director and in response to Application No. 0010 the air contaminant discharge permit as proposed be issued to the Southern Oregon Tallow Company, Inc. for its rendering plant located 3 miles from the city of Eagle Point.

It was MOVED by Dr. Crothers, seconded by Mr. Bragdon and carried that as recommended by the Director and in response to Application No. 0080 the air contaminant discharge permit with the changes proposed at this hearing be issued to the Klamath Tallow Company for its rendering plant located on Old Midland Road 2-1/2 miles south of Klamath Falls.

It was MOVED by Dr. Crothers, seconded by Mr. Bragdon and carried that as recommended by the Director and in response to Application No. 0017 the air contaminant discharge permit as proposed be issued to the Ontario Rendering Co. for its rendering plant located approximately 1 mile from the city of Ontario.

It was MOVED by Mr. Bragdon, seconded by Dr. Crothers and carried that as recommended by the Director and in response to Application No. 0021 the air contaminant discharge permit as proposed be issued to the Bioproducts Inc. for its fish-rendering plant located on Warrenton Drive between Warrenton and Hammond, Oregon.

It was MOVED by Dr. Phinney, seconded by Mr. Bragdon and carried that as recommended by the Director and in response to Application No. 0005 the air contaminant discharge permit as proposed be issued to the Asphalt Paving Co. for its asphalt concrete plant located off of Highway 97 about 1 mile north of Klamath Falls.

At the suggestion of the Department the hearing in the matter of issuance of an air contaminant discharge permit for the Deschutes Readymix Sand and Gravel Company was continued. It will be held at an early date before a hearing officer in Bend in order to give local residents an opportunity to be heard.

CONTINUATION OF HEARING RE: ACD PERMITS FOR PUBLISHERS PAPER CO.

The hearing in the matter of issuance of air contaminant discharge permits for the Publishers Paper Company's sulfite pulp and paper mills at Newberg and Oregon City having been continued from April 2, 1973, Mr. Burkitt reviewed briefly the proposed permits and the staff's evaluation and analysis of the objections raised previously by the company. Copies of the staff report and proposed permit conditions have been made a part of the Department's permanent files in this matter.

Mr. Pete Schnell was present to represent the company. His main comment was that the company is aware that under Section 25-360 of Chapter 340 OAR the Department, after notice and hearing, can establish more restrictive emission limits and compliance schedules for mills located in recognized problem areas.

It was MOVED by Mr. Cogan, seconded by Dr. Crothers and carried that as recommended by the Director the proposed amended air contaminant discharge permit, file No. 36-6142, be issued to Publishers Paper Company for its pulp and paper mill located at Newberg, Oregon.

It was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that as recommended by the Director the proposed amended air contaminant discharge permit, file No. 03-1850, be issued to Publishers Paper Company for its pulp and paper mill at Oregon City, Oregon.

UNIFIED SEWERAGE AGENCY CONSTRUCTION PROGRAM

Mr. Sawyer presented a detailed report dated April 19, 1973 covering the background, present status and Director's recommendations regarding the Unified Sewerage Agency's (USA) sewerage works construction program. He pointed out that water quality standards in the Tualatin Basin will continue to be violated until the Agency's master plan facilities are completed and in operation. He said that in spite of the delays that have been encountered considerable progress has thus far been made toward implementation of the master plan but that at the present time further progress is blocked by new EPA grant requirements, failure of EPA to release promised funds and failure of EPA to award grants so construction can begin.

Mr. O'Scannlain then emphasized the seriousness of the situation caused primarily by the failure of the federal government to award construction grants. He said the possibility that a ban on further construction and development in the area may have to be imposed if the Durham waste water treatment plant does not get under construction shortly cannot be taken lightly. Such a ban would have serious consequences. He pointed out that the county is willing to proceed but the federal government has not released the funds and that construction cannot even be started until the grant offer has been received. He submitted a suggested resolution for adoption by the Commission.

It was MOVED by Mr. McPhillips, seconded by Mr. Cogan and carried that the following resolution be adopted:

RESOLUTION

The Environmental Quality Commission at its meeting April 30, 1973, in Salem, Oregon, goes on record as deploring the failure of the U.S. Environmental Protection Agency to release sewage treatment plant construction funds for projects long scheduled for construction. EPA's position appears to be hopelessly legalistic and fails to recognize that Oregon could lose one entire construction year with consequent increased costs and would be forced to impose a building ban on one of the fastest growing areas of the state. The Environmental Quality Commission urges that EPA issue interim regulations and authorization to meet this critical situation for Oregon and all other states.

The Commission hereby instructs the Director of the Department of Environmental Quality to continue vigorous efforts toward achieving a release of such funds.

It was then MOVED by Mr. Cogan, seconded by Mr. Bragdon and carried that the following recommendations regarding the USA construction program be approved:

1. The general revised implementation schedule for Master Plan facilities should be approved. This includes delay of completion of the Durham Plant until July 1975 and acceleration of the Rock Creek Plant to December 1977. Deadlines for phase out of interim plants must be adjusted accordingly.
2. If the Durham Plant is not placed under construction by July 1, 1973, USA should be required to immediately develop and submit to DEQ a program for curtailment of building in the Fanno Creek Basin so as to assure that treatment facilities are not overloaded.

3. USA should be required to immediately further evaluate the facilities in the Beaverton Creek Basin and propose a revised plan for control of connections pending completion of the Master Plan facilities in 1977. Such program and plan should evaluate and present alternatives which include phasing out the Sunset, Oak Hills, and Tektronix Plants and improving and maintaining one or more of the plants in operation under reduced loading condition until 1977.
4. Renewal Waste Discharge Permits should be issued immediately for all sewage treatment plants in the Tualatin Basin. Conditions of these permits should require greatly improved monitoring and reporting of operations including sampling of the stream quality above and below each discharge. Permits should allow connections only where demonstrated capacity exists and should also clearly allow DEQ to prohibit or curtail connections to any plant where violations occur or where it appears that permit conditions and standards may not be met.
5. USA should be required to submit to DEQ within 60 days a detailed interim plan for handling and disposal of sludge from all treatment plants within the Agency.

SEWERAGE WORKS CONSTRUCTION PRIORITIES LIST REVISIONS

Mr. Sawyer submitted for approval by the Commission the following proposed changes and additions to the sewerage works construction priorities list adopted on December 21, 1972:

<u>Applicant</u>	<u>Project</u>	<u>Est. Cost</u>	<u>Priority Points</u>
Bly S.D.	Interceptor, plant	\$254,192	Reclass from 70 to 90
Milwaukie	East interceptor	684,090	Reclass from 60 to 80
Prineville	Interceptor	398,000	Reclass from 70 to 90
McMinnville	Interceptor	235,000	Reclass from 70 to 90
Newport	Interceptor	145,900	Reclass from 70 to 90
Huntington	Chlorination facilities	20,500	90
Jordan Valley	Interceptor, plant	298,167	90
Port of Port Orford	Interceptor	27,500	80
Veneta	Lagoon expansion	316,250	70
Unified Sewerage Agency	Sherwood Interceptor (Phase I)	592,550	80

It was MOVED by Dr. Phinney, seconded by Mr. Cogan and carried that as recommended by the Director the above changes and additions to the sewerage works construction priorities list be approved.

TAX CREDIT APPLICATIONS

Mr. Sawyer presented the Department's evaluations and recommendations regarding the tax credit applications covered by the following motions:

It was MOVED by Mr. Cogan, seconded by Mr. Bragdon and carried that as recommended by the Director Pollution Control Facility Tax Credit Certificates be issued to the following applicants for facilities claimed in the respective applications and with 80% or more of the listed costs being allocable to pollution control:

<u>Appl. No.</u>	<u>Applicant</u>	<u>Cost</u>
T-341	Willamette Industries, Griggs Division, Lebanon	\$91,027.39
T-398	Weyerhaeuser Co., Cottage Grove	14,210.00
T-423	Boise Cascade Corp., Island City	57,416.62
T-436	Western Kraft Corp., Albany	26,704.00
T-448	Fir-Ply, Inc., White City	26,395.58

It was MOVED by Mr. Cogan, seconded by Dr. Phinney and carried that as recommended by the Director a Pollution Control Facility Tax Credit Certificate be denied for the facility claimed in Tax Application T-406 submitted by Weyerhaeuser Company.

COLUMBIA WILLAMETTE AIR POLLUTION AUTHORITY

Mr. O'Scannlain informed the Commission members that since the April 2, 1973 Commission meeting he had corresponded and conferred further with representatives of the Board of Directors of CWAPA and that as a result of those contacts had learned that neither Clackamas nor Columbia Counties plan to rejoin CWAPA if it is dissolved in order to eliminate Washington County. He said that in view of these developments a public hearing will be scheduled for 2:00 p.m. on May 29, 1973 in the auditorium of the Public Service Building, 920 S.W. 6th Avenue, Portland, Oregon to determine whether the air quality control program of CWAPA is being administered in compliance with statutory requirements and, if it is not, to show cause why CWAPA should not be dissolved and its program assumed by DEQ.

There was also a brief discussion of the Alkali Lake environmentally hazardous wastes disposal problem but no action was taken in that matter.

The meeting was recessed at 5:15 p.m. and reconvened at 7:30 p.m.

CONTINUATION OF PUBLIC HEARING RE: BOISE CASCADE CORP.

Continuation of the public hearing in the matter of issuance of a proposed air contaminant discharge permit for the Boise Cascade Corp. sulfite pulp mill at Salem, Oregon was called to order by the Chairman at 7:30 p.m. on Monday April 30, 1973 in the Council Chambers, Civic Center, 555 Liberty St. S.E., Salem, Oregon. All Commission members except Arnold M. Cogan were present.

Mr. Ayer presented background information including a discussion of the problems encountered by the company in the start-up of its new chemical recovery system which was placed in operation in July of 1972. Dr. Crothers commended Mr. Ayer for the clarity and thoroughness of his presentation.

Mr. Burkitt then discussed the provisions or conditions of the proposed air contaminant discharge permit as outlined in the staff report dated April 24, 1973.

He also submitted one additional condition that had not been included in the staff report. It is as follows:

"Permittee shall provide adequate controls and safeguards to prevent the escapement of ammonia (NH_3) from all handling and process systems in such quantities that cause ammonia odors to be detected off the plant premises."

Mr. Burkitt pointed out that in a letter dated April 25, 1973 Mr. C.J. Fahlstrom, Resident Manager, claimed that the Salem mill has a practical production capacity of 310 ADT compared to the 250 ADT capacity stated by the DEQ in its letter of April 11, 1973.

Mr. C.J. Fahlstrom then made a statement on behalf of the company and stated that they could not accept a reduction in mill capacity. He objected to the 5,000 pounds/day monthly average limit for SO_2 given in Condition 1(b) of the proposed permit. He requested that this limit be increased to 6200 pounds (20 pounds/ton for 310 tons per day capacity).

Dr. Crothers asked how much SO_2 in pounds per day is being discharged now from the mill and Mr. Phil Stultz of Boise Cascade Corp. replied that it probably ranges from 17,000 to 20,000 pounds/day. Dr. Crothers commented

that under the conditions which now prevail he did not see how the company would dare ask for any increase in production capacity. The company representatives stated that the SO₂ discharges should be down to 20 pounds per ton of pulp produced by December 1, 1973 or before the end of the year. Mr. Fahlstrom said the company has spent \$10 million in making the changes needed in the plant and claimed that the design basis for such changes was 310 to 330 ADT per day.

Mr. Tom Deering, Attorney for Boise Cascade, argued that if limits were to be established that are more restrictive than the specific emission limits set forth in Section 25-360 of Chapter 340 OAR, proper notice would have to be given and a hearing would have to be held for that specific purpose.

In response to a question by Mr. McPhillips Mr. Fahlstrom said he did not know what the ultimate future capacity of the Salem mill might be. In answer to another question he said the maximum daily capacity for a mill of 310 ADT/day design capacity would be about 330 ADT/day.

In summary, Mr. Fahlstrom stated that the proposed permit conditions that concern them the most are condition No. 1(b) which sets a 5,000 pounds per day (monthly average) limit on the SO₂ emissions from the mill and condition No. 4(b) which limits the opacity of the particulate emissions from the recovery system to not more than 20% for an aggregated time of 3 minutes in any one hour.

After further discussion it was MOVED by Dr. Crothers, seconded by Dr. Phinney and carried that this matter be continued until the next meeting of the Commission on May 29, 1973.

The hearing was then adjourned by the Chairman at 9:15 p.m.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5301

TOM McCALL
GOVERNOR

Memorandum

DIARMUID F. O'SCANNLAIN
Director

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. B, EQC Meeting, April 30, 1973
Project Plans for March, 1973

During the month of March, 1973, staff action was taken relative to plans, specifications and reports as follows:

Water Quality Control

1. Forty-Four (44) domestic sewage projects were reviewed:
 - a) Provisional approval was given to:
 - 33 plans for sewer extensions
 - 1 plan for sewage treatment works improvements (Arlington)
 - b) Approval without conditions given to:
 - 1 plan for interceptor sewer (North Bend)
 - 1 Engineering report (Sweet Home STP expansion)
 - 8 Contract modifications
 - 6 treatment plant projects (2-Gresham, 2-Sheridan, 1-Oak Lodge, 1-Waldport)
 - 2 sewer projects (Beaver Creek, Toledo)
2. Twelve (12) project plans for industrial waste facilities were reviewed:
 - a) Provisional approval given to:
 - 6 Wastewater treatment works
 - 3 Animal Waste facilities
 - 3 Miscellaneous (Outfall, Western Kraft-Albany; emergency storage pond, Boise Cascade-Salem; removal of log pond, Willamina Lumber-Willamina)

Air Quality Control

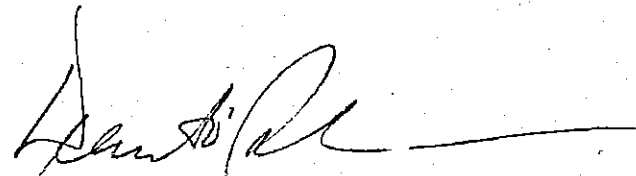
1. Fourteen (14) project plans, reports or proposals were received and reviewed:
 - a) Conditional approval given to:
 - 1 Parking Facility (Terminal Sales Bldg., Multnomah County)
 - b) Additional information requested for:
 - 3 Miscellaneous projects (Reichhold Chemicals, Jackson County, plant expansion; Eastern Oregon Grain, Umatilla County, grain storage facilities; Eastern Oregon Farms, Umatilla County, alfalfa processing plant)
 - c) Approval given to:
 - 10 projects
 - 2 Wigwam waste burner modifications (Medford Corp., Jackson County; Smith River Lumber, Douglas County)
 - 2 Cyclone systems (Georgia Pacific, Coos Co.; Burrill Lumber, Jackson County)
 - 2 Boiler installations (St. Charles Hosp., Deschutes County; Weyco, Klamath County)
 - 2 Flyash and cinder collector systems (Prineville Forest Products, Crook Co.; Weyco, Klamath County)
 - 1 Veneer drier (Columbia Plywood, Klamath County)
 - 1 Proposed noise standards (Madras Airport, Jefferson Co.)

Solid Waste Disposal

1. Five (5) Project plans were reviewed:
 - a) Provisional approval given to:
 - 2 Sanitary landfills (Garbage) (Crook County: Ashland San. Service)
 - 3 Industrial waste landfills (Boise Cascade, Marion County; Sun Studs, Douglas County; Consolidated Pine, Crook County)

Director's Recommendation

It is recommended that the Commission give its confirming approval to staff action on project plans for the month of March, 1973.


DIARMUID F. O'SCANNLAIN

PROJECT PLANS

Water Quality Division

During the month of March, 1973, 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.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
<u>Municipal Projects (44)</u>			
3-7-73	Gresham	Majestic Pine Estates sewers	Prov. approval
3-7-73	Gresham	N.E. 199th and Burnside sewer	Prov. approval
3-7-73	Pendleton	Grecian Heights Subd. sewers	Prov. approval
3-7-73	Canby	Big Fir Acres Subd. sewers	Prov. approval
3-7-73	Hillsboro (Rock Cr.)	Azalea East Subd. sewers	Prov. approval
3-7-73	USA (Cornelius)	Forest Hills Mobile Village sewer	Prov. approval
3-7-73	Gresham	Two change orders, sewage treatment plant contracts	Approved
3-7-73	Troutdale	Change Order No. 1 - Beaver Creek interceptor	Approved
3-7-73	Sheridan	Change Orders #1 and 2, lagoon contract	Approved
3-12-73	Willamina	Fifth Street sewer	Prov. approval
3-12-73	Oak Lodge San. Dist.	Change Order No. 2 to sewage treatment plant contract	Approved
3-14-73	Arlington	Sewage treatment plant expansion to secondary 0.125 MGD activated sludge	Prov. approval
3-14-73	St. Helens	Cedar Oak Subd. - First Addition sewers	Prov. approval
3-14-73	St. Helens	Highway 30 sewer extension	Prov. approval

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-19-73	USA (Sherwood)	South Sherwood Blvd. sewer replacement	Prov. approval
3-19-73	Gresham	N.W. 12th sewer and Pinewood Subd. sewers	Prov. approval
3-19-73	USA (Aloha)	Honeywood Park Subd. sewers	Prov. approval
3-20-73	Sweet Home	Sewage treatment plant expansion report	Approved
3-21-73	Prineville	Interceptor & collector sewers	Prov. approval
3-21-73	Keizer	Northtree Estates Subd. sewers	Prov. approval
3-21-73	Wilsonville	Serene Acres Subd. sewers	Prov. approval
3-21-73	East Salem Sewer & Drainage Dist. I	Raintree Subd. No. 2 sewers	Prov. approval
3-21-73	Salem (Willow Lake)	Cherylee Drive & Lazy K Drive sewers	Prov. approval
3-21-73	East Salem Sewer & Drainage Dist. I	Briarwood Subd. sewers	Prov. approval
3-22-73	Troutdale	West Columbia trunk sewer	Prov. approval
3-22-73	Sweet Home	Stonebrook Subd. sewers	Prov. approval
3-22-73	Dallas	Bridlewood Estates Subd. sewers revised plans	Prov. approval
3-22-73	Canby	Country Club Estates Annex No. 2 sewers	Prov. approval
3-26-73	Coquille	Ferbasche Heights sewers	Prov. approval
3-26-73	Clackamas County	Oak Acres sewerage system - infiltration control plan	Prov. approval
3-26-73	East Salem Sewer & Drainage Dist. I	Jan Ree East Subd. sewer	Prov. approval
3-37-73	Ochoco West S.D.	L.I.D. No. 2 sewers	Prov. approval
3-27-73	Gladstone	Petite Court Subd. sewers	Prov. approval

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-27-73	Gladstone	Hardrock Subd. sewers	Prov. approval
3-27-73	North Bend	Lincoln Avenue and Wall Street sewers	Prov. approval
3-27-73	Bear Creek Valley Sanitary Auth.	Midway service area sewers	Prov. approval
3-28-73	North Bend	Specifications for Pony Creek interceptor	Approved
3-29-73	Gresham	N.W. 12th Street sewer	Prov. approval
3-29-73	Toledo	Sewer specification revision	Approved
3-29-73	USA (Sunset)	S.W. 85th Avenue san. sewer	Prov. approval
3-30-73	Waldport	Chlorine contact tank revisions	Approved

Water Pollution ControlIndustrial Projects (12)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3/5/73	Dundee	Norpac Growers, Inc., wastewater facilities for nutmeat process	Prov. Approval
3/5/73	Monmouth	Robert Ritz Turkey Farm, animal waste facilities	Prov. Approval
3/5/73	Albany	Stokely-Van Camp, Inc., wastewater land disposal system	Prov. Approval
3/6/73	Merrill	A. Levy & J. Zentner Co., wastewater treatment lagoon	Prov. Approval
3/7/73	Albany	Western Kraft Corp., outfall and diffuser	Prov. Approval
3/9/73	Salem	Boise Cascade Corp., emer- gency storage pond and piping layout connecting mill drain system to the emergency pond	Prov. Approval
3/13/73	The Dalles	John Williams Farm, animal waste facilities	Prov. Approval
3/14/73	Portland	Omark Industries, waste disposal system	Prov. Approval
3/20/73	Portland	Ross Island Sand & Gravel Company, Vanport plant water clarification system	Prov. Approval
3/21/73	Canby	Daniel Payzant Farm, animal waste facilities	Prov. Approval
3/27/73	Willamina	Willamina Lumber Company, removal of log pond	Prov. Approval
3/28/73	Albany	Georgia Pacific Corp., waste reuse and disposal system	Prov. Approval

AP-9 PROJECT PLANS, REPORTS, PROPOSALS FOR AIR QUALITY CONTROL
DIVISION FOR MARCH, 1973

<u>DATE</u>	<u>COUNTY</u>	<u>PROJECT</u>	<u>ACTION</u>
2	Multnomah	<u>Terminal Sales Building</u> Proposal to construct parking facility.	Approved with conditions
	Klamath	<u>Columbia Plywood Corporation</u> Plans to install gas-fired Coe-jet-veneer drier.	Approved
6	Deschutes	<u>St. Charles Hospital</u> Plans for installation of oil fired boiler	Approved
	Jackson	<u>Medford Corporation</u> Plans for modification of wigwam waste burner	Approved
8	Coos	<u>Georgia Pacific Corporation</u> Plans for installation of Carter-Day baghouse and replacement of a cyclone and relay system at the hardboard plant.	Approved
	Jackson	<u>Reichold Chemicals</u> Proposal to expand resin plant facilities.	Requested Additional Information
12	Jackson	<u>Eugene F. Burrill Lumber Company</u> Plans to install three (3) cyclones for pneumatic conveyor systems for wood chips from a lily-pad chipper, chips from a chipper and bark from a hog.	Approved
	Douglas	<u>Smith River Lumber Company</u> Plans to modify wigwam waste burner	Approved
	Jefferson	<u>Madras Airport</u> Preparation of Noise Standards for Master Plan.	Approved

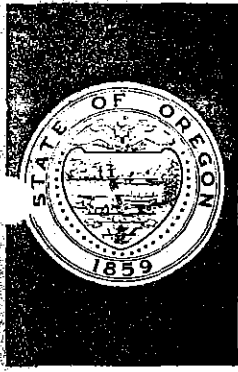
AP-9 PROJECT PLANS, REPORTS, PROPOSALS FOR AIR QUALITY CONTROL
 DIVISION FOR MARCH, 1973 - Continued

<u>DATE</u>	<u>COUNTY</u>	<u>PROJECT</u>	<u>ACTION</u>
22	Crook	<u>Prineville Forest Products, Inc.</u> Plans for installation of Aerodyne fly ash collector on hog fuel boiler.	Approved
	Klamath	<u>Weyerhaeuser Company</u> Plans to install cinder collector on the #5 hog fuel boiler.	Approved
23	Umatilla	<u>Eastern Oregon Grain</u> Plans to install a grain storage facility. }	Requested Additional Information
24	Umatilla	Eastern Oregon Farms Plans to install alfalfa processing plant.	Requested Additional
27	Klamath	<u>Weyerhaeuser Company</u> Plans to install fuel preparation, fuel handling system and new hog fuel boiler.	Approved.

PROJECT PLANS
SOLID WASTE MANAGEMENT DIVISION

During the month of March 1973, the following project plans and specifications and/or reports were reviewed by the staff. The disposition of each project is shown, pending confirmation by the Environmental Quality Commission.

<u>DATE</u>	<u>LOCATION</u>	<u>PROJECT</u>	<u>ACTION</u>
9	Crook County	Crook County Landfill Existing Garbage Site Short Term Permit (to be replaced by new regional Sanitary Landfill)	Prov. Approval
15	Jackson County	Ashland Sanitary Service Landfill Existing Garbage Site (to be upgraded to Sanitary Landfill)	Prov. Approval
16	Marion County	Boise Cascade Landfill Site New Industrial Waste Landfill (Paper Company clarifier sludge only)	Prov. Approval
20	Douglas County	Sun Studs Inc. Landfill New Industrial Waste Landfill (Log Pond Dredgings and cold deck waste only)	Prov. Approval
22	Crook County	Consolidated Pine Inc. Existing Industrial Waste Landfill (Cold Deck Cleanup only)	Prov. Approval



DEPARTMENT OF ENVIRONMENTAL QUALITY

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TOM McCALL
GOVERNOR

DIARUID F. O'SCANNLAIN
Director

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MEMORANDUM

To: Environmental Quality Commission

From: The Director

Subject: Agenda Item No. C, April 30, 1973, EQC Meeting

Proposed Lloyd Corporation Office Building and 428 Space
Three Level Parking Facility

Background

On April 5, 1973, the Department received a letter from the Columbia Willamette Air Pollution Authority delineating their analysis of and recommendation for the proposed Lloyd Corporation 428 space, three level, parking facility. A copy of the CWAPA letter and supporting information is attached.

The Lloyd Corporation proposes to build a 17-story office structure and ancillary 428 space parking facility on the blocks bounded by N. E. Multnomah, N. E. Seventh, N. E. Holladay and N. E. Grand Avenues near the Lloyd Center.

The proposed office structure will serve over 1,100 people and have approximately 312,000 square feet of gross floor area. The adjoining parking garage housing 428 cars will consist of three decks... lower level with 146 stalls, ground level with 157 stalls and upper level with 125 stalls.

The project site is presently occupied by open space and a surface parking lot for 96 cars. This lot will be relocated in the immediate area.

The City of Portland Zoning Code requires that one parking space be provided for every 700 square feet of gross floor area in an office structure with M3 zoning. The gross floor area of the proposed new building, 312,000 square feet, would require 446 spaces.

Analysis:

The CWAPA review and analysis of this project indicates that the carbon monoxide ambient air standard would be met in the general vicinity of the proposed project with or without construction of the parking facility; however, with the proposed facility, a chance exists of exceeding the standard near high traffic density areas such as in the garage or along N. E. Union and Grand Avenues.

The Department is in general agreement with the CWAPA analysis of the proposed project. Clearly, this project alone will not be sufficient to result in ambient air violations. However, the Department is very concerned about the impact upon air quality between 1973 and 1980 which will occur due to the further rapid development of Lloyd Corporation properties in the Lloyd Center area. Figure 1 shows the present extensive holdings of Lloyd Corporation in this area. The potential exists, if these properties are developed to the same

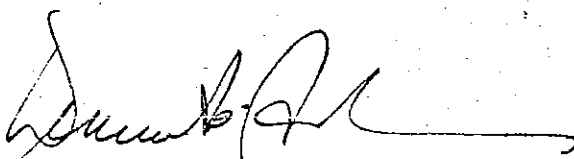
density as the proposed project presently under consideration, for a mini-downtown Portland taking shape in this area with attendant air quality problems caused by high automobile usage of the access streets.

In the judgment of the Department, the most effective means for avoiding future air quality problems in this area would be to analyze, at this time, the impact of the Lloyd Corporations plans for their existing and future properties through 1980. This would have the additional benefit of shortening the time delays experienced by the Lloyd Corporation in complying with the Department's rules.

While not making such a study a condition of approval of this facility, it is recommended that air quality evaluations be made a part of Lloyd Corporation planning process in the development of this area and information concerning such an analysis be submitted when future projects are submitted for approval.

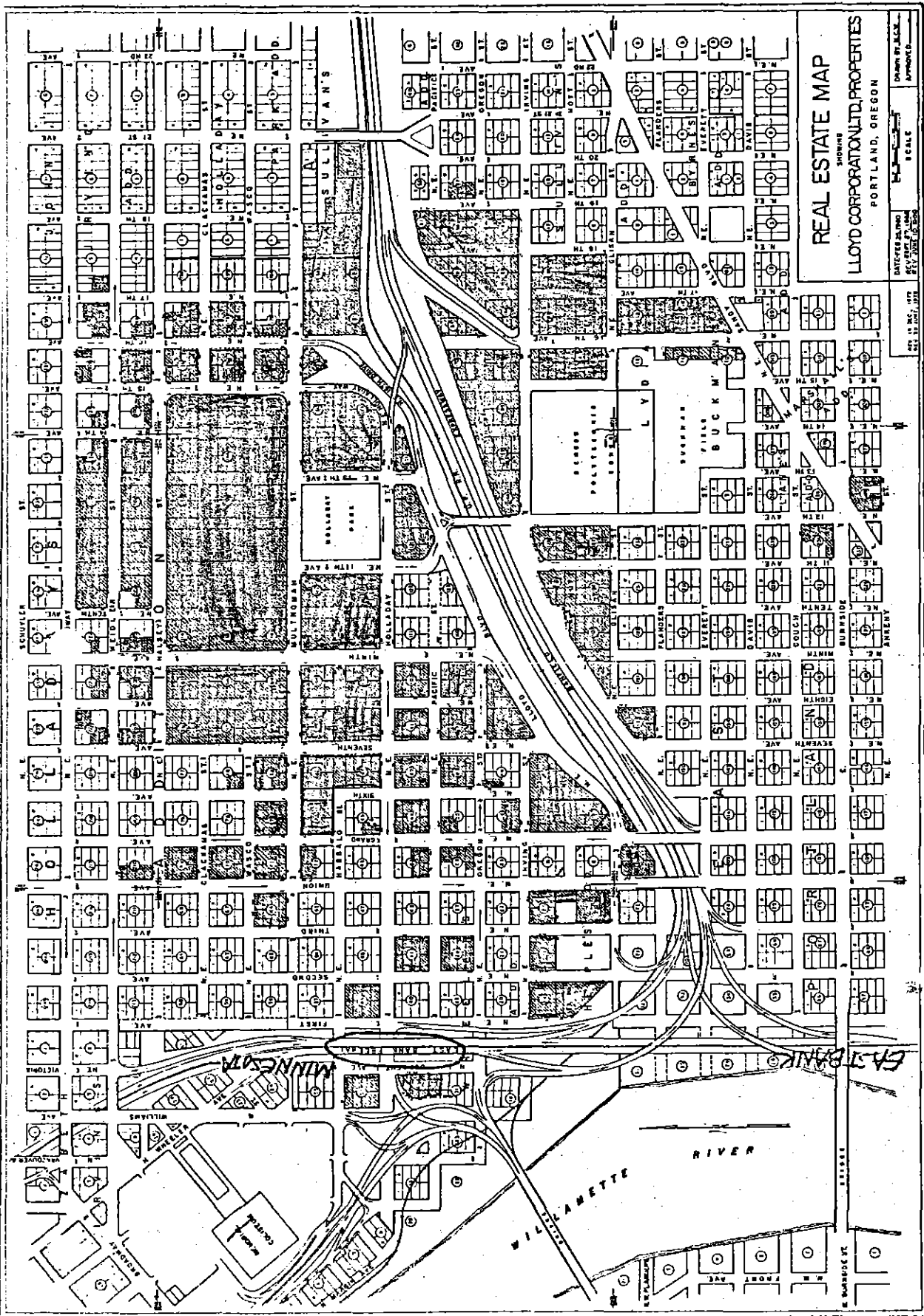
Director's Recommendation

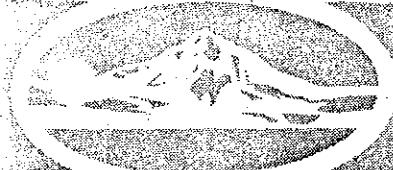
The Director recommends that the proposed Lloyd Corporation 428-space parking facility be approved for construction according to the plans and specifications submitted by the applicant with the condition that plans of the garage ventilation system are submitted to and approved by the CWAPA as required by Title 21 of the authority's rules.



DIARMUID F. O'SCANNLAIN
Director

FIGURE 1





COLUMBIA-WILLAMETTE AIR POLLUTION AUTHORITY

1010 N.E. COUCH STREET PORTLAND, OREGON 97232 PHONE (503) 233-7176

2 April 1973

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

Attention: H. M. Patterson, Administrator
Air Quality Control Division

Gentlemen:

Background

On 12 March 1973, Lloyd Corp., Ltd., filed a notice of construction and environmental impact statement for their proposed 428, three deck parking facility to be located near Grand Avenue and Multnomah Street. The parking facility is intended to support a new 17 story office structure which will serve over 1100 people.

Air Quality Impact

Air quality impact of the proposed facility was projected using data collected in a short term air sampling program in the immediate vicinity of the project. Certain assumptions and estimates were necessary to arrive at the final conclusion. These assumptions and estimates in some cases may be questionable; however, CWAPA is in general agreement with carbon monoxide air quality projections listed in Table 1 for 1972 and 1976 with the following adjustments made to the 1976 levels:

1. 5% increase due to general traffic increase from 1972 to 1976.
- 2, 20% reduction in CO emissions due to state motor vehicle inspection. Adjusted maximum 8-hour average CO (mg/m³) in 1976 would therefore be:
 - a. In neighborhood without garage - 7.4 ± 2.6
 - b. In neighborhood with garage - 8.2 ± 2.9

This projection would indicate that carbon monoxide air quality in the vicinity of the proposed facility in 1976 would not exceed the ambient air standard of 10 mg/m³ with or without the traffic from the facility. The data would also indicate a potential for exceeding the ambient air standard near very heavy traffic sources with the proposed facility in existence as evidenced by the maximum 11.1 mg/m³ projected with the garage versus 10.0 mg/m³ without.

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Program Director

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
APR 05 1973
AIR QUALITY CONTROL

2 April 1973

CWAPA has cross-checked the methodology of the projections using its grid system and has calculated a CO emission rate of 229 tons/year in 1976 without the garage in a .183 x .183 mile grid centered on the project. This calculation would indicate area wide CO levels would be about 30% below ambient air standard in 1976 (based on 325 t/yr CO emission rate correlating with ambient air standard). This compares within reason with the 26% below standard projected using impact statement methodology (i.e., 7.4 mg/m³ max. CO in 1976 versus 10 mg/m³ standard).

Conclusions drawn from the data would indicate that the CO ambient air standard would be met in the general vicinity of the proposed project with or without construction of the proposed facility; however, with the proposed facility, a chance exists of exceeding the standard near high traffic density areas such as in the garage or along NE Union and Grand Avenues. Other environmental aspects of the project appear to be consistent with the D.E.Q. Parking Facility Regulation and the parking space allocation essentially meets the minimum City of Portland core requirements.

Recommendations

Since the proposed facility is in an area of special concern and since air quality projections with the proposed facility indicate a possibility of exceeding the CO ambient air standard in 1976 in localized areas near the CBD it is recommended that DEQ notify the Lloyd Corp., Ltd. that construction of the proposed facility may proceed subject to the following conditions:

1. DEQ interim guidelines adopted 25 October 1972 for new parking facilities in downtown Portland be met. This would mean a maximum of 367 parking spaces be utilized for long term (more than 4 consecutive hours) commuter parking. The impact statement indicated 52 spaces in the facility would be used for general parking - presumably short term. Meeting the above criteria would require increasing this to 61.

2. Plans of the garage ventilation system are submitted to and approved by the CWAPA as required by Title 21 of the authority's Rules.

Very truly yours,



R. E. Hatchard
Program Director

REH:jks

cc: Robert G. Cameron
Lloyd Corp. Ltd.

114
JC.

Computation of 1975 CO emissions within a 0.183 x 0.183 mile grid centered on the proposed Way Center Corporation office structure

1. assume 1975 traffic volumes as follows

a). Union Avenue $17,600 + 5\% (17,600) = 18,480$

b). Grand Avenue $15,000 + 5\% (15,000) = 15,750$

c). Multnomah $8,200 + 5\% (8,200) = 8,610$

d). Holladay $11,000 + 5\% (11,000) = 11,500$

total ADT = 54,340

Adjusted 7 day/week ADT = $54,340 - 8\% = 49,993$

2). Vehicle miles per year

$49,993 \times 0.183 = 9,148 \text{ v/mi/day} \times 365 = 3,339,020$

3). Assume vehicle speed 16 mph average

CO Urban travel adjustment factor 1.3

CO 1975 emission factor $60 \text{ gm/vmi} \times 1.3 = 78 \text{ g/vmi}$

CO emissions tons/mile = $(78) (1 \text{ ton} / 9.07 \times 10^5 \text{ gms}) = 8.59 \times 10^{-5}$

4). total CO emissions

$(8.59 \times 10^{-5} \times 3,339,020 \times 10^5) = 286 \text{ tons/year CO}$

5). CO emissions considering 20% reduction ^{due} to state
motor vehicle inspection

$286 \text{ t/y} \times 0.8 = 229 \text{ ton/y}$

HEAD OFFICE:
BEVERLY HILLS
CALIFORNIA

LLOYD CORPORATION, LTD.

SUITE 1050, LLOYD BUILDING
700 N. E. MULTNOMAH
PORTLAND, OREGON 97232
TEL. 233-5871

PLEASE ADDRESS
ALL COMMUNICATIONS
TO THE COMPANY

March 8, 1973

Mr. Richard E. Hatchard
Columbia Willamette Air Pollution Authority
1010 N. E. Couch St.
Portland, Oregon 97232

Dear Dick:

Enclosed are duplicate copies of the Notice of
Construction form relative to Lloyd Corporation's
parking structure which will adjoin our new office
building.

Very truly yours,

LLOYD CORPORATION, LTD.



Robert G. Cameron
Vice President

RGC:mt

RECEIVED
MAR 12 1973

COLUMBIA WILLAMETTE
AIR POLLUTION AUTHORITY

Attention: Columbia-Willamette Air Pollution Authority
1010 N.E. Couch Street
Portland, Oregon 97232

PARKING FACILITY
NOTICE OF CONSTRUCTION AND APPLICATION FOR APPROVAL

To Construct or Modify an Air Contaminant Source

NOTE: An Approval to Construct must be obtained prior to construction. The Columbia-Willamette Air Pollution Authority will review the application and will send its recommendations to the D.E.Q. for their final action to approve or deny the project. An environmental impact statement or other information may be requested within 30 days of receipt of this N-C.

Business Name: LLOYD CORPORATION, LTD. Phone: 233-5871

Address of Premises: 700 N. E. Multnomah St. City: Portland, Ore. Zip: 97232

Nature of Business: Property development and management

Responsible Person to Contact: Robert G. Cameron Title: Vice President

Other Person Who May Be Contacted: Orvin E. Ahern, Jr. Title: Maintenance Manager

Corporation Partnership Individual Government Agency
(head office: _____)

Legal Owner's Address: 9441 Olympic Blvd. City: Beverly Hills, Ca Zip: 90212

Description of Parking Facility and its Intended Use: (Please include 2 copies of Plot Plan showing parking space location and access to streets or roadways): see Impact Study. Park. structure will house 428 cars, consisting of 3 decks, lower, ground and upper level. Parking will be used by tenants of adjoining new office bldg. (see Impact Study)

Estimated Cost: Parking Facility Only: \$ 1,200,000

Estimated Construction Date: June 1, 1973 Estimated Operation Date early 1975

Name of Applicant or Owner of Business: LLOYD CORPORATION, LTD.

Robert G. Cameron
Title: Vice President Phone: 233-5871

Signature: x *Robert G. Cameron* Date: March 8, 1973

Applicability: This Notice of Construction Requirement Pertains

1. To areas within five miles of the municipal boundary of any city having a population of 50,000 or greater.
2. Any parking facility used for temporary storage of 50 or more motor vehicles or having two or more levels of parking for motor vehicles.

Date Received: MAR 12 1973 Grid _____ N/C P-56

LLOYD CORPORATION, LTD.

SUITE 1050, LLOYD BUILDING
700 N. E. MULTNOMAH
PORTLAND, OREGON 97232
TEL. 233-5871

March 8, 1973

Mr. Richard E. Hatchard
Columbia Willamette Air Pollution Authority
1010 N. E. Couch St.
Portland, Oregon 97232

Dear Dick:

You may remember my past several conversations with you regarding the need, and contents, of an impact study for our proposed new office building and parking structure at N. E. Multnomah and N. E. Grand Ave.

We retained Cornell, Howland, Hayes, Merryfield-Hill to prepare the study and two copies of the impact statement are enclosed.

As you may also remember, I made quite a point with you that Lloyd Corporation was quite a way behind their established time schedule for this new building because of delays at the Planning Commission level, the City Council level, and now the impact study level. Actually, the construction of our new building has been delayed by approximately 14 - 15 months. What greatly concerns us is that a major portion of this new building is leased to a nationally recognized corporation and there are other companies that are either in our existing buildings or are new to Portland, that are looking at this new office building for expansion purposes. So far, we have been able to sit down with them and objectively explain the reason for this delay in the start of construction, but I am concerned that one or two of them will begin looking at a suburban location if we do not show some evidence of the imminent state of construction.

For the above reasons I would greatly appreciate anything you can do to expedite the review of the enclosed impact study. If you have any questions of a technical nature I would certainly urge you to contact CH2M-Hill, or if you need any information from me I would be willing to meet with you at any time.

Very truly yours,

LLOYD CORPORATION, LTD.



Robert G. Cameron
Vice President

RGC:mt
enc - 2

RECEIVED
MAR 12 1973

COLUMBIA WILLAMETTE
AIR POLLUTION AUTHORITY

*To the information committee
If so, when will our review be
complete?*

ROUTING	
To	Noted by
LVH	RVB
JK	
REN	



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5301

MEMORANDUM

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

ENVIRONMENTAL QUALITY
COMMISSION

B. A. McPHILLIPS
Chairman, McMinnville

EDWARD C. HARMS, JR.
Springfield

STORRS S. WATERMAN
Portland

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. D , April 30, 1973, EQC Meeting

Variance Request

Alder Manufacturing, Inc., Myrtle Point Mill, Coos County
SIC 2421

Background:

Alder Manufacturing, Inc. operates a cut-stock plant in White City and has a closed-down sawmill and wigwam waste burner located near Myrtle Point, Oregon.

The company, because of the decreased Alder lumber supplies and the tight market conditions, has been forced to the position of having to provide additional supplies of Alder lumber for the cut-stock plant by building a new sawmill. However, the immediate step required to overcome the present lumber shortage is the temporary reactivation of the Myrtle Point mill.

Current Program:

Alder Manufacturing, Inc. has requested a variance to Oregon Administrative Rules, Chapter 340, Sections 25-005 through 25-020, "Construction and Operation of Wigwam Waste Burners," so that the company can

reactivate and operate the Myrtle Point mill and the unmodified wigwam waste burner for approximately six (6) months.

During this six month variance period, the company will construct a new sawmill and dry kiln plant in the Myrtle Point area. When the new facility is completed, the old mill will be shut down.

The company has proposed the following program to the Department:

1. A new sawmill facility will be built in accordance with plans and specifications that have been reviewed and approved by the Department.
2. The new mill will have a barker, a chipper and two (2) dry kiln installations as a part of the total facility.
3. Contracts will be negotiated for the sale of all wood waste residues and no wigwam waste burner will be utilized when the new facility is in operation.
4. The new facility will be completed and in operation about six (6) months after the issuance of a variance for operation of the old sawmill.

Analysis:

The existing sawmill that the company wishes to operate under the requested variance is located on Matheny Creek, off the Catching Creek road about 2-3 miles from Myrtle Point. The mill is situated in an isolated canyon and there are only two residences in the vicinity of the mill, one belonging to the mill watchman and one belonging to the mill owner.

Mr. J. R. Howe, City Manager of Myrtle Point, has stated to the Department that the community is in favor of the company's proposed program and, because of the remote location of the mill, no air pollution problems arising from the operation of the unmodified wigwam waste burner are anticipated in Myrtle Point or the immediate area.

The existing sawmill would be operated to process about 10,000-15,000 board feet of logs per day. This production level would produce an estimated 8-12 units of wood waste residues per day. This size of mill, of course, is quite small compared to the average sawmill facility existing in the industry today.

Oregon Revised Statutes, Chapter 449, 1971 Replacement Part, Section 449.810, Variances from rules, regulations and orders, Paragraph (1) states that, "The Environmental Quality Commission may grant specific variances from the particular requirements of any rule, regulation or order...if it finds that strict compliance with such rule, regulation

or order is inappropriate because...of special circumstances which would render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause, or because strict compliance would result in substantial curtailment or closing down of a business, plant or operation or because no other alternative facility or method of handling is yet available."

The company has stated that approximately six (6) months will be required to construct the new facility after DEQ approval for construction has been received. Since the plans and specifications for the new facility have been reviewed and recommended for approval by the Department and assuming favorable action on the plan approval and this request for variance by the EQC, it is believed that a specific end date for construction of the new facility can be established.

Conclusions:

1. The temporary operation of the existing sawmill and wigwam waste burner during the construction time for the new facility is required to keep the company's White City cut-stock plant at its present level of operation.

2. No market exists presently for the unprocessed wood waste residues except for, possibly, the sawdust if it can be segregated in the old mill operation.

3. A definite market does exist in the area for Alder chips and shavings after the suitable equipment is installed in the new facility.

4. From an overall environmental standpoint, it is judged that disposal of the wood waste residues by burning in the unmodified wigwam waste burner is more acceptable than disposal in a landfill.

5. Because of the remote location of the old sawmill, the limited time duration of the requested variance and the relatively small amount of wood waste residues that would be generated by this operation, it is judged that operations enabled by the granting of this variance would not create air pollution problems.

6. The granting of this variance by the Environmental Quality Commission would be allowable in accordance with Oregon Revised Statutes, 449.810(1).

Director's Recommendation:

It is recommended that the variance be granted and an order be adopted granting this variance under the following conditions:

1. The operation of the existing sawmill waste burner under this variance order shall be terminated on or before December 31, 1973.

2. Construction of the new facility in accordance with Department approved plans and specifications shall be completed and placed in operation on or before December 31, 1973.

3. Every effort should be made by the company to sell or dispose of the wood waste residues to outside sources during interim operation of the existing mill under this variance in order to limit the use of the wigwam waste burner as much as possible.

4. The unmodified wigwam waste burner shall be maintained and operated in a manner so as to reduce visible emissions to the lowest practicable level.

5. The company shall report, in writing to the Department, the date of the start of operation at the existing sawmill facility.

6. The company shall submit a progress report of the construction of the new sawmill facility to the Department on or before November 1, 1973.

7. All operation at the existing sawmill shall be phased-out as soon as the new facility is placed in operation.



DIARMUID F. O'SCANNLAIN
Director

The Environmental Quality Commission

In the Matter of)
Alder Mfg., Inc.,)
White City, Oregon,)
an Oregon Corporation) Order Granting Variance

Findings:

I

Alder Mfg., Inc., by letter dated March 27, 1973, petitioned for a variance from Oregon Administrative Rules, Chapter 340, Sections 21-005 through 21-020 for the operation of an existing sawmill and unmodified wigwam waste burner located in the vicinity of Myrtle Point, Coos County, Oregon for a period of six (6) months, during which time, a new sawmill facility will be constructed.

II

The new sawmill facility will be completed and placed in operation and all operation of the existing sawmill and wigwam waste burner will be phased-out within the six (6) month time period granted by this variance.

Conclusion:

Pursuant to the provisions of Oregon Revised Statutes, Chapter 449, 1971 Replacement Parts, Section 449.810 (1), the Environmental Quality Commission has the authority to grant the requested variance and said variance should be granted for a six (6) month period of time subject to the terms and conditions hereinafter set forth.

Order:

Now Therefore It Is Ordered that a Variance from OAR, Chapter 340, Sections 21-005 through 21-020 be granted to Alder Mfg., Inc. to permit operation of the existing sawmill and unmodified wigwam waste burner located near Myrtle Point, Oregon subject to the following conditions:

1. The operation of the existing sawmill waste burner under this variance order shall be terminated on or before December 31, 1973.
2. Construction of the new facility in accordance with Department approved plans and specifications shall be completed and placed in operation on or before December 31, 1973.

3. Every effort should be made by the company to sell or dispose of the wood waste residues to outside sources during interim operation of the existing mill under this variance in order to limit the use of the wigwam waste burner as much as possible.

4. The unmodified wigwam waste burner shall be maintained and operated in a manner so as to reduce visible emissions to the lowest practicable level.

5. The company shall report, in writing to the Department, the date of the start of operation at the existing sawmill facility.

6. The company shall submit a progress report of the construction of the new sawmill facility to the Department on or before November 1, 1973.

7. All operation at the existing sawmill shall be phased-out as soon as the new facility is placed in operation.

IT IS SO ORDERED

Dated _____, 1973

For the Environmental Quality Commission

By _____

Title _____



To: AQCD Files

Date: April 20, 1973

From: RAR

Subject: Installation of new sawmill facility - Alder Mfg., Inc.
Myrtle Point, Coos County, SIC 2421

The company submitted plans and specifications for the proposed facility to the Department on April 2, 1973.

Technical Analysis:

The proposed facility will consist of an alder and maple small log sawmill, a planing mill, dry kilns and steam generating boilers. The principal equipment to be installed is as follows:

1. Soderham debarker
2. Precision chipper
3. Log carriage, two (2) band saw head rigs and an edger
4. Knife planer and surfacer
5. (2) Moore dry kilns
6. (2) Kewanee 180 HP oil and/or bark fired boilers
7. Materials handling systems, bins, cyclones, etc.

Discussion:

Logs will be dry decked at the plant site. Logs will be processed through the debarker and the precision chipper to the sawmill. The resulting cants will be sawed by the band saw head rigs and rough sized in the edger.

The rough lumber will be kiln dried and then finish sized in the planing mill.

Wood waste residues will be handled as follows:

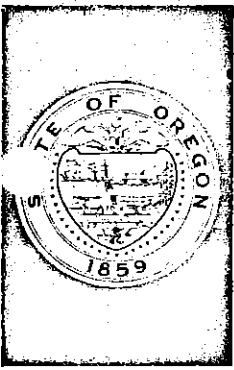
1. Bark from the debarker will be processed and fired in suspension in the boilers.
2. Chips from the precision chipper and sawdust from the sawmill will be blown into trailers for sale to paper mills in Coos Bay and/or Toledo.
3. Edgings will be returned and chipped in the chipper.
4. Planer shavings will be blown to a storage bin with an emission control cyclone. Shavings will also be sold to paper mills.

The bark-generated at this operation will not be sufficient to supply all of the fuel requirements for the boilers and there is a good chance that, once set up, this mill will be able to utilize some of the other wood wastes from the area for make up fuel.

Recommendations:

It is recommended that this installation be approved.

A handwritten signature or set of initials, possibly 'R', written in black ink.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5395

TOM McCALL
GOVERNOR

MEMORANDUM

DIARMUID F. O'SCANNLAIN
Director

ENVIRONMENTAL QUALITY
COMMISSION

B. A. McPHILLIPS
Chairman, McMinnville

EDWARD C. HARMS, JR.
Springfield

STORRS S. WATERMAN
Portland

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. E, April 30, 1973, EQC Meeting

MNVAPA Variance to Stayton Sanitary Service

Background:

The Stayton Sanitary Service operates a solid waste collection and disposal service in the Sublimity-Stayton area of Marion County. After phasing out an open burning dump in September of 1970 the company operated a sanitary landfill at their site. A Chemeketa Regional Solid Waste Plan provided for phasing out the landfill operation. The company developed a waste compaction and transfer station in an effort to make it feasible to long-haul the waste twenty-five miles to the Brown Island disposal site in Salem. Since starting operation of the transfer station in October, 1972, the company cites excessive costs of operation and continuing financial losses making the hauling of bulky wastes no longer feasible.

About 75% of the material handled by Stayton Sanitary Service is wood and paper waste material from industrial sources. It is claimed that this material does not sufficiently compact and is responsible for the financial loss in the operation.

By letter dated March 19, 1973, the Company applied to MWVAPA for an open burning variance for burning of wood, timbers, cardboard, and paper from industrial sources only, while alternative systems under consideration are evaluated. This request for variance was endorsed by the Chemeketa Region Solid Waste Management Program and by the Solid Waste Management Division of the Department.

MWVAPA granted an open-burning variance for two months commencing April 1, 1973, to and including May 31, 1973, subject to the following conditions:

1. Open burning shall be permitted at the Fern Ridge site for the burning of wood, timbers, cardboard and paper only from industrial sources for the period above stated.
2. Such open burning shall be subject to burning requirements and restrictions as may be designated by the Director of the Authority including but not limited to time periods for burning, location or place of site on fire, required use of fuels and auxiliary equipment, and site supervision by owner or his personnel.
3. Such burning shall not be permitted on any day when the Director advises fire permit issuing agencies not to issue permits because such practices would have an adverse effect on air quality.

By letter dated April 2, 1973, the Authority advised Stayton Sanitary Service, Inc. of the burning requirements and restrictions desig-

nated by the Director of the Authority. A copy of this letter is attached with the Variance background material.

Analysis:

The variance as granted meets all Department review criteria.

The reference material submitted by MWVAPA indicates that the variance is a reasonable and necessary step as an interim measure to the final solution of this solid waste problem.

Director's Recommendation:

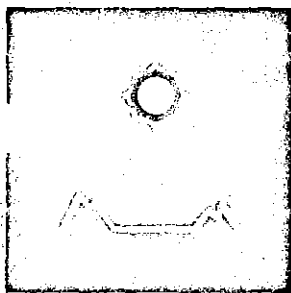
The Director recommends that MWVAPA variance dated March 28, 1973, to Stayton Sanitary Service be approved as submitted.


DIARMUID F. O'SCANNLAIN

LDB:c

4/12/73

Attachments



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

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

March 27, 1973

Harold Patterson
Administrator
Air Quality Control
Department of Environmental Quality
1234 S.W. Morrison St.
Portland, Oregon 97205



SUBJ: VARIANCE GRANTED BY MWVAPA TO STAYTON SANITARY SERVICE

Dear Mr. Patterson:

Pursuant to ORS 449.880 I have enclosed for your review a copy of a variance granted to Stayton Sanitary Service on March 20, 1973, to open burn industrial wastes from April 1 to May 31, 1973, at their Fern Ridge disposal site near Stayton.

Also enclosed is a staff report on the matter with attachments. This information should more than adequately fulfill the requirements of ORS 449.880 and the Authority's similar regulation MWR 23-005.

If any further information is required for your review, my staff and I will assist you in every way.

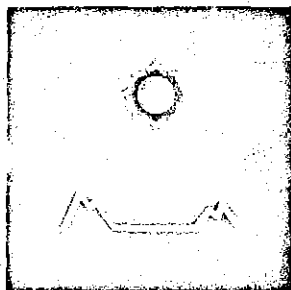
Sincerely,

Michael D. Roach
Director

MDR/DM/st

encl.

cc: Ernie Schmidt, DEQ
Jerry Connor, Chemeketa Solid Waste
Roger Emmons, Oregon Sanitary Services Institute
Utah Crowson, Stayton Sanitary Services Co.



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

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

TO : ENVIRONMENTAL QUALITY COMMISSION
FROM : Michael D. Roach, MWVAPA Director
DATE : April 2, 1973
SUBJ : VARIANCE GRANTED TO STAYTON SANITARY SERVICE, INC.
TO OPEN-BURN REFUSE FROM APRIL 1 TO MAY 31, 1973

In September, 1970, Stayton Sanitary Service phased out an open-burning dump following a schedule of compliance, a variance, and an order to comply. From the fall of 1970 to the fall of 1972 the company operated a landfill disposal site.

Because of a Chemeketa Regional Solid Waste Plan providing for the phase-out of this disposal site, the company, on their own initiative, established a compacting and transfer station in October, 1972. Garbage from two other collection companies has also been received at this site. Compacted drop boxes are hauled twenty-five miles to the Brown Island site in Salem.

Citing excessive costs after six months of operation, the company requested that they be allowed to open burn industrial wastes until they found a financial solution.

Following joint meetings of MWVAPA, DEQ, and Chemeketa Solid Waste staff members on March 8 and 15, the company submitted a request for a thirty-day variance on March 19. On March 20, the MWVAPA Board of Directors approved a sixty-day variance lasting from April 1 to May 31, 1973.

Copies of the variance request, the minutes of the meeting, and the variance order are attached for your review.

Board Meeting Minutes
March 20, 1973

STAYTON SANITARY SERVICE COMPANY - APPLICATION FOR VARIANCE

M.D. Roach, Director, referred Board members to a Summary Application for Variance dated March 19, 1973, and an Application for Variance dated March 19, 1973, both submitted by Roger Emmons, Counsel for the Oregon Sanitary Service Institute. Mr. Roach briefly reviewed the alternate systems proposed on page two of the Application, stating that Proposal number 8 appeared to be most viable. Mr. Roach indicated that most of these points had been discussed at a meeting with DEQ, Chemeketa Solid Waste, and Mr. Crowson on March 15 and staff was in agreement. Mr. Roach also suggested granting a sixty day variance rather than the thirty day variance with possibly two additional months if necessary proposed.

Mr. Emmons agreed the sixty day variance might be more feasible. He added that the parties involved realized the request for variance was a serious matter, but that they felt it was absolutely necessary under the circumstances. The compaction unit has proved inadequate for industrial waste; however, even if the unit were more efficient the truck weights would exceed lawful limits.

Commissioner Carson asked Mr. Emmons if he felt confident that the problem could be resolved and an alternate method could be implemented within the sixty day proposed variance period.

Mr. Emmons indicated this could hopefully be accomplished and every effort would be made to do so. He added that it has been suggested that Mr. Crowson use an interim demolition landfill site. Considering this alternative, at least something could be accomplished, said Mr. Emmons. Board members indicated that Mr. Crowson appeared to be subsidizing the industries and that the rates should be increased to reflect the true cost.

Commissioner Hawkins interjected that all alternatives are apparently being considered. Therefore, he MOVED the variance be granted for sixty days with the provision that every effort be made to succeed in implementing a viable alternative in that period of time. Commissioner Majors SECONDED the motion.

Councilman Hammond asked what date the variance would be effective. Mr. Emmons suggested the effective date be upon EQC's approval of the variance.

Board Meeting Minutes
March 20, 1973

Mr. Cecil Quesseth, Attorney for MWVAPA, suggested the effective date be immediately as there could be a delay of up to two months before the EQC can grant approval. Mr. Emmons asked if this process could be accelerated.

Mr. Roach replied that the agenda for the EQC April meeting has already been set. Therefore, he recommended Mr. Quesseth's suggested effective date. He added the staff would meet with Mr. Crowson during the week of March 26 regarding alternatives and the variance would be effective following that meeting.

Mr. Emmons asked that Chemeketa Regional Solid Waste Management be notified of the proceedings of this public hearing. He was informed that Donna Lakin of that organization was present, and that Chemeketa had been consulted earlier and agreed that a variance was a viable route.

Councilman Hammond asked that the Board consider the formal statement of the motion as follows:

Sixty days for open burning of wood, timbers, and cardboard and paper only. Only from industrial sources. No public use. Fuel pile and combustion techniques to be determined by operator and MWVAPA staff.

Commissioner Hawkins and Majors concurred with this amendment and added April 1 as the effective starting date. The question was called and the amended Motion PASSED.



Oregon Sanitary Service Institute

1755 John St. So., Salem, Oregon 97302 Phone 364-1575

SEARCHED	INDEXED
SERIALIZED	FILED
MAR 20 1973	
FBI - SALEM	

March 19, 1973

Mr. Mike Roach, Director
Mid Willamette Valley Air Pollution Authority
2585 State St.
Salem, Oregon 97301

Dear Mr. Roach:

Re: Summary Application for Variance

Approximately three-fourths of all wastes handled by the Stayton collector are industrial wastes consisting of combustible materials from canneries, trailer manufacturing plants and others.

These wastes are compacted and transferred to Salem. Each load costs \$1.23/yd. in direct costs against a fee of \$1.25/yd. Direct costs do not include overhead, any salary to Mr. Crowson for his 14-16 hours per day, return on investment, etc.

In short, Mr. Crowson loses substantial amounts on every load to Salem. And the volume will increase 35% or more by summer. One of the four industries predicts a 25% increase in manufacturing volume and a similar increase in solid waste volume. Mr. Crowson, working on an approved 6-month interim plan approved by Marion County and the City of Stayton is facing financial and physical collapse. What was the much touted pioneering private industry effort in long haul and transfer to satisfy governmental requirements is turning into a disaster.

After three meetings involving, at various stages, your staff, DEQ staff, Chemeketa staff, OSSI staff, the affected industries and the Stayton Mayor and two members of the Council:

- (1) There is no practical short range solution. All of those proposed and being seriously worked on involve time, dollars and equipment or procedural changes.
- (2) To prevent collapse of the system, a variance is needed for open burning of certain industrial wastes at the Fern Ridge Site for a period of one month, renewable for two additional months.

The reasons and justifications as well as constructive solutions being worked on now are detailed in the attached letter.

Respectfully submitted,

Roger E. Emmons
Roger Emmons, Counsel

OSSI

Research
Standards
Service

Oregon Sanitary Service Institute

1755 John St. So., Salem, Oregon 97302 Phone 364-1505

March 19, 1973

Mr. Mike Roach, Director
Mid Willamette Valley Air Pollution Authority
2585 State St.
Salem, Oregon 97301

Dear Mr. Roach:

Re: Application for Variance, Fern Ridge Disposal
and Transfer Site, Stayton, Oregon

After three meetings with your staff, DEQ staff and Chemeketa staff on the prohibitive costs of transporting industrial wastes from Stayton to Browns Island Regional Site at Salem, no short term alternative was found other than a limited variance request.

In review:

- (1) MWVAPA shut off all burning at disposal sites.
- (2) At considerable cost of the operator, Utah Crowson, and Marion County, Fern Ridge was converted to a landfill.
- (3) Repeated studies by the operator, DEQ staff, Chemeketa Region, OSSI and others demonstrated the futility of trying to operate a landfill at this site.
- (4) The operator, at his own cost, installed a complete transfer system serving the public directly at the site, other collectors and his own trucks. While expensive (\$1/yard), this model system won plaudits from the County, Region and State. DEQ pointed to this Oregon pioneering effort as a model for the whole state under the DEQ program of long haul and transfer.
- (5) Transfer site rates are established by Marion County. Those to residential, commercial and industrial customers are set by the City of Stayton where all the major industries and nearly all residential customers are located.

Mr. Crowson agreed to a \$1/yard interim transfer and disposal rate for 6 months. The City drastically increased rates and allowed Mr. Crowson to install a curb service type collection system using bags presold including the charge for collection service.

- (6) The major industries involved incurred their third 25%/yard increase in drop box rates in just three years. Now at \$1.25 per yard as contrasted to the \$1.50 county rate for outside the cities.
- (7) The industries provide approximately 3/4 of the volume in wastes handled by Mr. Crowson.

March 19, 1973

Mr. Roach - 2

- (8) The situation in Stayton was found to be unique by the DEQ, MWVAPA and Chemeketa staffs due to the small size of the city with such large industries with an increasing solid waste load.
- (9) At one meeting with the industries, staffs, operator, OSSI and Stayton Mayor and two members of his Council, we found that the industries have tried to recycle this material and have not been successful. While they have diverted some wastes, recycled others, the volume grows. Special efforts of Mr. Crowson to work out better source handling techniques has been resisted by some industry employees.
- (10) Despite use of \$35,000 compaction system to reduce volume prior to transfer to Salem, direct costs on each yard now picked up at the industries is \$1.23/yard against a fee of \$1.25 yard. The direct costs include no salary or return to Mr. Crowson who is now working from 14 to 16 hours per day trying to keep the system going. He has reached his borrowing and financial limits. Loss of the industrial accounts would cut off his financial base for the drop box system also used to transport residential-commercial garbage and refuse.

Alternate Systems under review:

- (1) Haul direct from Industries to Browns Island. Requires trailer system to haul extra box and \$4,000 minimum in new boxes. Second alternative would be going to larger boxes, 40 yard, at cost minimum of \$15,000 plus trailer. Whole system needs cost analysis. Comparable metal scrap hauling units run 75% per mile including turn around time.
- (2) Increase rates to industries. This can be a losing proposition and result in adverse competitive position for these industries. Rates are so high that one industry has threatened to invest over \$100,000 in an on-site incinerator. Probable maximum is \$1.50/yard which will be sought.
- (3) On-site incineration. You and your staff point out that stringent air quality standards and problems of fuel loading on much of this material make installation, operation and maintenance prohibitive and you do not encourage this solution.
- (4) Variance for pit incinerator at Fern Ridge Site. MWVAPA estimates installation cost at \$20,000 plus. Variance, if granted at all, could not exceed one year. Little chance to amortize cost.
- (5) Landfill disposal. Excessively expensive at site. Soil extremely difficult to work. Alternate might be short range demolition type site. Preparation of either requires interim assistance.

331

Oregon Sanitary Service Institute

1755 John St. So., Salem, Oregon 97302 Phone 364-1505

Research
Standards
Service

March 19, 1973

Mr. Roach - 3

- (6) Increased compaction and volume reduction. Increased compaction is not feasible with existing equipment and would result in over legal weight truck loads. On-site volume reduction at industries if direct haul is instituted could reduce volume.
- (7) Terminate the industrial business and let the industries find their own way to handle this waste. This is required if no alternative works.
- (8) Partnership in some business form with source industries. Now being explored to provide financial base for alternatives.
- (9) Totally terminate business and sell to county or city. Neither have shown any interest or have the funds.

Specific Variance Request.

- * (1) One month of open burning of wood, timbers, cardboard and paper only. Only from industrial sources. No public use. Fuel pile and combustion techniques to be determined by operator and MWVAPA staff. Preliminary test indicates little visible emissions.
- (2) Authority to extend variance for up two additional months if necessary during change over to another system.

Respectfully Submitted,


Roger Emmons, Counsel



CHEMEKETA REGION

SOLID WASTE MANAGEMENT PROGRAM

3000 MARKET STREET, N.E., SUITE 315, SALEM, OR. 97301 PHONE (503) 588-5293

March 27, 1973

Mr. Michael D. Roach, Director
Mid-Willamette Valley Air Pollution
Authority
2585 State Street
Salem, Oregon 97301

Dear Mr. Roach:

RE: FERN RIDGE TRANSFER STATION

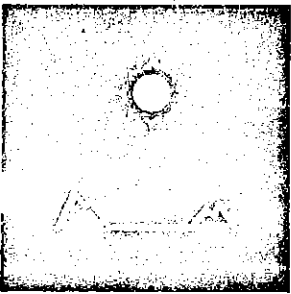
At the March 21, 1973, Chemeketa Region Operations Committee meeting, the Region approved the action of the Mid-Willamette Valley Air Pollution Authority's Board of Directors to grant an open burning variance to Utah Crowson, Fern Ridge Transfer Station, Stayton, Oregon.

It is hoped this unanimously adopted endorsement of the open burning variance will lend support to the Air Pollution Authority's request for approval before the State Environmental Quality Commission.

Sincerely yours,

Clifford R. Jones
Clifford R. Jones, Chairman

d1
cc Alan Hershey
Ernest Schmidt
Roger Emmons
Utah Crowson



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

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

April 2, 1973

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
APR 04 1973
AIR QUALITY CONTROL

Stayton Sanitary Service, Inc.
432 E. Cedar
Stayton, Oregon 97308

SUBJ: RESTRICTIONS ON OPEN BURNING DURING VARIANCE PERIOD

Attention: Utah Crowson

Gentlemen:

Following the inspection on March 27 during which a test burn was observed, I will require that the following provisions must be complied with during the variance period for open burning:

(1) Burning will be allowed on prohibited burning days except that burning shall be terminated upon one hours notice by the Authority.

(2) Burning shall be conducted between the hours of 10:00 a.m. and 4:00 p.m. No fires shall be started nor any new waste dumped into an existing fire after 3 p.m. Every effort will be taken to prevent or suppress smoldering piles lasting after 4 p.m.

(3) Burning shall be done only in the area where the test fire was conducted, that is adjacent to the unused drainage ditch. Waste shall not be burned in the water-filled pit or on the former fill area.

(4) The debris piles shall be ignited around the full perimeter with an ignition torch or similar equipment.

(5) The waste open-burned shall have an absolute minimum of rubber, plastics, linoleum, insulation or other substances

C
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P
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Stayton Sanitary Service, Inc.

April 2, 1973

Page Two

or materials which normally emit dense smoke or obnoxious odors. No garbage shall be burned. No wastes other than from industrial sources shall be burned.

(6) Any drop box load which, if burned, would violate any of these restrictions shall instead be transferred to Brown Island.

(7) A weekly summary of the waste yardage burned shall be mailed to the Authority each Friday.

Sincerely yours,

Michael D. Roach
Director

MDR:DM:db:963

cc: Roger Emmons
Harold Patterson
Ernie Schmidt
Jerry Connors

BEFORE THE MID-WILLAMETTE VALLEY
AIR POLLUTION AUTHORITY

In the Matter of the Application)
for variance)

) ORDER GRANTING VARIANCE
)
)

of)

STAYTON SANITARY SERVICE COMPANY)

This matter came on regularly before the Mid-Willamette Valley Air Pollution Authority Board of Directors on March 20, 1973, upon the application of Utah Crowson dba Stayton Sanitary Service Company, for a variance from the order of this Authority of July 31, 1970, prohibiting open burning of garbage, refuse and rubbish, and from the restrictions contained in Rule 33-005 of this Authority.

The Board having considered the variance application and the recommendation of its staff finds that the conditions of ORS 449-510(1) have been met in that an innovative and original solid waste compaction and transfer system has been operated for six months at a financial loss to replace undesirable landfill and open burning activities, and that alternative or modified systems for disposal are now under examination, and by reason of such circumstances strict compliance of the rules of this Authority would be burdensome and impractical, Now Therefore,

ON MOTION duly made, seconded and passed, it was resolved by the Board as follows:

IT IS HEREBY ORDERED that the application for variance by Utah Crowson dba Stayton Sanitary Service Company, be and the same hereby is granted commencing

with April 1, 1973, to and including May 31, 1973, subject to the following conditions:

1. Open burning shall be permitted at the Fern Ridge site for the burning of wood, timbers, cardboard and paper only from industrial sources for the period above stated.

2. Such open burning shall be subject to burning requirements and restrictions as may be designated by the Director of the Authority including but not limited to time periods for burning, location or place on site of fire, required use of fuels and auxiliary equipment, and site supervision by owner or his personnel.

3. Such burning shall not be permitted on any day when the Director advises fire permit issuing agencies not to issue permits because such practices would have an adverse effect on air quality.

IT IS FURTHER ORDERED that a true copy of this order shall forthwith be filed with the Environmental Quality Control Commission pursuant to ORS 449.830.

IT IS FURTHER ORDERED that a true copy of this order shall be forthwith mailed to Stayton Sanitary Service Company and its attorney, Roger Emmons.

DATED this 28 day of March, 1973.

Mid-Willamette Valley Air
Pollution Authority

By Harry Carson
Chairman

Attest:

G. M. Roach
Director



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5301

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item F, April 30, 1973 EQC Meeting

Proposed Amendments to Oregon Administrative Rules,
Chapter 340, Division 4, Subdivision 1

Background

The Federal Water Pollution Control Act amendments of 1972 required the Environmental Protection Agency (EPA) to review and to notify the states regarding the adequacy and need for revisions of their established water quality standards relative to the new Federal law. The Federal Statute allows 90 days for states to modify standards after notification by EPA. Based upon this review, EPA, on January 18 and March 13, 1973, requested the Department of Environmental Quality to add some provisions to Oregon's standards and to consider some modifications of existing standards for interstate and intrastate waters to achieve compatibility with the standards of adjacent states. DEQ proceeded rapidly to evaluate the changes suggested by EPA on January 18, 1973 for interstate waters and develop proposed modifications to satisfy this request, and the anticipated later request relative to intrastate waters. DEQ met with Washington and Idaho on February 2, 1973 and prepared proposed standards revisions. Public notice was given and this hearing was scheduled in order to come as close as possible to the

Federal act deadline for adopting standards changes. As a result of further evaluation since publication of the hearing notice, the department now considers it necessary to propose some changes to the proposed standards revisions. The proposed standards revisions as printed and distributed together with proposed further changes are discussed in the following sections.

Discussion of Proposed Standards Amendments

A. General Considerations

It is proposed to add a new section to Oregon's standards defining general applicability. The purpose of this section is to facilitate the determination of compliance or non-compliance with standards.

One paragraph simply defines the analytical testing methods to be used in determining compliance with standards and should not require further explanation.

Two of the paragraphs as proposed require more discussion. These read as follows:

1. The water quality standards herein established, except for the esthetic values, shall not apply within immediate mixing zones of very limited size adjacent to or surrounding a wastewater discharge, nor when the stream flow falls below the 10-year, 7-day average low flow; nor in the case of total dissolved gas, when the stream flow exceeds the 10-year, 7-day average flood.
2. The total area and/or volume of a receiving water assigned to a mixing zone shall be described in a valid discharge permit and limited to that which will: (1) not interfere with biological communities or populations of important species to

a degree which is damaging to the ecosystem; and (2) not diminish other beneficial uses disproportionately.

The concept of specifically defined mixing zones is new to Oregon's standards. Most highly treated effluents will not by themselves meet stream water quality standards. After mixing and dispersion in a limited zone of the stream, however, a properly treated effluent will not cause standards to be violated. In practice, the department recognizes that a small dispersion zone exists in the immediate vicinity of an outfall pipe where standards may not be strictly met. However, lack of specific definition of the limits of a zone allowed for effluent dispersion or mixing can conceivably impair standards enforcement. As a result, it was considered necessary to establish a procedure and guidelines for defining mixing zones.

It is considered that the best method for formally defining a mixing zone of minimum practicable size for each discharge is by condition within the waste discharge permit which will be issued in accordance with procedures which afford opportunity for public review. The proposed language provides that while water quality standards do not strictly apply within the mixing zone, conditions damaging to aquatic life, nuisance conditions or conditions which would unreasonably impair other uses can not be permitted.

The language originally proposed in paragraph 1 also provides that standards shall not apply when stream flows fall below the 10-year, 7-day average low flow. This wording was suggested by EPA guidelines and is also incorporated in the State of Washington proposed standards. After further evaluation, the department feels this wording should be deleted since

it might tend to prevent the Department taking extraordinary measures to prevent damage to water and aquatic resources.

The last portion of paragraph 1 which provides that total dissolved gas standards do not apply when stream flows exceed the 10-year, 7-day average flood is proposed to be deleted from Section 1 and attached to the dissolved gas standard.

This is considered to be a reasonable inclusion since the passage of 10-year flood flows tend to cause high levels of dissolved gases with little or no opportunity for control.

As a result of these changes, Section 1 would be revised to read as follows:

Section 1. The following new section shall be added to OAR 340, Division 4, Subdivision 1.

41-023 GENERAL CONSIDERATIONS

The following general guidelines shall be applicable to the water quality standards set forth in this subdivision:

- (1) The water quality standards herein established, except for the esthetic values, shall not apply within immediate mixing zones of very limited size adjacent to or surrounding a wastewater discharge. The total area and/or volume of a receiving water assigned to a mixing zone shall be as described in a valid

discharge permit and limited to that which will: (1) not interfere with biological communities or populations of important species to a degree which is damaging to the ecosystem; and (2) not diminish other beneficial uses disproportionately.

- (2) The analytical testing methods for these standards shall be in accordance with the most recent edition of Standard Methods for the Examination of Water and Waste Water and other or superseding methods published by the Department following consultation with adjacent states and concurrence of the Environmental Protection Agency.

B. Temperature Standards

1. The proposed revisions to the temperature standards for both interstate and intrastate waters include specific additions aimed at clarifying these existing standards. The current temperature standards are worded similar to the following:

"No waste shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause in any waters of the Columbia River: (5) Any measurable increase when river temperatures are 68° F or above, or more than 2° F increase when river temperatures are 66° F or less."

The maximum temperature level varies in different streams and basins depending on natural background conditions. The 2° temperature rise allowed by Oregon's standards when temperatures are below the stated maximum has been misinterpreted by many including EPA. The 2° F increase refers to a cumulative effect from all sources. The standard is difficult to interpret with respect to individual sources however. Therefore, in line with the mixing zone concept, it is now being proposed that when temperatures are below the stated maximum, the maximum temperature increase allowed at the boundary of a mixing zone for any individual point source would be 0.5° F. When stream temperatures are at or above the stated maximum, no measurable increase is allowed, either at the mixing zone boundary or for all sources combined.

These specific additions to the temperature standards are proposed for the general water quality standards and the special water quality standards established for the rivers and river basins listed below:

(a) Main Stem or River

- (1) Klamath River
- (2) Multnomah Channel and Willamette River
- (3) Columbia River from the eastern Oregon-Washington border westward to the Pacific Ocean.
- (4) Grande Ronde River
- (5) Walla Walla River
- (6) Snake River

(b) River Basins

- (1) Rogue
- (2) Umpqua
- (3) Clackamas, Molalla, and Sandy
- (4) Tualatin
- (5) McKenzie and Santiam
- (6) Deschutes

2. It is also proposed that the temperature standard for the Snake River be changed from the current maximum level of 70° F to 68° F in order to make Oregon's standard compatible with Idaho's standard.

C. Dissolved Nitrogen Standard

The existing dissolved nitrogen standard reads as follows:

"No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause in the waters of the state: (12) The dissolved nitrogen concentration (DN) relative to the water surface to exceed one hundred and five percent (105%) of saturation."

It is proposed that this standard be revised to reflect a more scientific description of the total dissolved gas phenomenon and to include the high flow variance previously discussed, as follows:

- (12) "The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection to exceed one hundred and five percent

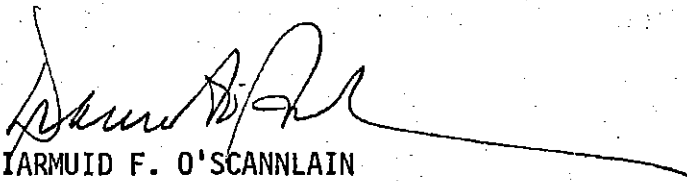
(105%) of saturation, except when stream flow exceeds the 10-year, 7-day average."

Summary and Conclusions

1. Oregon's water quality standards are being systematically reviewed as a part of the Department's on-going River Basin Planning Program. It is anticipated that further changes in the special standards pertaining to specific river basins will be recommended upon completion of this in-depth review.
2. The presently proposed changes are necessary to meet minimum requirements and time schedules imposed by the Environmental Protection Agency and 1972 amendments to the Federal Water Pollution Control Act.

Director's Recommendations

It is the Director's recommendation that the Commission take action to adopt the proposed amendments to OAR Chapter 340, Division 4, Subdivision 1, as recommended by this report and with such changes that the Commission may consider appropriate, in consideration of testimony received as a result of this hearing.


DIARMUID F. O'SCANNLAIN

HLS:1jb

4/18/73

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

OF THE STATE OF OREGON

In the matter of the amendment)
of Standards of Quality for Public) NOTICE OF HEARING
Waters of Oregon and Disposal Therein) AND INTENDED ACTION
of Sewage and Industrial Wastes)

On April 30, 1973, beginning at 2:00 P.M., a public hearing will be held in the Second Floor Council Chambers, Civic Center, 555 Liberty Street S. E., Salem, Oregon, to consider amendment by the Department of Environmental Quality of Oregon Administrative Rules Chapter 340, Division 4, Subdivision 1, Standards of Quality for Public Waters of Oregon and Disposal Therein of Sewage and Industrial Wastes.

Proposed amendments include:

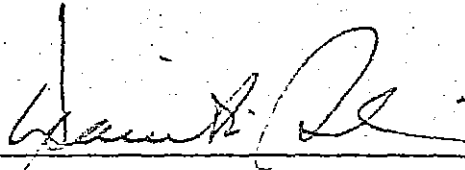
1. A new section of General Considerations which: (a) specifies applicability of water quality standards with respect to maximum and minimum stream flows; (b) defines mixing zones; and (c) specifies methods to be used in analytical testing to determine compliance with water quality standards.
2. Modification of water quality standards to limit temperature increases for single-source and combined-source discharges.
3. Amending the dissolved nitrogen standard to include total dissolved gases.

Copies of the proposed rules may be obtained by writing the Director, Department of Environmental Quality, Terminal Sales Building, 1234 S. W. Morrison, Portland, Oregon.

Interested parties may present their data, views or arguments either orally or in writing, at the hearing or may submit them to the Director, in writing, prior to the hearing for inclusion in the hearing record.

The Environmental Quality Commission will preside over and conduct the hearing.

Dated this 19th day of March, 1973.



Director
Department of Environmental Quality

PROPOSED

AMENDMENTS TO OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 4, SUBDIVISION 1

Section I. The following new section shall be added to OAR 340,
Division 4, Subdivision 1.

41-023 GENERAL CONSIDERATIONS.

The following general guidelines shall be applicable to
the water quality standards set forth in this subdivision:

- (1) The water quality standards herein established, except for the esthetic values, shall not apply within immediate mixing zones of very limited size adjacent to or surrounding a wastewater discharge, nor when the stream flow falls below the 10-year, 7-day average low flow; nor in the case of total dissolved gas, when the stream flow exceeds the 10-year, 7-day average flood.
- (2) The total area and/or volume of a receiving water assigned to a mixing zone shall be as described in a valid discharge permit and limited to that which will: (1) not interfere with biological communities or populations of important species to a degree which is damaging to the ecosystem; and (2) not diminish other beneficial uses disproportionately.
- (3) The analytical testing methods for these standards shall be in accordance with the most recent edition of Standard Methods for the Examination of Water and Waste Water and other or superseding methods published by the Department

following consultation with adjacent states and concurrence of the Environmental Protection Agency.

Section II. OAR 340-41-025 (9) and (12) are to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (9) Any measurable increase in temperature when the receiving water temperatures are 64° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when receiving water temperatures are 62° F. or less.
- (12) The [dissolved nitrogen] concentration [(DN)] of total dissolved gas relative to [the water surface] atmospheric pressure at the point of sample collection to exceed one hundred and five percent (105%) of saturation.

Section III. OAR 340-41-040 (4) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (4) Temperature. Any measurable increase when river temperatures are 72° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. [cumulative] increase due to all sources combined when river temperatures are 70° F. or less.

Section IV. OAR 340-41-045 (4)(a) and (b) are to be amended as follows (additions are underlined, deletions are enclosed in brackets):

(4) Temperature

- (a) (Multnomah channel and main stem Willamette River from mouth to Newberg, river mile 50). Any measurable increase when river temperatures are 70° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when river temperatures are 68° F. or less.
- (b) (Main stem Willamette River from Newberg to confluence of Coast and Middle Forks, river mile 187). Any measurable increase when river temperatures are 64° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when river temperatures are 62° F. or less.

Section V. OAR 340-41-050 (5) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (5) Temperature. Any measurable increase when river temperatures are 68° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when river temperatures are 66° F. or less.

Section VI. OAR 340-41-055 (4) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (4) Temperature. Any measurable increase when river temperatures are 68° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when river temperatures are 66° F. or less.

Section VII. OAR 340-41-060 (4) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (4) Temperature. Any measurable increase when river temperatures are 68° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when river temperatures are 66° F. or less.

Section VIII. OAR 340-41-065 is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (4) Temperature. Any measurable increase when river temperatures are [70°] 68° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when river temperatures are [68°] 66° F. or less.

Section IX. OAR 340-41-080 (e) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

(e) Temperature. Any measurable increases when stream temperatures are 58° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase[s] due to all sources combined when stream temperatures are 56° F. or less, except for short-term activities which may be specifically authorized by the Department of Environmental Quality under such conditions as it may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable.

Section X. OAR 340-41-085 (e) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

(e) Temperature. Any measurable increases when stream temperatures are 58° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase[s] due to all sources combined when stream temperatures are 56° F. or less, except for certain short-term activities which may be specifically authorized by the Department of Environmental Quality under such conditions as it may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable.

Section XI. OAR 340-41-090 (e) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

(e) Temperature. Any measurable increases when stream temperatures are 58° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase[s] due to all sources combined when stream temperatures are 56° F. or less, except for certain short-term activities which may be specifically authorized by the Department of Environmental Quality under such conditions as it may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable.

Section XII. OAR 340-41-095 (d) (A) and (B) are to be amended as follows (additions are underlined, deletions are enclosed in brackets):

(d) Temperature.

(A) In Salmonid fish spawning areas, any measurable increases when stream temperatures are 58° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase[s] due to all sources combined when stream temperatures are 56° F. or less, except for certain short-term activities which may be specifically authorized by the Department of Environmental Quality under such conditions as it may prescribe and which are

necessary to accommodate essential uses or activities where temperatures in excess of this standard are unavoidable.

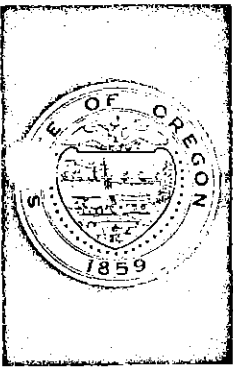
- (B) In all other basin areas, any measurable increases when stream temperatures are 68° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 4° F. increase due to all sources combined when river temperatures are 64° F. or less.

Section XIII. OAR 340-41-100 (e) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

- (e) Temperature. Any measurable increases when stream temperatures are 58° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase due to all sources combined when stream temperatures are 56° F. or less, except for certain short-term activities which may be specifically authorized by the Department of Environmental Quality under such conditions as it may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable.

Section XIV. OAR 340-41-105 (c) is to be amended as follows (additions are underlined, deletions are enclosed in brackets):

(c) Temperature. Any measurable increases when stream temperatures are 58° F. or above, or more than 0.5° F. increase beyond the assigned mixing zone boundaries of a single-source discharge, or more than 2° F. increase[s] due to all sources combined when stream temperatures are 56° F. or less, except for certain short-term activities which may be specifically authorized by the Department of Environmental Quality under such conditions as it may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5359

TOM McCALL
GOVERNOR

MEMORANDUM

DIARMUID F. O'SCANLAIN
Director

To: Environmental Quality Commission

ENVIRONMENTAL QUALITY
COMMISSION

From: The Director

B. A. McPHILLIPS
Chairman, McMinnville
EDWARD C. HARMS, JR.
Springfield

Subject: Agenda Item G, April 30, 1973, EQC Meeting

STORRS S. WATERMAN
Portland

Proposed Air Contaminant Discharge Permits

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

Background

The Department has prepared proposed Air Contaminant Discharge Permits for the following companies in accordance with OAR, 340, Sections 20.033.02 through 20.033.20. Staff evaluations and proposed permits are appended and may be found under sub-tabs as indicated below:

Redmond Tallow Company, Inc., Redmond	G(a)
Southern Oregon Tallow Company, Inc., Eagle Point	G(b)
Klamath Tallow Company, Klamath Falls	G(c)
Ontario Rendering Company, Ontario	G(d)
Bioproducts, Inc., Warrenton	G(e)
Asphalt Paving Company, Klamath Falls	G(f)
Deschutes Ready-Mix Sand and Gravel Company, Bend	G(g)

The Department issued prominent public notice on March 26, 1973, that testimony would be received and consideration would be given at this time and place relative to issuance of Air Contaminant Discharge Permits for each of the above sources.

Director's Recommendation:

It is the Director's recommendation that the Commission take action to issue permits as attached for each of the above sources with any changes that may be considered appropriate in consideration of testimony received at this hearing.

A handwritten signature in black ink, appearing to read "Diarmuid F. O'Scannlain", with a long horizontal flourish extending to the right.

DIARMUID F. O'SCANNLAIN
Director

Department of Environmental Quality
Air Quality Control Division

Date:

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

REDMOND TALLOW CO., INC.
3110 NE O'Neill Way
Redmond, OR 97756Background

1. Redmond Tallow Co., Inc. operates a rendering plant on O'Neill Way six (6) miles from Redmond.
2. The plant has a capacity of up to 8,000 pounds per day of raw material. Raw materials include restaurant and slaughterhouse scraps and dead animals.
3. The facilities, which include one (1) boiler, are well maintained and cleaned.
4. The Department of Environmental Quality has received no complaints regarding this source.

Evaluation

1. The emission regulation for rendering plants is defined to be applicable within city limits or within two (2) miles of city limits. Therefore, the rendering facilities themselves at the subject plant do not require controls. The steam-generating boilers, however, are subject to regulation.
2. The following emission limitations are applicable to the emissions from the steam-generating boilers:
 - a. Particulate emissions shall not exceed two-tenths (0.2) grains per standard cubic foot.
 - b. Smoke opacity shall not equal or exceed forty percent (40%) for an aggregated time of more than three (3) minutes in any one (1) hour.
 - c. Residual fuel oil used in the boilers may not have more than two and one-half percent (2.5%) sulfur by weight, and after July 1, 1974 may not have more than one and three-fourths percent (1.75%) sulfur by weight.
3. The emissions from the steam-generating boiler have not been observed to be visible. Surveillance will be continued, and if smoke opacity exceeds the limit, a compliance procedure is specified.
4. A two-year permit is proposed, with a termination date of December 31, 1974 to allow time for compliance determination and to make timely changes in a new permit if it should prove desirable.

Recommendation

It is recommended that the attached proposed permit conditions be reviewed for issuance to Redmond Tallow Co., Inc.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74

Page 1 of 3

APPLICANT:

REDMOND TALLOW CO., INC.
3110 N. E. O'Neill Way
Redmond, OR 97756

REFERENCE INFORMATION

File Number 09-0032

Appl. No.: 0009 Received: _____

OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

RENDERING PLANT

2094

Permitted Activities

Until such time as this permit expires, or is modified or is revoked, REDMOND TALLOW CO., INC. is herewith permitted to operate its rendering plant, consisting of raw material handling and preparation facilities, cookers, product handling, storage and transportation facilities, and steam-generating facilities, including those processes and activities directly related and associated thereto located on O'Neill Way approximately six (6) miles from Redmond, and to discharge therefrom exhaust gases in accordance with the requirements and conditions of this permit.

Performance Standards and Emission Limits

All air-contaminant generating process and air-contaminant control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air-contaminants are kept to lowest practicable levels.

1. Steam-generating boiler particulate emissions shall not exceed:
 - a. Two-tenths (0.2) grains per standard cubic foot, corrected to twelve percent (12%) carbon dioxide, or fifty percent (50%) excess air.
 - b. An opacity equal to or greater than forty percent (40%) for an aggregated time of more than three (3) minutes in any one (1) hour.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the

Department of Environmental Quality

REDMOND TALLOW CO., INC.

2. The use of residual fuel oil containing more than two and one-half percent (2.5%) sulfur by weight is prohibited.

3. The use of residual fuel oil containing more than one and three-fourths percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

4. In the event that visual observations indicate that emissions from the steam-generating boiler do not comply with the limits of Condition 1, the Company shall cause to be conducted a source emission test to determine the concentration of particulate matter in the exhaust gases and to develop a proposal and schedule for attaining and demonstrating compliance. Approval of the proposal and schedule shall be based in part upon a showing that the schedule will achieve compliance in the shortest practicable time, but in no case will the schedule be approved if compliance is not to be attained within eight (8) months of the initial notice of violation.

Monitoring and Reporting

5. The operation and maintenance of the rendering plant and related facilities shall be effectively monitored. In December of each year that this permit is in effect, a report shall be submitted to the Department of Environmental Quality which lists the following:

- a. Quantities and types of raw material processed.
- b. Quantities and types of fuel used.

6. The Department of Environmental Quality shall be notified promptly of any upset condition, in accordance with OAR, Chapter 340, "Upset Conditions", which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Prohibited Activities

7. No open burning shall be conducted at the plant site.

Special Conditions

8. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

9. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting functions related to this permit.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 3 of 3

Appl. No: 0009

File No: 09-0032

REDMOND TALLOW CO. INC.

10. No alteration, modification, or expansion of the subject rendering plant production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

11. The Annual Compliance Determination Fee shall be submitted according to the following schedule:

Amount Due

Date Due

\$125.00

December 1, 1973

12. This permit is subject to termination if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by a lack of full disclosure in this application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

SOUTHERN OREGON TALLOW CO., INC.
10175 Agate Road
Eagle Point, OR 97524

Background

1. Southern Oregon Tallow Co., Inc. operates a rendering plant three (3) miles from Eagle Point.
2. The plant has a capacity of up to 10,000 pounds of tallow per day and up to 8,000 pounds of meat meal per day. Raw materials include restaurant and butcher scraps, and dead animals.
3. The facilities are well maintained and well cleaned. There are three (3) oil-fired steam-generating boilers on the site. Generally, only one (1) is in operation at any time, although occasionally two (2) are in use simultaneously. The fuel used is diesel (distillate) oil with residual oil as an auxiliary fuel.
4. The Department of Environmental Quality has received no complaints of odors from this plant.

Evaluation

1. The emission regulation for rendering plants is defined to be applicable within city limits or within two (2) miles of city limits. Therefore, the rendering facilities themselves at the subject plant do not require controls. The steam-generating boilers, however, are subject to regulation.
2. The following emission limitations are applicable to the emissions from the steam-generating boilers:
 - a. Particulate emissions shall not exceed two-tenths (0.2) grains per standard cubic foot, corrected to twelve percent (12%) CO₂ or fifty percent (50%) excess air.
 - b. Smoke opacity shall not equal or exceed forty percent (40%) for an aggregated period of three (3) minutes in any one (1) hour.
 - c. Residual fuel oil used in the boilers may not have more than two and one-half percent (2.5%) sulfur by weight, and after July 1, 1974, the sulfur limitation is reduced to one and three-fourths percent (1.75%).

3. Steam-generating boilers fueled with distillate fuel oil meet the particulate emission requirements. When fueled with residual oil, the particulate emissions may exceed the limits. A source emission test will be performed at this plant in the near future, while residual oil is being used. If the particulate emissions exceed regulatory limits, a compliance demonstration schedule is provided in the permit.
4. A two-year permit is proposed, with a termination date of December 31, 1974, to allow time to determine compliance and to make timely changes in a new permit if it should prove desirable.

Recommendation

It is recommended that the attached proposed permit conditions be reviewed for issuance to Southern Oregon Tallow Co., Inc.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
Page 1 of 3

APPLICANT:

SOUTHERN OREGON TALLOW CO., INC.
10175 Agate Road
Eagle Point, OR 97524

REFERENCE INFORMATION

File Number 15-0056

Appl. No.: 0010 Received: _____

OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

RENDERING PLANT

2094

Permitted Activities

Until such time as this permit expires, or is modified or is revoked, SOUTHERN OREGON TALLOW CO., INC. is herewith permitted to operate its rendering plant, consisting of raw material handling and preparation facilities, cookers, product handling, storage and transportation facilities, and steam-generating facilities, including those processes and activities directly related and associated thereto located on Agate Road three (3) miles from Eagle Point, and to discharge therefrom exhaust gases in accordance with the requirements and conditions of this permit.

Performance Standards and Emission Limits

All air-contaminant generating process and air-contaminant control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air-contaminants are kept to lowest practicable levels.

1. The three (3) steam-generating boilers shall:

- a. Be fired by diesel (distillate) fuel oil with residual oil as an alternative.
- b. Not exceed two-tenths (0.2) grains per standard cubic foot of particulate matter, corrected to twelve percent (12%) carbon dioxide or fifty percent (50%) excess air nor an opacity equal to or greater than forty percent (40%) for an aggregated period of three (3) minutes in any one (1) hour.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 2 of 3

Appl. No: 0010

File No: 15-0056

SOUTHERN OREGON TALLOW CO., INC.

2. The use of residual fuel oil containing more than two and one-half percent (2.5%) sulfur by weight is prohibited.

3. The use of residual fuel oil containing more than one and three-fourths percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

4. In the event that source emission tests, performed by the Department of Environmental Quality, indicate that emissions from the steam-generating boilers do not comply with the limits of Condition 1.b above, the Company shall submit a proposal and schedule by no later than July 1, 1973 for attaining compliance, said schedule to attain and demonstrate compliance by no later than October 31, 1973.

Monitoring and Reporting

5. The operation and maintenance of the rendering plant and related facilities shall be effectively monitored. In December of each year that this permit is in effect, a report shall be submitted to the Department of Environmental Quality which lists the following:

- a. Quantities and types of raw material processed.
- b. Quantities and types of fuel used.

6. The Department of Environmental Quality shall be notified promptly of any upset condition, in accordance with OAR, Chapter 340, "Upset Conditions", which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Prohibited Activities

7. No open burning shall be conducted at the plant site.

Special Conditions

8. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

9. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting functions related to this permit.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 3 of 3

Appl. No: 0010

File No: 15-0056

SOUTHERN OREGON TALLOW CO., INC.

10. No alteration, modification, or expansion of the subject rendering plant production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

11. The Annual Compliance Determination Fee shall be submitted according to the following schedule:

Amount Due

\$125.00

Date Due

December 1, 1973

12. This permit is subject to termination if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by a lack of full disclosure in this application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Department

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

KLAMATH TALLOW CO.
Old Midland Road
Klamath Falls, OR 97601

Background

1. Klamath Tallow Co. operates a rendering plant two and one-half (2.5) miles south of Klamath Falls on Old Midland Road.
2. The plant has a capacity of up to 9,000 pounds of product per day. Raw materials include restaurant and slaughterhouse scraps and dead animals.
3. The facilities are well maintained and cleaned. There is one boiler, which uses waste crankcase (automobile) oil for a fuel.
4. The Department of Environmental Quality has received no complaints of odors from this source.

Evaluation

1. The emission regulation for rendering plants is defined to be applicable within city limits or within two (2) miles of city limits. Therefore, the rendering facilities themselves at the subject plant do not require controls. The steam-generating boilers, however, are subject to regulation.
2. The following emission limitations are applicable to the emissions from the steam-generating boilers:
 - a. Particulate emissions shall not exceed two-tenths (0.2) grains per standard cubic foot, corrected to twelve percent (12%) carbon dioxide or fifty percent excess air.
 - b. Smoke opacity shall not equal or exceed forty percent (40%) for an aggregated period of three (3) minutes in any one (1) hour.
3. The Department of Environmental Quality will conduct source-emission tests in March, 1973 of the boiler stack. If emissions exceed the limitations, a compliance demonstration proposal and schedule is required in the proposed permit.
4. A two (2) year permit is proposed, with a termination date of December 31, 1974, to allow time to determine compliance and to make timely changes in a new permit if it should prove desirable.

Recommendation

It is recommended that the attached proposed permit conditions be reviewed for issuance to Klamath Tallow Co.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
Page 1 of 3

APPLICANT:

KLAMATH TALLOW CO.
Old Midland Road
Klamath Falls, OR 97601

REFERENCE INFORMATION

File Number 18-0020
Appl. No.: 0008 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

RENDERING PLANT

2094

Permitted Activities

Until such time as this permit expires, or is modified or is revoked, KLAMATH TALLOW CO. is herewith permitted to operate its rendering plant, consisting of raw material handling and preparation facilities, cookers, product handling, storage and transportation facilities, and steam-generating facilities, including those processes and activities directly related and associated thereto located on Old Midland Road two and one-half (2.5) miles south of Klamath Falls, and to discharge therefrom exhaust gases in accordance with the requirements and conditions of this permit.

Performance Standards and Emission Limits

All air-contaminant generating process and air-contaminant control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air-contaminants are kept to lowest practicable levels.

1. Steam-generating boiler particulate emissions shall not exceed:
 - a. Two-tenths (0.2) grains per standard cubic foot, corrected to twelve percent (12%) carbon dioxide, or fifty percent (50%) excess air.
 - b. An opacity equal to or greater than forty percent (40%) for an aggregated time of more than three (3) minutes in any one (1) hour.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 2 of 3

Appl. No: 0008

File No: 18-0020

KLAMATH TALLOW CO.

2. The use of residual fuel oil containing more than two and one-half percent (2.5%) sulfur by weight is prohibited.
3. The use of residual fuel oil containing more than one and three-quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.
4. The present use of used crankcase (automobile) oil may be continued only providing that the particulate emission limits of Condition 1. above are met.

Compliance Demonstration Schedule

5. In the event that source emission tests, performed by the Department of Environmental Quality, indicate that emissions from the steam-generating boilers do not comply with the limits of Condition 1. above, the Company shall submit a proposal and schedule by no later than July 1, 1973 for attaining compliance, said schedule to attain and demonstrate compliance by no later than October 1, 1973.

Monitoring and Reporting

6. The operation and maintenance of the rendering plant and related facilities shall be effectively monitored. In December of each year that this permit is in effect, a report shall be submitted to the Department of Environmental Quality which lists the following:

- a. Quantities and types of raw material processed,
- b. Quantities and types of fuel used.

7. The Department of Environmental Quality shall be notified promptly of any upset condition, in accordance with OAR, Chapter 340, "Upset Conditions", which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Prohibited Activities

8. No open burning shall be conducted at the plant site.

Special Conditions

9. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

10. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting functions related to this permit.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 3 of 3

Appl. No: 0008

File No: 18-0020

KLAMATH TALLOW CO.

11. No alteration, modification, or expansion of the subject rendering plant production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

12. The Annual Compliance Determination Fee shall be submitted according to the following schedule:

Amount Due

\$125.00

Date Due

December 1, 1973

13. This permit is subject to termination if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by a lack of full disclosure in this application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

ONTARIO RENDERING CO.
Island Road
Ontario, OR 97914

Background

1. Ontario Rendering Company operates a rendering plant within one (1) mile of Ontario.
2. The plant has a capacity of processing 12,000 pounds per day of raw materials, including restaurant and slaughterhouse scraps and whole dead animals.
3. The rendering facilities are well maintained and well cleaned. There is one (1) steam-generating boiler on the site, fueled exclusively with natural gas.
4. Odors from the plant site were the subject of a hearing before the Environmental Quality Commission in June, 1970. The Commission ordered that odor controls be installed on the rendering facilities and that modifications be made to the wastewater treatment system, including installation of a blood-dryer to reduce loading on the wastewater-treatment lagoons. Controls have been installed and the wastewater-treatment system improved, but the blood dryer has not been installed.

Evaluation

1. The emission regulation for rendering plants is defined to be applicable within city limits or within two (2) miles of city limits. Therefore, this rendering plant is subject to the Rendering Plant Regulation.
2. The emission limits require that the emissions from rendering cookers be subject to a temperature of 1200°F for at least 0.3 seconds, or be given equivalent treatment. The emissions from this plant's cookers are condensed and scrubbed, and any remaining portion incinerated in the gas-flame of the plant's boiler.
3. The following emission limitations apply to the steam-generating boiler:
 - a. Particulate emissions shall not exceed two-tenths (0.2) grains per standard cubic foot, corrected to twelve percent (12%) CO₂ or fifty percent (50%) excess air.
 - b. Smoke opacity shall not equal or exceed forty percent (40%) for an aggregated period of three (3) minutes in any one (1) hour.
 - c. Residual fuel oil used in the boilers may not have more than two and one-half percent (2.5%) sulfur by weight, and after July 1, 1974, the sulfur limitation is reduced to one and three-fourths percent (.175%).

4. Steam-generating boilers fueled with natural gas easily meet the limits for particulate emissions.
5. A two-year (2) permit is proposed, with a termination date of December 31, 1974, so as to allow time to evaluate the effect on area odors arising from the wastewater treatment system of installing a blood dryer.

Recommendation

It is recommended that the attached proposed permit conditions be reviewed for issuance to Ontario Rendering Company.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
Page 1 of 3

APPLICANT:

ONTARIO RENDERING CO.
Island Road
Ontario, OR 97914

REFERENCE INFORMATION

File Number 23-0004
Appl. No.: 0017 Received: 1/31/73
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

RENDERING PLANT

2094

Permitted Activities

Until such time as this permit expires, or is modified or is revoked, ONTARIO RENDERING CO. is herewith permitted to operate its rendering plant, consisting of raw material handling and preparation facilities, cookers, product handling, storage and transportation facilities, and steam-generating facilities, including those processes and activities directly related and associated thereto located on Island Road within one (1) mile of the City of Ontario, and to discharge therefrom exhaust gases in accordance with the requirements and conditions of this permit.

Performance Standards and Emission Limits

All air-contaminant generating process and air-contaminant control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air-contaminants are kept to lowest practicable levels.

1. Gases and vapors from the two (2) cookers shall be scrubbed and condensed in two (2) water-jet, ejector venturi scrubbers. The non-condensable portion of those gases and vapors shall be ducted to the firebox of the steam-generating, natural-gas fired boiler.

2. The steam-generating boiler shall be fired on natural gas only, unless prior, written consent for the use of an alternative fuel is obtained from the Department of Environmental Quality.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

ONTARIO RENDERING CO.

Recom. Expir. Date: 12/31/74

Page 2 of 3

Appl. No: 0017

File No: 23-0004

Compliance Demonstration Schedule

3. Blood drying shall be commenced by no later than July 1, 1973. Vapors and gases from the blood-drying facility shall be treated in the same manner as those from the rendering cookers, commencing at the same time that the blood dryer is placed in operation.

Monitoring and Reporting

4. The operation and maintenance of the rendering plant and related facilities shall be effectively monitored. In December of each year that this permit is in effect, a report shall be submitted to the Department of Environmental Quality which lists the following:

- a. Quantities and types of raw material processed
- b. Quantities and types of fuel used.

5. The Department of Environmental Quality shall be notified promptly of any upset condition, in accordance with OAR, Chapter 340, "Upset Conditions", which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Prohibited Activities

6. No open burning shall be conducted at the plant site.

Special Conditions

7. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

8. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting functions related to this permit.

9. No alteration, modification, or expansion of the subject rendering plant production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

10. The Annual Compliance Determination Fee shall be submitted according to the following schedule:

Amount Due

\$125.00

Date Due

December 1, 1973

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 3 of 3

Appl. No: 0017

File No: 23-0004

ONTARIO RENDERING CO.

11. This permit is subject to termination if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by a lack of full disclosure in this application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

BIOPRODUCTS, INC.
Warrenton Drive
Warrenton, Oregon 97146

Background

1. Bioproducts, Inc. operates a fish-rendering plant on Warrenton Drive between Warrenton and Hammond, Oregon.
2. The plant processes 500⁰ tons per year of raw material consisting of fish and shellfish scraps from commercial canneries. The raw material is reduced in size, a portion is pasturized, then the pasturized and stock is blended with some unpasturized stock, then pelletized and finally frozen. Other raw material is cooked, centrifuged to remove oil, and the products (oil and dry fish meal) are shipped to customers.
3. The Company has conducted odor strength tests, using non-employees to judge whether an odor is present in samples of vent gases diluted with fresh air. Successive samples were diluted with increasing amounts of air until no odor was detected, and the results expressed as "dilutions to threshold". The Company is investigating activated carbon absorber controls for the strongest sources.
4. There are two (2) steam-generating boilers on the site, fueled with natural gas and residual fuel oil. These boilers are not presently suspected to be out of compliance, but stack emission tests are scheduled for March 5 and 6, 1973 to confirm compliance.

Evaluation

1. The location of this rendering plant is within the area of application as defined by OAR, Chapter 340, Section 25-070, defined as "within city limits or within two miles of the boundaries of incorporated cities".
2. The applicable limit on this type of facility is a treatment standard, requiring incineration of odorous gases at 1200°F for at least 0.3 seconds or equivalent treatment. Department of Environmental Quality odor panel tests of rendering plant emissions after incineration have indicated that the "dilutions to threshold" odor strengths are 50:1, which serves as a criterion for equivalency of treatment.
3. The termination date of the permit is proposed for December 31, 1974, so that a full summer (most severe period for odors) will have passed after controls are installed. If staff observations lead to concluding that further controls are needed, the appropriate provisions will be made in the next permit.

Recommendation

It is recommended that the proposed permit be reviewed for issuance to Bioproducts, Inc. for its rendering plant at Warrenton.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74

Page 1 of 3

APPLICANT:

BIOPRODUCTS, INC.
Warrenton, Drive
P. O. Box 429
Warrenton, OR 97146

REFERENCE INFORMATION

File Number 04-0006

Appl. No.: 0021 Received: 11/7/72

OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

FISH RENDERING PLANT

2094

Permitted Activities

Until such time as this permit expires or is modified or revoked, BIOPRODUCTS INC is herewith permitted to operate its 500 ton (annual raw material capacity) fish rendering plant consisting of cookers, driers, and product-processing equipment, including those processes and activities directly related or associated thereto at Warrenton, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

- Emissions of odorous gases shall:
 - Be kept to lowest practicable levels at all times
 - Shall not exceed a dilution-to-threshold of 50:1 after January 1, 1974.
- The steam-generating boilers, which are fired by natural gas and alternatively No. 300 fuel oil, particulate emissions shall not be greater than two-tenths (0.2) grain per standard cubic foot, at twelve percent (12%) carbon dioxide (CO₂) or at fifty percent (50%) excess air and shall not equal or exceed forty percent (40%) opacity of an aggregated time of more than three (3) minutes in any one (1) hour.
- The use of fuels other than those in condition #2 above is prohibited unless approved by the Department.

BIOPRODUCTS, INCCompliance Demonstration Schedule

4. Pilot studies of activated-charcoal absorption of odors from the gaseous effluents from steam-jacketed drier discharge equipment and evaporator discharges shall be completed by no later than July 1, 1973, and a report submitted by no later than July 15, 1973.
5. Plans and specifications for the installation of permanent controls, supported by the pilot scale data gathered in Condition #4 above, shall be submitted to the Department of Environmental Quality by no later than September 1, 1973.
6. The controls, as approved in writing by the Department of Environmental Quality, shall be installed and placed in operation by no later than January 1, 1974.
7. Compliance shall be demonstrated by no later than February 1, 1974, using procedures on file with and approved by the Department of Environmental Quality.
8. In the event that the pilot plant studies required by Condition #4 above, should indicate that the use of activated charcoal cannot abate the emissions of odorous gases, the company shall immediately proceed with the installation of a system for ducting those gases to a thermal incineration device capable of providing incineration of the gases for at least three-tenths (0.3) seconds at 1200°F, on the same schedule for design, construction, and installation as in conditions #5 and #6 above.
9. In the event that source emission tests, scheduled to be performed by the Department of Environmental Quality in March, 1973, indicate that emissions from either or both steam-generating boilers do not comply with the emission limits of Condition 2 above, the Company shall submit a proposal and schedule by no later than June 1, 1973 for attaining compliance, said schedule to bring the facility into compliance and demonstrate compliance by no later than October 31, 1973.

Monitoring and Reporting

10. The operation and maintenance of the rendering plant and related facilities shall be effectively monitored. In December of each year that this permit is in effect, a report shall be submitted to the Department of Environmental Quality which list the following:
 - a. Quantities and types of raw material processed
 - b. Quantities and types of fuel used.
11. The Department shall be notified promptly of any upset condition in accordance with OAR Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Prohibited Activities

12. No open burning shall be conducted at the plant site.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

BIOPRODUCTS, INC

Recom. Expir. Date: 12/31/74

Page 3 of 3

Appl. No.: 0021

File No: 04-0006

Special Conditions

13. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
14. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
15. No alteration, modification or expansion of the subject fish rendering plant production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
16. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

Amount Due

\$125.00

Date Due

December 1, 1973

17. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

ASPHALT PAVING CO.
P. O. Box 938
Klamath Falls, Oregon 97601

Background

1. Asphalt Paving Co. operates an existing stationary asphalt concrete plant off Highway 97 about one (1) mile north of Klamath Falls.
2. The plant is a 4,000 lb per batch system made by Iowa Manufacturing Company. The maximum production rate equals 160 t/hr (based on 45 second batch cycles). The normal production rate is considered to be on the order of 50 to 100 t/hr.
3. The dust control system includes a dry cyclone, dry fan, double drum scrubber and wetted stack.
4. The scrubber water is routed to a series of three (3) settling ponds. The water discharged from the third pond flows into a canal system at the Jeld-Wen, Inc. plant site.
5. The annual operating time for this plant is estimated to be about 1,000 hours from mid-April through November.

Evaluation

1. This site, off Highway 97, is within a Special Control Area. Therefore, high efficiency controls are required.
2. The following emission limitations are applicable to the exhaust system discharge from this asphalt plant:
 - a. The total particulate emission rate cannot exceed 40 lb/hr.
 - b. The concentration of particulate matter cannot exceed 0.2 gr/SCF.
 - c. Visible emissions (excluding condensed water) cannot equal or exceed 20% opacity for a period or periods totalling more than three (3) minutes in any one (1) hour.

The presence of a steam plume and the size of the asphalt plant cause the use of the opacity limitation to be difficult to determine and in most instances inappropriate.

3. A source test is necessary to demonstrate compliance with 2 a. and b. above and to determine quantities of both exhaust gases and air contaminants (particulates).

4. Should the plant not achieve compliance, a compliance schedule must be developed rapidly and compliance should be achievable during the 1973 paving season (prior to September 1, 1973).
5. A Water Quality Control Division Waste Discharge Permit will be required if there is any discharge from the settling ponds.
6. After demonstrating compliance, the dust controls should be capable of sustaining compliance for at least five (5) years, so a long term (5 yr.) permit is proposed.
7. No correspondence or comments were received regarding this application as a result of the Public Notice that the application was filed and that a proposed permit was being drafted.

Recommendation

1. It is recommended that the attached proposed permit conditions be reviewed for issuance to Asphalt Paving Co.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 1/1/78

Page 1 of 4

APPLICANT:

ASPHALT PAVING CO.
P. O. Box 938
Klamath Falls, OR 97601

REFERENCE INFORMATION

File Number 18-0011
Appl. No.: 0005 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

STATIONARY HOT-MIX ASPHALTIC
CONCRETE PAVING PLANT

2951

Permitted Activities

Until such time as this permit expires or is modified or revoked, ASPHALT PAVING CO. is herewith permitted to operate its Iowa Manufacturing Company, 4000 pounds per batch, stationary hot-mix asphaltic concrete paving plant, including those processes and activities directly related or associated thereto off Highway 97, about one (1) mile north of Klamath Falls, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

1. At all times all air contaminant generating processes and all contaminant control equipment shall be maintained and operated at full efficiency and effectiveness, such that the emission of air contaminants are kept at the lowest practicable levels and in no instance shall emissions from the hot-mix asphalt concrete paving plant and all associated dust control equipment including the dry cyclone, dry fan, double drum scrubber and wetted exhaust stack exceed any of the following:

- a. An emission rate of forty (40) pounds per hour of particulate matter.
- b. A particulate concentration in the exhaust stack gas of 0.2 grains per standard cubic foot.
- c. A visible opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 1/1/78

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Appl. No: 0005

File No: 18-0011

ASPHALT PAVING CO.

2. Ancillary sources of air contaminants such as, but not limited to, the drier openings, screening and classifying system, hot rock elevator, bins, hoppers and pug mill mixer shall be controlled at all times so as to maintain the highest possible level of air quality and the lowest possible discharge of air contaminants.

3. Dust suppression measures such as, but not limited to, watering, oiling, or paving of all heavily traveled roads or areas at the plant site, including access roads, shall be conducted so that fugitive type dust generated by vehicles involved or associated with this operation will be adequately controlled at all times.

Compliance Demonstration Schedule

4. The results of an emission test program conducted by qualified persons according to procedures approved in advance by the Department shall be submitted to the Department by no later than June 1, 1973.

5. If the results of the emission test program required in condition 4. indicates noncompliance with condition 1., ASPHALT PAVING CO. shall develop and submit to the Department of Environmental Quality by no later than June 15, 1973 for review and approval a detailed schedule for achieving compliance with condition 1. This hot-mix asphalt plant must be in compliance with condition 1. by no later than September 1, 1973 as demonstrated by an emission test program.

Monitoring and Reporting

6. The operation and maintenance of the hot-mix asphalt plant and control facilities shall be effectively monitored. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month on forms provided by the Department of Environmental Quality. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. The starting time and period of operation of the hot-mix asphalt plant	Daily
b. The amount of asphalt produced	Daily
c. The water pressure at the scrubber	Daily

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 1/1/78

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Appl. No: 0005

File No: 18-0011

ASPHALT PAVING CO.

<u>Parameter</u>	<u>Minimum Frequency</u>
d. The pressure drop across the fan	Daily
e. A description of any maintenance to the dust control system	As performed
f. The average, minimum and maximum percent of -200 mesh material in the drier feed	Monthly
g. The date of inspecting all water nozzles in the dust control system	As performed
h. The water flow rate	Daily
i. The date of removing, cleansing and replacing all water nozzles in the dust control system	Biannually
j. The date, amount, location, and method of disposal of any solids removed from the settling ponds	As performed
k. Any observable increase in particulate emissions from the plant, suspected reason for such increased emissions and projected date for any corrective action to reduce the emission increase	Daily

7. The final monthly report required in condition 6. submitted during any calendar year shall include the quantities and types of fuels used during that calendar year or operating season.

8. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 1/1/78

Page 4 of 4

Appl. No: 0005

File No: 18-0011

ASPHALT PAVING CO.

Prohibited Activities

9. No open burning shall be conducted at the plant site.
10. No treated or untreated scrubber water shall be discharged to any public waterway unless such discharge is the subject of a valid waste discharge permit issued by the Department of Environmental Quality.

Special Conditions

11. A sufficient number of spare water nozzles shall be maintained at the plant for installation into the dust control system as necessary.
12. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
13. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
14. No alteration, modification, expansion or relocation of the subject asphalt plant or the related activities shall be made without prior notice to and approval by the Department of Environmental Quality.
15. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
a. \$100.00	December 1, 1973
b. \$100.00	December 1, 1974
c. \$100.00	December 1, 1975
d. \$100.00	December 1, 1976

16. This permit is subject to termination if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

DESCHUTES READY MIX, SAND & GRAVEL CO.
Asphalt Division
P. O. Box 1008
Bend, OR 97701

Background

1. Deschutes Ready Mix, Sand & Gravel Co. operates an existing stationary asphalt concrete plant about three (3) miles north of Bend off Johnson Road. (This company also operates a portable asphalt plant in the general area of Central Oregon, which will be the subject of another air contaminant discharge permit).
2. This plant is a 2,000 lb per batch system manufactured by Standard Steel Corporation. The maximum production rate equals 80 t/hr (based on 45 second batch cycles). The normal production rate is considered to be on the order of 60 t/hr.
3. The dust control equipment includes a dry cyclone, dry fan and combined cyclonic scrubber - exhaust stack.
4. The scrubber water is routed to settling ponds. No water is discharged from these ponds.
5. The annual operating time for this plant is estimated to be 330 hours during May to November.

Evaluation

1. The applicant previously moved this plant somewhat routinely prior to purchasing a larger portable plant. Since the plant under consideration is no longer relocated routinely, the Department now considers it to be a stationary facility.
2. This site off Johnson Road is within a Special Control Area, therefore high efficiency controls are required.
3. The following emission limitations are applicable to the exhaust system discharge from this asphalt plant:
 - a. The total particulate emission rate cannot exceed 40 lb/hr.
 - b. The concentration of particulate matter cannot exceed 0.2 gr/SCF.
 - c. Visible emissions (excluding condensed water) cannot equal or exceed 20% opacity for a period or periods totalling more than three (3) minutes in any one (1) hour.

The presence of a steam plume and the size of the asphalt plant cause the use of opacity to be difficult to determine and in most instances inappropriate.

4. A source test is necessary to demonstrate compliance with items 3 a. and b. Therefore, the requirement of a compliance demonstration is included in the proposed permit.
5. Should the plant not be in compliance, a compliance schedule must be developed rapidly and compliance should be achievable during the 1973 paving season (prior to September 1, 1973).
6. A Water Quality Control Division waste discharge permit does not appear needed at this time, since there is no known water discharge.
7. After demonstrating compliance, the dust controls should be capable of sustaining compliance for at least 5 years, so a long term (5 yr.) permit is proposed.
8. Several letters have been received by the Department from residents of the Bend area regarding this Company. These letters are considered to result from the Public Notice that the application was filed with the DEQ and that a proposed permit was being drafted.

In general, the letters received oppose the issuance of a permit. The receipt of the letters has been acknowledged. Additional correspondence and testimony can be expected after Public Notice of a hearing for issuance of this permit.

Recommendation

1. It is recommended that the attached proposed permit conditions be reviewed for issuance to Deschutes Ready Mix, Sand & Gravel Co.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 1/1/78

Page 1 of 4

APPLICANT:

DESCHUTES READY MIX, SAND & GRAVEL CO.
Asphalt Division
P. O. Box 1008
Bend, OR 97701

REFERENCE INFORMATION

File Number 16-0011
Appl. No.: 0006 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

STATIONARY HOT-MIX ASPHALTIC
CONCRETE PAVING PLANT

2951

Permitted Activities

Until such time as this permit expires or is modified or revoked, DESCHUTES READY MIX, SAND & GRAVEL CO. is herewith permitted to operate its Standard Steel Corporation, 2000 pounds per batch, stationary hot-mix asphaltic concrete paving plant, including those processes and activities directly related or associated thereto off Johnson Road about three (3) miles north of Bend, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

1. At all times all air contaminant generating processes and all contaminant control equipment shall be maintained and operated at full efficiency and effectiveness, such that the emission of air contaminants are kept at the lowest practicable levels and in no instance shall emissions from the hot-mix asphalt concrete paving plant and all associated dust control equipment including the dry cyclone, dry fan and combined wet cyclonic scrubber and exhaust stack exceed any of the following:

- a. An emission rate of forty (40) pounds per hour of particulate matter.
- b. A particulate concentration in the exhaust stack gas of 0.2 grains per standard cubic foot.
- c. A visible opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 1/1/78

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DESCUTES READY MIX, SAND & GRAVEL CO.

2. Ancillary sources of air contaminants such as, but not limited to, the drier openings, screening and classifying system, hot rock elevator, bins, hoppers and pug mill mixer shall be controlled at all times so as to maintain the highest possible level of air quality and the lowest possible discharge of air contaminants.

3. Dust suppression measures such as, but not limited to, watering, oiling, or paving of all heavily traveled roads or areas at the plant site, including access roads, shall be conducted so that fugitive type dust generated by vehicles involved or associated with this operation will be adequately controlled at all times.

Compliance Demonstration Schedule

4. The results of an emission test program conducted by qualified persons according to procedures approved in advance by the Department shall be submitted to the Department by no later than June 1, 1973.

5. If the results of the emission test program required in condition 4. indicates noncompliance with condition 1., DESCUTES READY MIX, SAND & GRAVEL CO. shall develop and submit to the Department of Environmental Quality by no later than June 15, 1973 for review and approval a detailed schedule for achieving compliance with condition 1. This hot-mix asphalt plant must be in compliance with condition 1. by no later than September 1, 1973 as demonstrated by an emission test program.

Monitoring and Reporting

6. The operation and maintenance of the hot-mix asphalt plant and control facilities shall be effectively monitored. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month on forms provided by the Department of Environmental Quality. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. The starting time and period of operation of the hot-mix asphalt plant	Daily
b. The amount of asphalt produced	Daily
c. The water pressure at the scrubber	Daily

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 1/1/78

Page 3 of 4

Appl. No: 0006

File No: 16-0011

DESCHUTES READY MIX, SAND & GRAVEL CO.

<u>Parameter</u>	<u>Minimum Frequency</u>
d. The pressure drop across the fan	Daily
e. A description of any maintenance to the dust control system	As performed
f. The average, minimum and maximum percent of -200 mesh material in the drier feed	Monthly
g. The date of inspecting all water nozzles in the dust control system	As performed
h. The water flow rate	Daily
i. The date of removing, cleansing and replacing all water nozzles in the dust control system	Biannually
j. The date, amount, location, and method of disposal of any solids removed from settling ponds	As performed
k. Any observable increase in particulate emissions from the plant, suspected reason for such increased emissions and projected date for any corrective action to reduce the emission increase	Daily

7. The final monthly report required in condition 6. submitted during any calendar year shall include the quantities and types of fuels used during that calendar year or operating season.

8. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 1/1/78

Page 4 of 4

Appl. No: 0006

File No: 16-0011

DESCHUTES READY MIX, SAND & GRAVEL CO.

Prohibited Activities

- 9. No open burning shall be conducted at the plant site.
- 10. No treated or untreated scrubber water shall be discharged to any public waterway unless such discharge is the subject of a valid waste discharge permit issued by the Department of Environmental Quality.

Special Conditions

- 11. A sufficient number of spare water nozzles shall be maintained at the plant for installation into the dust control system as necessary.
- 12. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
- 13. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
- 14. No alteration, modification, expansion or relocation of the subject asphalt plant or the related activities shall be made without prior notice to and approval by the Department of Environmental Quality.
- 15. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
a. \$100.00	December 1, 1973
b. \$100.00	December 1, 1974
c. \$100.00	December 1, 1975
d. \$100.00	December 1, 1976

- 16. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

CORRESPONDENCE RECEIVED RESULTING FROM PUBLIC NOTICE

Re: PERMIT APPLICATION RECEIVED FOR

Deschutes Readymix, Stationary Asphalt Plant
Bend, Oregon

<u>Name and Address</u>	<u>Item</u>	<u>Summary of Correspondence</u>
Northwest Steelheaders Council of Trout Unlimited P. O. Box 845 Bend, OR 97701	Letter	The sixty conservation members and the board oppose permit issuance.
Mr. & Mrs. Richard Meddish Kwinnum Drive Bend, OR 97701	Letter	Marring scenic view and blight landscape. Preserve our environment in area becoming primarily residential by refusing permit. Hold hearing in Bend.
George C. Zahl, Dean Student Personnel Services Central Ore. Comm. College Bend, OR 97701	Letter	Beauty and clean air of college are healthful assets. Change site to save the college.
M. R. S. Co., Inc. P. O. Box 587 Bend, OR 97701	Letter	Plant detrimental to tranquility of area and their subdivision. Refuse permit.
Mr. & Mrs. Ron Radabaugh Route 2, Box 1444 Bend, OR 97701	Letter	Noise, dust to residential inhabitants and school children, debris left behind by company from old jobs. Refuse permit.
Patricia Wallin Route 2, Box 1419 Bend, OR 97701	Letter	Dust pollutes beautiful countryside leaving shroud of grey for people and animals. Refuse permit.

CORRESPONDENCE RECEIVED RESULTING FROM PUBLIC NOTICE

Re: PERMIT APPLICATION RECEIVED FOR

Deschutes Readymix, Stationary Asphalt Plant
Bend, Oregon

<u>Name and Address</u>	<u>Item</u>	<u>Summary of Correspondence</u>
Tom and Diane Gavin Bend, OR 97701	Letter	Obscures aesthetic view and pollutes residential area. Refuse permit.
David Langworthy, Pres. Associated Students--COCC Bend, OR 97701	Letter	Concerned about permit issuance. Request public hearing to be held at the college. They would host and provide meeting space.
Central Oregon Inter- governmental Council Deschutes County Courthouse 1164 Bond Street Bend, OR 97701	Letter	Favor issuance of permit.
Mrs. Huston Walter P. O. Box 1102 Bend, OR 97701	Letter	Dust and trucks decreasing beauty of country. Refuse permit.
Mrs. Marilyn J. Hunt Box S Ranch Route 2, Box 1430 Bend, OR 97701	Letter	Natural beauty, especially of nearby State parks in jeopardy. Refuse permit.
William K. Brokken, M. D. 1019 Brooks Street Bend, OR 97701	Letter	Airborne debris and too much pollution from company already. Refuse permit. Implement changes in their present operations.
Mel Jordan, Ph. D. Counseling Center--COCC Bend, OR 97701	Letter	Against issuance of permit without a hearing. Air discharges affect homes and COCC.

CORRESPONDENCE RECEIVED RESULTING FROM PUBLIC NOTICE

Re: PERMIT APPLICATION RECEIVED FOR
Deschutes Readymix, Stationary Asphalt Plant
Bend, Oregon

<u>Name and Address</u>	<u>Item</u>	<u>Summary of Correspondence</u>
Administrative Assistant Central Oregon Inter- governmental Council Deschutes County Courthouse 1164 Bond Street Bend, OR 97701	Letter	Request delay in issuance of permit until COIC can review and comment upon additional background information being sought from DEQ and company.
Bruce R. Watkins P. O. Box 1049 Bend, OR 97701	Letter	Clean air, peace of mind and quality of environment sought in this area will be jeopardized. Refuse permit.
Gary Hickmann 415 E. DeKalb Bend, OR 97701	Letter	Got along without plant before, can now. It is not worth the contamination. "'Profits' will never replace 'Nature' to anyone! Please, help 'Her', help 'Us'."
Richard M. Hewitt Route 2, Box 1420 Bend, OR 97701	Letter	Rock dust and noise from equipment. Limited visibility and destruction of clean air and quiet. Company already expressed complete lack of concern for environment. Refuse permit.
A. J. Ziegler Route 2, Box 1415 Bend, OR 97701	Letter	Previous temporary and ineffective compliances by company. Refuse permit.

Additional Conditions for
Proposed Air Contaminant Discharge Permit
KLAMATH TALLOW COMPANY

BC Bio product

Special Conditions

Permittee shall ensure that adequate control is maintained to prevent the escapement of odors in such strength as to cause a nuisance from the rendering process and the liquid waste treatment system.

The permittee shall keep the plant and premises clean by means of a daily washdown of equipment, facilities, and building interiors that contact raw or processed material, using steam or hot water and a cleansing agent. Raw material, products, and solid wastes shall be kept in covered containers.

Compliance Schedule

Permittee shall submit to the Department of Environmental Quality for review and approval a program to bring the operation of the oil-fired steam generating boilers into continuous compliance with Oregon Administrative Rules, Chapter 340, Section 21-020, in accordance with the following schedule:

- a. Submit all necessary plans and specifications by no later than July 1, 1973.
- b. Issue all purchase orders for all necessary equipment, components and/or modification-installation work by no later than August 1, 1973.
- c. Complete all required modifications and/or installation work by no later than September 1, 1973.
- d. Submit a final stack sampling and analysis report to the Department or otherwise demonstrate that the oil-fired steam generating boilers are capable of continuous compliance with the above cited rule (OAR, 340-21-020).



BIOPRODUCTS INCORPORATED
BOX 429 · WARRENTON, OREGON
ZIP 97146 · AREA 503 · 861-2256

29 March 1973

Department of Environmental Quality
1234 S. W. Morrison
Portland, Oregon 97201

Gentlemen:

The notices for public hearing and review report all list our plant capacity as 500 tons annually. Our actual copy is 5000 tons and was so listed in our application. Apparently it is simply a typing error but should be noted and corrected.

Cordially yours,

B I O P R O D U C T S
Incorporated

R. T. Carruthers
President

dc



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5395

MEMORANDUM

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

ENVIRONMENTAL QUALITY
COMMISSION

B. A. McPHILLIPS
Chairman, McMinnville

EDWARD C. HARMS, JR.
Springfield

STORRS S. WATERMAN
Portland

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

To: Environmental Quality Commission

From: The Director

Subject: Agenda Item Ha, April 30, 1973, Meeting

Air Contaminant Discharge Permit, Publishers Paper
Company - Newberg (Continuance from April 2, 1973 EQC
Hearing)

Background

1.1 Publishers Paper Company operates a sulfite pulp and paper mill on Wynooski Road southeast of Newberg. The capacity is 250 ton/day of unbleached, air-dried pulp. Original figures at the Department had indicated a capacity of 220 tons/day, but the letter from the company dated March 9, 1973, adequately updated this apparent error.

2. The pulp is produced in four (4) batch digesters of 14.4 tons per digester capacity. Pulp batches are discharged at intervals of approximately one and two-third hours, with an accompanying discharge of sulfur dioxide (SO₂). After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO₂ and magnesium oxide (MgO) from the cook liquor. These

compounds are removed from the flue gases by means of mechanical collectors (principal mechanism for MgO removal) and a series of four scrubbers, which remove both SO₂ and MgO in a water solution. The solution is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.

3. The current status of controls at this mill is as follows:

- a. Digester blow SO₂: A system was installed in mid-1972 for condensing and scrubbing blow gases. It functioned but in so doing caused an additional discharge of SO₂ to the liquid waste treatment system. Additional capacity is being provided for relieving SO₂ from the digesters prior to discharging the pulp. The improved system and its installation schedule are the subject of Condition #9 of the Proposed Air Contaminant Discharge Permit. The completed system is designed to reduce emissions below three (3) pounds of SO₂ per ton of pulp, with compliance to be demonstrated by no later than September 1, 1973.
- b. Recovery Furnace: Particulate (MgO and fly ash) emissions have ranged from 1.1 to 3.2 pounds per ton of pulp, with an average of 2.1 pounds per ton since monitoring started. SO₂ emissions have peaked over 2,000 ppm (for periods on the order of minutes), and averaged 210 ppm during 1972, and 175 ppm from July through December 1972. The average mass emission rate from July to December 1972 was 13.5 pounds of SO₂ per air-dried ton.

c. Other Sources: Other sources of SO₂ are from the pulp-washing system and amount to approximately one (1) pound per ton.

4. Monitoring and reporting are to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO₂ emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.

5. The power boilers are fueled with natural gas, and with residual oil during gas curtailment. Stack tests, to be performed during the winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by April 1, 1974, including a schedule to achieve compliance by February 1, 1975.

Evaluation

1. The digester controls are the final step in this mill's program for compliance with the Sulfite Mill Emission Regulation. This mill has served as the "pilot plant" study for controls at Publishers-Oregon City, so that the controls installed at Newberg have been somewhat experimental. Accordingly, the problems have been greater than are normally met in installing facilities of established design.

2. It is anticipated that with the installation of the relief-system modifications, the mill will be adequately controlled to prevent nuisance-level SO₂ ambient odors.

3. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: Twenty (20) pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery furnace SO₂: Not to exceed 800 parts per million as an hourly average.
 - c. Blow-pit vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery furnace particulate: Not to exceed four (4) pounds per ton of pulp.
 - e. Power boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, not a smoke opacity equal to or greater than 20% for a period or periods aggregating three (3) minutes in any one (1) hour.

4. A five (5) year permit is now proposed for this facility instead of the original 2 year permit since the company is well ahead of schedule for compliance with the sulfite regulations.

Summary

The Department has prepared a proposed Air Contaminant Discharge Permit in accordance with OAR, 340, Sections 20.033.02 through 20.033.20, to clearly identify the operating parameters discussed above, the

emission restrictions imposed by the Department to preserve air quality and the rules of the Department of Environmental Quality. Public notice was issued on February 28, 1973, that testimony would be taken and consideration given at a Public Hearing on April 2, 1973, at 2:00 p.m. at the Public Service Building in Portland. That hearing was continued until this time and place since the Commission desired to receive additional testimony and to have adequate time to familiarize themselves with this matter.

No public comments have been received as a result of the Public Notice procedures of the Department. The attached proposed permit was prepared incorporating the requirements and limitations of the Mid-Willamette Valley Air Pollution Authority (MWVAPA) relating to the operation of the steam boilers. The MWVAPA has reviewed the proposed permit and no comments have been submitted.

The company did respond by letter dated March 9, 1973 (attached) and also presented testimony in Portland at the hearing.

The following substance changes are proposed as a result of review by the Attorney General's Office, the written and oral testimony presented by the company and a subsequent meeting between the Department and Publishers Paper Company on April 10, 1973:

Permitted Activities

A change in meaning has been made to delete a permit to "operate" the facility to a permit to "discharge" treated air contaminants. In addition the maximum production capacity for this mill of 250 adt/day has been inserted for the 220 adt/day as originally stated.

Performance Standards and Emission Limitations

A wording change has been made to specify "Permittee" rather than infer reference to the permittee.

Condition #1: No change.

Condition #2: Reworded to clearly identify the specific SO₂ emission limits described in the permit. 2(b) has been modified by eliminating the 500 ppm as a monthly average and substituting 3,500 lbs/day as a monthly average based on 16 lbs/adt at 220 adt/day average monthly production. Further, since the maximum production capacity is 250 adt/day, condition 2(c) has been modified to reflect a maximum allowable of 4,000 lbs/day based on 16 lbs/adt at 250 adt/day.

Condition #3: Modified SO₂ emission limits from the recovery furnace to reflect a maximum production of 250 adt/day resulting in a limit of 750 lbs/day based on 3 lbs/adt.

Condition #4: Modified SO₂ emission limits from the blow-pit vent to reflect a maximum production of 250 adt/day resulting in a limit of 250 lbs/day at 1 lb/adt.

Condition #5: Reworded by eliminating the 3 lbs/adt and substituting specific particulate emission limits from the recovery furnace of 700 lbs/day as a monthly average (allowable per OAR, 340, Section 25-355(4) would be: 4 lb/adt x 220 adt/day average production =

880 lbs/day) and 875 lb/day as a maximum particulate emission on any given day (again at 4 lbs/adt x 250 adt/day maximum production = 1,000 lbs/day per the above administrative rule).

Conditions #6, #7, #8 and #9: No change.

Conditions #10 and #11: Modified to require testing and reporting of boiler emissions by no later than December 31, 1973, instead of April 1, 1974, and for control program submittal prior to April 1, 1974, rather than September 1, 1974.

Conditions #12, #13, #14, #15 and #16: No change.

Prohibited Activities

New condition #17: This condition places a further restriction on the permittee prohibiting any discharges of air contaminants not covered by this permit which would exceed the standards fixed by said permit or the rules of the Department.

Special Conditions

Condition #17: Renumbered as condition #18 and has been changed to a Notice Condition relative to solid waste disposal.

Conditions #18 and #19: Renumbered as conditions #19 and #20. No change.


New condition #21: This condition requires the permittee to make application for a new permit if a substantial change is proposed affecting the discharge of air contaminants.

Condition #20: Renumbered as condition #22 and modified to reflect a five (5) year permit.

Condition #21: Renumbered as condition #23. No change.

Directors Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 36-6142, for Publishers Paper Company, Newberg Division be issued with the above noted changes.



DIARMUID F. O'SCANNLAIN
Director

HHB:c

4/18/73

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/77
Page 1 of 6

APPLICANT:

PUBLISHERS PAPER COMPANY
Newberg Division
Wynooski Road
Newberg, Oregon

REFERENCE INFORMATION

File Number 36-6142
Appl. No.: 0013 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
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Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to discharge treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit from its 250 ton per day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, and steam generating boiler facilities, including processes and activities directly related or associated thereto located at Newberg, Oregon.

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emission of air contaminants are kept at the lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a millsite basis shall not exceed twenty (20) pounds per ton of unbleached, air-dried ton (adt) of pulp produced after September 1, 1973.
2. The recovery furnace SO₂ emissions shall not exceed the following:
 - a. 800 ppm as an hourly average
 - b. 3,500 pounds per day as a monthly average
 - c. Sixteen (16) pounds per ton and 4,000 pounds per day as a maximum daily emission.
3. The blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 750 pounds per day after September 1, 1973.
4. SO₂ emissions from all sources except the recovery furnace boilers 1, 2, 3, 5, 6, 7, and the blow pit vent shall not exceed one (1) pound of SO₂ per adt and 250 pounds per day.
5. The recovery furnace particulate emissions shall not exceed the following:
 - a. 700 pounds per day as a monthly average.
 - b. 875 pounds per day as a maximum on any given day.
6. All steam generating boiler particulate emissions shall not exceed 0.2 grains per standard cubic foot corrected to twelve percent (12%) CO₂ or at fifty percent (50%) excess air, and shall not equal or exceed the opacity indicated below when fired on the specific fuel for that limit for more than three (3) minutes in any one (1) hour:

<u>Boiler</u>	<u>Fuel</u>	<u>Opacity</u>	<u>Grains/SCF***</u>	<u>Sulfur Dioxide</u>
1	N.G.*	20%	0.2	1,000 ppm
2,3,5,6,7	N.G./Oil**	20%	0.2	1,000 ppm
2,3	Sludge & Knots	40%	0.2	1,000 ppm

* N.G. refers to natural gas only

** N.G./Oil refers to natural gas, or alternatively residual oil.

*** Grains per standard cubic foot

7. The use of residual fuel oil containing more than two and one half percent (2.5%) sulfur by weight is prohibited.

8. The use of residual fuel oil containing more than one and three quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Blow pit vent controls shall be improved by the installation of additional digester relief capability to reduce blow pit vent emissions to no more than three (3) pounds of SO₂ per adt and no more than 750 pounds of SO₂ per day according to the following schedule:

- a. Components (additional relief and additional heat exchanger) shall be purchased by no later than February 15, 1973.
- b. Construction shall be started by no later than February 28, 1973.
- c. Installation shall be completed by no later than August 1, 1973.
- d. Compliance shall be demonstrated by no later than September 1, 1973, using procedures on file at the Department of Environmental Quality or with recognized applicable standard methods approved in advance by the Department.
- e. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each of these conditions.

10. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers #2, #3, #5, #6 and #7 while being fired with residual fuel oil by no later than July 1, 1973, and a report and analysis of the test results by no later than December 31, 1973; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than April 1, 1974, for review and approval by the Department of Environmental Quality.

11. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers #2 and #3 while being fired with waste sludge and knots by no later than July 1, 1973, and a report and analysis of the test results on or before December 31, 1973; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than April 1, 1974, for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

12. The permittee shall effectively monitor the operation and maintenance of the sulfite pulp and paper production control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with the testing, monitoring and reporting procedures on file at the Department of Environmental Quality or in conformance with recognized applicable standard methods approved in advance by the Department, and shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

13. The final monthly report required in condition 12. submitted during any calendar year shall also include the quantities and types of fuels used during that calendar year.

14. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

PUBLISHERS PAPER COMPANY, Newberg Division

Emergency Reduction Plan

15. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

16. No open burning shall be conducted at the plant site.

17. Permittee is prohibited from causing or allowing discharges of air contaminants from sources not covered by this permit so as to cause the plant site to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.

Special Conditions

18. (NOTICE CONDITION) All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

19. The permittee shall allow Department of Environmental Quality representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise to conduct all necessary functions related to this permit.

20. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

21. The permittee will be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.

22. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
\$175.00	December 1, 1973
\$175.00	December 1, 1974
\$175.00	December 1, 1975
\$175.00	December 1, 1976

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality
PUBLISHERS PAPER COMPANY, Newberg Division

Recom. Expir. Date: 12/31/77

Page 6 of 6

Appl. No: 0013

File No: 36-6142

23. This permit is subject to revocation if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

PUBLISHERS PAPER COMPANY
Wynooski Road
Newberg, Oregon

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill on Wynooski Road southeast of Newberg. The capacity is 220 ton/day of unbleached, air-dried pulp.
2. The pulp is produced in four batch digesters of 14.4 tons per digester capacity. Pulp batches are discharged approximately at intervals of one and two-third hours, with an accompanying discharge of sulfur dioxide (SO_2). After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO_2 and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gases by means of mechanical collectors (principal mechanism for MgO removal) and a series of four scrubbers, which remove both SO_2 and MgO in a water solution. The solution is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO_2 : A system was installed in mid-1972 for condensing and scrubbing blow gases. It functioned but in so doing caused an additional discharge of SO_2 to the liquid waste treatment system. Additional capacity is being provided for relieving SO_2 from the digesters prior to discharging the pulp. The improved system and its installation schedule are the subject of Condition #9 of the Air Contaminant Discharge Permit. The completed system is designed to reduce emissions below three pounds of SO_2 per ton of pulp, with compliance to be demonstrated by September 1, 1973.
 - b. Recovery Furnace: Particulate (MgO and fly ash) emissions have ranged from 1.1 to 3.2 pounds per ton of pulp, with an average of 2.1 pounds per ton since monitoring started. SO_2 emissions have peaked over 2,000 ppm (for periods on the order of minutes), and averaged 210 ppm during 1972, and 175 ppm from July through December 1972. The average mass emission rate from July to December 1972 was 13.5 pounds of SO_2 per air-dried ton.
 - c. Other Sources: Other sources of SO_2 are from the pulp-washing system and amount to approximately one pound per ton.

4. Monitoring and reporting are to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO₂ emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, with residual oil as a backup. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by September 1, 1974, including a schedule to achieve compliance by February 1, 1975. The date for submission of a compliance schedule was chosen to allow for including that schedule in the next permit, due to be issued by December 31, 1974 (the expiration date of this permit).

Evaluation

1. The digester controls are the final step in this mill's program for compliance with the Sulfite Mill Emission Regulation. This mill has served as the "pilot plant" study for controls at Publishers-Oregon City, so that the controls installed at Newberg have been somewhat experimental. Accordingly, the problems have been greater than are normally met in installing facilities of established design.
2. It is anticipated that with the installation of the relief-system modifications, the mill will be adequately controlled to prevent nuisance-level SO₂ ambient odors.
3. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: Twenty pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery furnace SO₂: Not to exceed 800 parts per million as an hourly average
 - c. Blow-pit vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery furnace particulate: Not to exceed four pounds per ton of pulp.
 - e. Power boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, nor a smoke opacity of 20%.
4. Because the SO₂ compliance program will not be complete until late 1973, and the power boiler compliance status cannot be determined until early 1974, a two-year permit is proposed in order to allow an opportunity for revising the permit conditions as indicated by the performance of the control system and to allow an opportunity to include the power boiler compliance schedule in a new permit.

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Publishers Paper Co., Newberg Division.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
Page 1 of 5

APPLICANT:

PUBLISHERS PAPER COMPANY
Newberg Division
Wynooski Road
Newberg, Oregon

REFERENCE INFORMATION

File Number 36-6142

Appl. No.: 0013 Received: 11/1/72

OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
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Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to operate its 220 ton/day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, cook chemical preparation facilities, cook chemical recovery facilities, and steam-generating boiler facilities, including those processes and activities directly related or associated thereto located at Newberg, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a millsite basis shall not exceed twenty (20) pounds per ton of unbleached, air-dried ton (adt) of pulp produced after September 1, 1973.
2. The recovery furnace SO₂ emissions shall not exceed the following:
 - a. 800 ppm as an hourly average
 - b. 200 ppm as a monthly average
 - c. Sixteen (16) pounds per ton and 3500 pounds per day

3. The blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 660 pounds per day after September 1, 1973.
4. SO₂ emissions from all sources except the recovery furnace boilers 1, 2, 3, 5, 6, and 7, and the blow pit vent shall not exceed one (1) pound of SO₂ per adt and 220 pounds per day.
5. The recovery furnace particulate emissions shall not exceed three (3) pounds per adt and 660 pounds per day.
6. All steam generating boiler particulate emissions shall not exceed 0.2 grains per standard cubic foot corrected to twelve percent (12%) CO₂ or at fifty percent (50%) excess air, and shall not equal or exceed the opacity indicated below when fired on the specific fuel for that limit for more than three (3) minutes in any one (1) hour:

<u>Boiler</u>	<u>Fuel</u>	<u>Opacity</u>	<u>Grains/SCF</u>	<u>Sulfur Dioxide</u>
1	N.G.*	20%	0.2	1,000 ppm
2,3,5,6,7	N.G./Oil**	20%	0.2	1,000 ppm
2,3	Sludge & Knots	40%	0.2	1,000 ppm

* N.G. refers to natural gas only

** N. G. /Oil refers to natural gas, or alternatively residual fuel oil.

7. The use of residual fuel oil containing more than two and one half percent (2.5%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Blow pit vent controls shall be improved by the installation of additional digester relief capability to reduce blow pit vent emissions to no more than three (3) pounds of SO₂ per adt and no more than 660 pounds of SO₂ per day according to the following schedule:
 - a. Components (additional relief capacity and additional heat exchanger) shall be purchased by no later than February 15, 1973.
 - b. Construction shall be started by no later than February 28, 1973.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

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Appl. No: 0013

File No: 36-6142

PUBLISHERS PAPER COMPANY, Newberg Division

9. Continued

- c. Installation shall be completed by no later than August 1, 1973.
- d. Compliance shall be demonstrated by no later than September 1, 1973, using procedures on file with and approved by the Department of Environmental Quality.
- e. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each of these conditions.

10. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers #2, #3, #5, #6 and #7 while being fired with residual fuel oil by no later than July 1, 1973, and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than September 1, 1974, for review and approval by the Department of Environmental Quality.

11. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers #2 and #3 while being fired with waste sludge and knots by no later than July 1, 1973, and a report and analysis of the test results on or before May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than September 1, 1974, for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

12. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

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Appl. No: 0013

File No: 36-6142

PUBLISHERS PAPER COMPANY, Newberg Division

12. Continued

- | | |
|--|---|
| c. Recovery furnace
particulate emissions | Three (3) times per month |
| d. Production of
unbleached pulp | Summarized monthly
from production records |

13. The final monthly report required in condition No. 12 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.

14. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

15. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

16. No open burning shall be conducted at the plant site.

Special Conditions

17. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

18. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.

19. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

20. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

Amount Due

Date Due

\$175.00

December 1, 1973

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

PUBLISHERS PAPER COMPANY, Newberg Division

Recom. Expir. Date: 12/31/74

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Appl. No: 0013

File No: 36-6142

21. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.



SIDNEY W. FORSTROM
GENERAL MANAGER
PULP AND PAPER

March 9, 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Air Quality Control Division

Gentlemen:

Relative to the proposed Air Contaminant Discharge Permits submitted to us for our Oregon City and Newberg pulp and paper divisions, we submit the following comments for your consideration.

1. BOTH DIVISIONS

a. The expiration date of 31 December 1974 for each plant seems to be unrealistic in light of the extensive programs for bringing SO₂ emissions into compliance. These projects are expensive, and once compliance is achieved, they should have a reasonable life expectancy. Five years would certainly be a more appropriate permit period for the sulphite pulping operations.

The difficulties of projecting programs or standards relating to boiler emissions until such time as testing and evaluation have been completed are apparent. We would suggest that a separate section of the permits, to be reconsidered not later than 31 December 1974, deal with the boiler SO₂ situation for the periods during which natural gas curtailment forces us to burn oil.

Boiler testing and evaluation dates appear to be realistic. However, the four month period (from May 1, 1974 to September 1, 1974) for submitting a compliance schedule for what could prove to be a complex control problem, appears to be unduly restrictive.



b. The proposals for a three pound per ton particulate maximum from the recovery systems should be modified to the four pound standard in your existing rules. We presently operate well within the three pound limit. However, any significant operating variable which might move us into the 3-4 lb. /ton range would also be considered a violation. Your requirement for efficient operation of the facilities would act as a mechanism to prevent poor control to result in higher emissions. Further, there is at present no assurance that there will not be changes in the testing procedures for particulate now being applied.

c. We have no objection to D. E. Q. representatives having access to our plants at reasonable times. However, we would request that this condition carry a requirement for notification to our personnel, so that we might be in a position to accompany them and minimize personnel hazards.

2. NEWBERG DIVISION

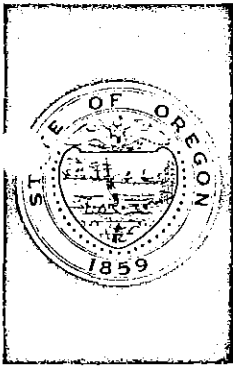
The permit indicates the sulphite pulping capacity of this division to be 220 tons per day, and establishes total maximums in recovery emissions, blow stack emissions, miscellaneous sources, and particulates on that basis. The mill has a rated capacity of 250 tons per day, and on an occasional good production day exceeds the 220 tons per day level. We would request the 250 tons per day capacity be entered into the permit, and the total allowable figures based on a maximum 20#/ton, be adjusted accordingly.

Sincerely,

S. N. Farstrom
w

SWF:nh

cc: P. Schnell
R. O. Smith
J. Freeberg



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 5301

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

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Portland

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. H b, April 30, 1973, EQC Meeting

Air Contaminant Discharge Permit - Publishers Paper
Company, Oregon City (Continuance from April 2, 1973,
EQC Hearing)

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill at the south end of Main St. in downtown Oregon City. The pulping capacity at this facility is 230 tons per day of unbleached, air-dried sulfite pulp.
2. The pulp is produced in six (6) batch digesters three (3) of which have a capacity of 9.25 tons and three (3) a capacity of 6.25 tons per batch. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO_2) to the atmosphere. After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO_2 and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gas by means of mechanical collectors (principal mechanism for MgO removal) and a series of Venturi-scrubbers, which remove both SO_2 and MgO in a water solution. The scrubber effluent is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.

3. The current status of controls at this mill is as follows:
 - a. Digester blow SO_2 : The company proposed a system for control of blow pit vent emissions, to be installed first at Publisher's Newberg Division, modified as necessary to attain compliance, and the modified system to be installed at the Oregon City Division. This schedule indicates compliance by no later than August 1, 1974.
 - b. Recovery Furnace SO_2 : A fourth scrubbing stage is to be added to the existing three, and is to be operational by September 30, 1973. At that time, the Oregon City recovery furnace will have the same degree of control as does the recovery furnace at Newberg, which emits under 16 pounds of SO_2 per ton of pulp. Presently, SO_2 emissions at Oregon City average 370 ppm and 27 pounds per ton.
 - c. Recovery Furnace Particulate: Emissions have averaged 2.9 pounds per ton since the commencement of monitoring. They should decrease somewhat after the fourth scrubbing stage is installed.
 - d. Other sources of SO_2 are mainly from the pulp washing system and amount to 2 pounds per ton.
4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO_2 emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, and with residual oil during gas curtailment. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are operated on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by April 1, 1974, including a schedule to achieve compliance by February 1, 1973.

Evaluation

1. The sensitive location of this mill dictates the care needed in achieving compliance. It is necessary that the controls installed function well upon completion and placement in operation. Also,

the restricted nature of the rather crowded plant site makes installation of control facilities difficult and also restricts the possibilities of adding additional controls if necessary. These considerations led to the Company's proposing that the control techniques be implemented first at Newberg and, after eliminating errors, implementing them at Oregon City.

2. It is anticipated that adding the fourth scrubbing stage will bring the Oregon City recovery furnace easily within compliance.
3. The subsequent installation of blowpit vent emission controls should eliminate ambient nuisance SO₂ odors in Oregon City.
4. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: Twenty (20) pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery Furnace SO₂: Not to exceed 800 ppm as an hourly average.
 - c. Blow-pit Vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery Furnace Particulate: Not to exceed four (4) pounds per ton of pulp produced.
 - e. Power Boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, nor a smoke opacity equal to or greater than 20% for a period or periods aggregating three (3) minutes in any one (1) hour.
5. A five (5) year permit is now proposed for this facility instead of the original two (2) year permit since the company is well ahead of schedule for compliance with the sulfite regulations.

Summary

The Department has prepared a proposed Air Contaminant Discharge Permit in accordance with OAR, 340, Sections 20.033.02 through 20.033.20, to clearly identify the operating parameters discussed above, the emission restrictions imposed by the Department to preserve air quality and the rules of the Department of Environmental Quality. Public notice was issued on February 28, 1973, that testimony would be taken and consideration given

at a Public Hearing on April 2, 1973, at 2:00 p.m. at the Public Service Building in Portland. That hearing was continued until this time and place since the Commission desired to receive additional testimony and to have adequate time to familiarize themselves with this matter.

No public comments have been received as a result of the Public Notice procedures of the Department. The attached proposed permit was prepared incorporating the requirements and limitations of the Columbia Willamette Air Pollution Authority (CWAPA) relating to the operation of the steam boilers. The CWAPA has reviewed the proposed permit and no comments have been submitted.

The company did respond by letter dated March 9, 1973, (attached) and also presented testimony in Portland at the hearing.

The following substance changes are proposed as a result of review by the Attorney General's Office, the written and oral testimony presented by the company and a subsequent meeting between the Department and Publishers Paper Company on April 10, 1973:

Permitted Activities

A change in meaning has been made to delete a permit to "operate" the facility to a permit to "discharge" treated air contaminants.

Performance Standards and Emission Limitations

A wording change has been made to specify "Permittee" rather than infer reference to the permittee.

Condition #1:

No change.

Condition #2:

Reworded to clearly identify the date of September 30, 1973, at which time the recovery furnace SO₂ emissions shall not exceed any of the specific limits described in the permit. 2 (b) has been modified by eliminating the 500 ppm as a monthly average and substituting 3,000 pounds per day as a monthly average based on 15 lbs/ton at 200 adt/day average monthly production.

Conditions #3 and #4:

No change.

Condition #5:

Reworded by eliminating the 3 lb/adt and substituting specific particulate emission limits from the recovery furnace of 680 lbs/day as a monthly average (allowable per OAR, 340, Section 25-355 (4) would be: 4 lbs/adt x 200 adt/day = 800 lbs/day) and 880 lbs/day as a maximum particulate emission on any given day (4 lbs/adt x 220 adt/day maximum production.)

Condition #6:

No change.

New Condition #7:

Has been added to require a further limitation of particulate emissions from all "other vents" to 200 lbs/day and an opacity not to exceed 20%.

New Condition #8:

Has been added to limit chlorine emissions from the bleach plant to not exceed 0.1 lbs/adt and 23 lbs/day.

Conditions #7 and #8:

Renumbered as conditions #9 and #10. No change.

Compliance Demonstration Schedule

Condition #9:

Renumbered as condition #11. No change.

Conditions #10 and #11:

Renumbered as condition #12 and combines both old condition #10 and #11 with no change in meaning except that compliance demonstration for those interrelated requirements all become due on August 1, 1974.

Conditions #12, #13 and #14:

Renumbered as conditions #13, #14 and #15 and have been modified to reflect proper condition reference numbers. In addition conditions #13 and #14 have had the date for testing and reporting of boiler emissions adjusted from April 1, 1974, to December 31, 1973, and for submission of a control program from September 1, 1974, to April 1, 1974.

Conditions #15, #16, #17, #18 and #19:

Renumbered as conditions #16, #17, #18, #19 and #20. No change.

Prohibited Activities

New Condition #21:

This condition places a further restriction on the permittee prohibiting any discharges of air contaminants not covered by this permit which would exceed the standards fixed by said permit or the rules of the Department.

Special Conditions

Condition #20:

Renumbered as condition #22 and has been changed to a Notice Condition relative to solid waste disposal.

Conditions #21 and #22:

Renumbered as conditions #23 and #24. No change.

New condition #25:

This condition requires permittee to make an application for a new permit if the substantial change is proposed affecting the discharge of air contaminants.

Condition #23:

Renumbered as condition #26 and modified to reflect a five (5) year permit.

Condition #24:

Renumbered as condition #27. No change.

Director's Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 03-1850, for Publishers Paper Company, Oregon City Division be issued with the above noted changes.


DIARMUID F. O'SCANNLAIN

HHB:sb
1-18-73

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/77

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APPLICANT:

PUBLISHERS PAPER COMPANY
419 Main Street
Oregon City, OR 97045

REFERENCE INFORMATION

File Number 03-1850

Appl. No.: 0014 Received: 11/1/72

OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
None		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to discharge treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit from its 230 ton per day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, and steam generating boiler facilities, including those processes and activities directly related or associated thereto located at Oregon City, Oregon.

REVISED

19 APR 1973

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels, and in addition:

1. Sulfur dioxide (SO_2) emissions on a mill site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced, and 4,600 pounds per day after August 1, 1974.
2. The recovery furnace SO_2 emissions shall be kept to the lowest practicable levels at all times and shall not exceed any of the following conditions after September 30, 1973:
 - a. 800 ppm as an hourly average
 - b. 3,000 pounds per day as a monthly average
 - c. Fifteen (15) pounds per adt and 3,450 pounds per day as a maximum daily emission.
3. The blow pit vent SO_2 emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 690 pounds per day after August 1, 1974.
4. SO_2 emissions from sources other than the recovery furnace and blow pit vent shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed two (2) pounds per ton and 460 pounds per day after August 1, 1974.
5. The Recovery furnace particulate emissions shall not exceed the following:
 - a. 680 pounds per day as a monthly average
 - b. 880 pounds per day as a maximum on any given day.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
 Prepared by the Staff of the
 Department of Environmental Quality
 PUBLISHERS PAPER COMPANY, Oregon City

Recom. Expir. Date: 12/31/77
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6. All steam generating boiler particulate emissions shall comply with the following:

<u>Boiler</u>	<u>Fuel</u> ⁽¹⁾	<u>Capacity</u> ⁽²⁾ <u>Steam</u>	<u>Opacity</u> ⁽³⁾	<u>Grains/SCF</u> ⁽⁴⁾	<u>Sulfur Dioxide</u>	<u>Bachrach</u>
A,B,C, and D	N.G.	140,000 (4 boilers)	20%	0.2	1,000 ppm	----
A,B,C, and D	Res. Oil	140,000 (4 boilers)	20%	0.2	1,000 ppm	4
G	N.G.	85,000	20%	0.2	1,000 ppm	----
G	Res. Oil	85,000	20%	0.2	1,000 ppm	4
G	Sludge & Knots	85,000	40%	0.2	1,000 ppm	----
4	N.G.	30,000	20%	0.2	1,000 ppm	----
5	N.G.	35,000	20%	0.2	1,000 ppm	----

(1) "N.G." refers to natural gas, "Res. Oil" to "residual fuel oil".
 The use of fuels other than these is prohibited unless prior
 approval is obtained from the Department of Environmental Quality.

(2) Steam Capacity in pounds per hour.

(3) Shall not equal or exceed the indicated opacity for a period or
 periods aggregating three (3) minutes in any one (1) hour and
 excluding uncombined water.

(4) Grains per standard cubic foot, corrected to twelve percent (12%)
 CO₂ or fifty percent (50%) excess air.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality
PUBLISHERS PAPER COMPANY, Oregon City

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7. Particulate emissions from all other vents as described in the permit application shall not exceed:
- 200 pounds per day.
 - A period or periods aggregating three (3) minutes in any one (1) hour equal to or greater than twenty percent (20%) opacity in the exhaust gases, exclusive of uncombined water.
8. Chlorine emissions from the bleach plant shall not exceed 0.1 pounds per adt and 23 pounds per day.
9. The use of residual fuel oil containing more than two and one-half percent (2 1/2%) sulfur by weight is prohibited.
10. The use of residual fuel oil containing more than one and three quarters percent (1 3/4%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

11. Recovery furnace SO₂-emission controls shall be provided according to the following schedule:
- Ordering major units of equipment to be completed by no later than February 1, 1973.
 - Construction to begin by no later than February 1, 1973.
 - Construction completed by no later than September 15, 1973.
 - Compliance demonstrated by December 1, 1973, in accordance with testing procedures on file at the Department of Environmental Quality or with recognized applicable standard methods approved in advance by the Department.
12. Blow-pit vent SO₂-emission controls and other source SO₂-emission controls exclusive of the recovery furnace and blow pit vent, shall be provided according to the following schedule:
- Detailed engineering to begin by no later than June 1, 1973.
 - Ordering components to begin by no later than September 1, 1973.
 - Construction to begin by no later than September 1, 1973.
 - Construction to be completed by June 30, 1974.
 - Compliance demonstrated by August 1, 1974, in accordance with testing procedures on file at the Department of Environmental Quality or with recognized applicable standard methods approved in advance by the Department.

Prepared by the Staff of the
 Department of Environmental Quality
 PUBLISHERS PAPER COMPANY, Oregon City

13. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each part of Conditions 11 and 12.

14. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers A, B, C, D, and G while being fired with residual fuel oil by no later than July 1, 1973 and a report and analysis of the test results by no later than December 31, 1973; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than April 1, 1974 for review and approval by the Department of Environmental Quality.

15. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boiler G while being fired with waste sludge and knots by no later than July 1, 1973 and a report and analysis of the test results by no later than December 31, 1973; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring boiler G into compliance with condition No. 6 by no later than February 1, 1975, shall be submitted by no later than April 1, 1974 for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

16. The permittee shall effectively monitor the operation and maintenance of the sulfite pulp and paper production and control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with the testing, monitoring and reporting procedures on file at the Department of Environmental Quality or in conformance with recognized applicable standard methods approved in advance by the Department, and shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Prepared by the Staff of the
Department of Environmental Quality
PUBLISHERS PAPER COMPANY, Oregon City

Recom. Expir. Date: 12/31/77
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<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

17. The final monthly report required in condition 16. submitted during any calendar year shall also include the quantities and types of fuels used during the calendar year.

18. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

19. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

20. No open burning shall be conducted at the plant site.

21. Permittee is prohibited from causing or allowing discharges of air contaminants from sources not covered by this permit so as to cause the plant site to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.

Special Conditions

22. (NOTICE CONDITION) All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

23. The permittee shall allow Department of Environmental Quality representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise to conduct all necessary functions related to this permit.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

PUBLISHERS PAPER COMPANY, Oregon City

Recom. Expir. Date: 12/31/77

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24. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

25. The permittee will be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.

26. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
\$175.00	December 1, 1973
\$175.00	December 1, 1974
\$175.00	December 1, 1975
\$175.00	December 1, 1976

27. This permit is subject to revocation if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

PUBLISHERS PAPER COMPANY
OREGON CITY, OREGON

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill at the south end of Main St. in downtown Oregon City. The pulping capacity at this facility is 230 tons per day of unbleached, air-dried sulfite pulp.
2. The pulp is produced in six batch digesters three (3) of which have a capacity of 9.25 tons and three (3) a capacity of 6.25 tons per batch. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO_2) to the atmosphere. After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO_2 and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gas by means of mechanical collectors (principal mechanism for MgO removal) and a series of Venturi-scrubbers, which remove both SO_2 and MgO in a water solution. The scrubber effluent is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO_2 : The company proposed a system for control of blow pit vent emissions, to be installed first at Publisher's Newberg Division, modified as necessary to attain compliance, and the modified system to be installed at the Oregon City Division. This schedule indicates compliance by no later than August 1, 1974.
 - b. Recovery Furnace SO_2 : A fourth scrubbing stage is to be added to the existing three, and is to be operational by September 30, 1973. At that time, the Oregon City recovery furnace will have the same degree of control as does the recovery furnace at Newberg, which emits under .16 pounds of SO_2 per ton of pulp. Presently, SO_2 emissions at Oregon City average 370 ppm and 27 pounds per ton.
 - c. Recovery Furnace Particulate: Emissions have averaged 2.9 pounds per ton since the commencement of monitoring. They should decrease somewhat after the fourth scrubbing stage is installed.
 - d. Other sources of SO_2 are mainly from the pulp washing system and amount to 2 pounds per ton.

4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO₂ emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, with residual oil as a back-up. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are operated on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by September 1, 1974, including a schedule to achieve compliance by February 1, 1975. The date for submission of this compliance schedule was chosen to allow for including that schedule in the next permit, due to be issued by December 31, 1974 (the expiration date of this permit).

Evaluation

1. The sensitive location of this mill dictates the care needed in achieving compliance. It is necessary that the controls installed function well upon completion and placement in operation. Also, the restricted nature of the rather crowded plant site makes installation of control facilities difficult and also restricts the possibilities of adding additional controls if necessary. These considerations led to the Company's proposing that the control techniques be implemented first at Newberg and, after eliminating errors, implementing them at Oregon City.
2. It is anticipated that adding the fourth scrubbing stage will bring the Oregon City recovery furnace easily within compliance.
3. The subsequent installation of blowpit vent emission controls should eliminate ambient nuisance SO₂ odors in Oregon City.
4. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: 20 pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery Furnace SO₂: Not to exceed 800 ppm as an hourly average.
 - c. Blow-pit Vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery Furnace Particulate: Not to exceed 4 pounds per ton of pulp produced.
 - e. Power Boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, nor a smoke opacity equal to or greater than 20% opacity.

5. The SO₂ compliance program will not be complete until August, 1974. By that time, measurements will have been taken to establish the compliance status of the power boilers while they are fueled by oil. The emission rates after compliance and the power boiler compliance schedules should be included in a permit, so that the recommended duration of this permit is for two (2) years (until Dec. 31, 1974).

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Publishers Paper Company, Oregon City Division.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
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APPLICANT:

PUBLISHERS PAPER COMPANY
419 Main Street
Oregon City, Oregon

REFERENCE INFORMATION

File Number 03-1850
Appl. No.: 0014 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to operate its 230 ton/day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, cook chemical preparation facilities, cook chemical recovery facilities, and steam-generating boiler facilities, including those processes and activities directly related or associated thereto located at Oregon City, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a mill site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced, and 4,600 pounds per day after August 1, 1974.
2. The recovery furnace SO₂ emissions shall:
 - a. Be kept to lowest practicable levels at all times.
 - b. Not exceed any of the following conditions after September 30, 1973:
 1. 800 ppm as an hourly average
 2. 500 ppm as a monthly average
 3. 15 pounds per adt and 3,450 pounds per day.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74
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for PUBLISHERS PAPER COMPANY

3. The blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 690 pounds per day after August 1, 1974.
4. SO₂ emissions from sources other than the recovery furnace and blow pit vent shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed two (2) pounds per ton and 460 pounds per day after August 1, 1974.
5. The recovery furnace particulate emissions shall not exceed three (3) pounds per adt and 690 pounds per day nor equal or exceed 20% opacity for a time period aggregating more than three (3) minutes in any one hour.
6. All steam generating boiler particulate emissions shall comply with the following:

Boiler	Fuel	Steam Capacity (2)	Opacity (3)	Grains/SCF (4)	Sulfur Dioxide	Backratch
A, B, C, and D	N.G.	140,000 (4 boilers)	20%	0.2	1000 ppm	-----
A, B, C, and D	Res. Oil	140,000 (4 boilers)	20%	0.2	1000 ppm	4
G	N.G.	85,000	20%	0.2	1000 ppm	-----
G	Res. Oil	85,000	20%	0.2	1000 ppm	4
G	Sludge & Knots	85,000	40%	0.2	1000 ppm	-----
4	N.G.	30,000	20%	0.2	1000 ppm	-----
5	N.G.	35,000	20%	0.2	1000 ppm	-----

- (1) "N.G." refers to natural gas, "Res. Oil" to "residual fuel oil" The use of fuels other than these is prohibited unless approved by the Department of Environmental Quality.
- (2) Steam Capacity in pounds per hour.
- (3) Shall not equal or exceed the indicated opacity for more than three (3) minutes in any one (1) hour.
- (4) Grains per standard cubic foot, corrected to twelve percent (12%) CO₂ or fifty percent (50%) excess air.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

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PUBLISHERS PAPER COMPANY

7. The use of residual fuel oil containing more than two and one-half percent (2 1/2%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three quarters percent (1 3/4%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Recovery furnace SO₂-emission controls shall be provided according to the following schedule:
 - a. Ordering major units of equipment to be completed by no later than February 1, 1973.
 - b. Construction to begin by no later than February 1, 1973.
 - c. Construction completed by no later than September 15, 1973.
 - d. Compliance demonstrated by December 1, 1973.
10. Blow-pit vent SO₂-emission controls shall be provided according to the following schedule:
 - a. Detailed engineering to begin by no later than June 1, 1973.
 - b. Ordering components to begin by no later than September 1, 1973.
 - c. Construction to begin by no later than September 1, 1973.
 - d. Construction to be complete by June 30, 1974.
 - e. Compliance demonstrated by August 1, 1974.
11. Other source SO₂-emission controls, exclusive of the recovery furnace and blow pit vent, shall be provided according to the following schedule:
 - a. A description of each emission point to be controlled and the method of control shall be submitted for review and approval by no later than May 1, 1973.
 - b. Detailed engineering for control of the emission points selected shall be complete by no later than August 1, 1973.
 - c. Construction shall be started by no later than August 1, 1973.
 - d. Construction shall be completed by no later than December 1, 1973.
 - e. Compliance shall be demonstrated by January 1, 1974.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

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12. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each part of Conditions 9, 10, and 11 above.
13. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers A, B, C, D, and G while being fired with residual fuel oil by no later than July 1, 1973 and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than September 1, 1974 for review and approval by the Department of Environmental Quality.
14. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boiler G while being fired with waste sludge and knots by no later than July 1, 1973 and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring boiler G into compliance with condition No. 6 by no later than February 1, 1975, shall be submitted by no later than September 1, 1974 for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

15. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
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- 16. The final monthly report required in condition No.15 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.
- 17. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

- 18. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, And Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

- 19. No open burning shall be conducted at the plant site.

Special Conditions

- 20. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
- 21. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
- 22. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
- 23. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
\$175.00	December 1, 1973

- 24. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

PUBLISHERS PAPER COMPANY
Wynooski Road
Newberg, Oregon

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill on Wynooski Road southeast of Newberg. The capacity is 220 ton/day of unbleached, air-dried pulp.
2. The pulp is produced in four batch digesters of 14.4 tons per digester capacity. Pulp batches are discharged approximately at intervals of one and two-third hours, with an accompanying discharge of sulfur dioxide (SO_2). After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO_2 and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gases by means of mechanical collectors (principal mechanism for MgO removal) and a series of four scrubbers, which remove both SO_2 and MgO in a water solution. The solution is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO_2 : A system was installed in mid-1972 for condensing and scrubbing blow gases. It functioned but in so doing caused an additional discharge of SO_2 to the liquid waste treatment system. Additional capacity is being provided for relieving SO_2 from the digesters prior to discharging the pulp. The improved system and its installation schedule are the subject of Condition #9 of the Air Contaminant Discharge Permit. The completed system is designed to reduce emissions below three pounds of SO_2 per ton of pulp, with compliance to be demonstrated by September 1, 1973.
 - b. Recovery Furnace: Particulate (MgO and fly ash) emissions have ranged from 1.1 to 3.2 pounds per ton of pulp, with an average of 2.1 pounds per ton since monitoring started. SO_2 emissions have peaked over 2,000 ppm (for periods on the order of minutes), and averaged 210 ppm during 1972, and 175 ppm from July through December 1972. The average mass emission rate from July to December 1972 was 13.5 pounds of SO_2 per air-dried ton.
 - c. Other Sources: Other sources of SO_2 are from the pulp-washing system and amount to approximately one pound per ton.

4. Monitoring and reporting are to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO₂ emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, with residual oil as a backup. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by September 1, 1974, including a schedule to achieve compliance by February 1, 1975. The date for submission of a compliance schedule was chosen to allow for including that schedule in the next permit, due to be issued by December 31, 1974 (the expiration date of this permit).

Evaluation

1. The digester controls are the final step in this mill's program for compliance with the Sulfite Mill Emission Regulation. This mill has served as the "pilot plant" study for controls at Publishers-Oregon City, so that the controls installed at Newberg have been somewhat experimental. Accordingly, the problems have been greater than are normally met in installing facilities of established design.
2. It is anticipated that with the installation of the relief-system modifications, the mill will be adequately controlled to prevent nuisance-level SO₂ ambient odors.
3. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: Twenty pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery furnace SO₂: Not to exceed 800 parts per million as an hourly average
 - c. Blow-pit vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery furnace particulate: Not to exceed four pounds per ton of pulp.
 - e. Power boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, nor a smoke opacity of 20%.
4. Because the SO₂ compliance program will not be complete until late 1973, and the power boiler compliance status cannot be determined until early 1974, a two-year permit is proposed in order to allow an opportunity for revising the permit conditions as indicated by the performance of the control system and to allow an opportunity to include the power boiler compliance schedule in a new permit.

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Publishers Paper Co., Newberg Division.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
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APPLICANT:

PUBLISHERS PAPER COMPANY
Newberg Division
Wynooski Road
Newberg, Oregon

REFERENCE INFORMATION

File Number 36-6142
Appl. No.: 0013 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
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Source(s) Permitted to Discharge Air Contaminants:

<u>NAME OF AIR CONTAMINANT SOURCE</u>	<u>STANDARD INDUSTRY CODE AS LISTED</u>
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SULFITE PULP AND PAPER	2621
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Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to operate its 220 ton/day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, cook chemical preparation facilities, cook chemical recovery facilities, and steam-generating boiler facilities, including those processes and activities directly related or associated thereto located at Newberg, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a millsite basis shall not exceed twenty (20) pounds per ton of unbleached, air-dried ton (adt) of pulp produced after September 1, 1973.

2. The recovery furnace SO₂ emissions shall not exceed the following:

a. 800 ppm as an hourly average

b. 200 ppm as a monthly average

c. Sixteen (16) pounds per ton and 3500 pounds per day adt

ppm
lbs/Ton x 2.2 = ppm dry
divide by 1.6 = ppm wet

16
23
48
320
360
32
16

3200 average
4000
220 x 16
250 x 16
220 x 16 lbs = 3520
3500

220

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
 Prepared by the Staff of the
 Department of Environmental Quality
 PUBLISHERS PAPER COMPANY, Newberg Division

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3. The blow pit vent SO₂ emissions shall:
- Be kept to the lowest practicable levels at all times.
 - Not exceed ~~three (3) pounds per adt~~ and 660 pounds per day after September 1, 1973.
4. SO₂ emissions from all sources except the recovery furnace boilers 1, 2, 3, 5, 6, and 7, and the blow pit vent shall not exceed one (1) pound of SO₂ per adt and 220 pounds per day.
5. The recovery furnace particulate emissions shall not exceed ~~three (3) pounds per adt~~ and 680 pounds per day *weekly ave. of 100 lbs/day*
6. All steam generating boiler particulate emissions shall not exceed 0.2 grains per standard cubic foot corrected to twelve percent (12%) CO₂ or at fifty percent (50%) excess air, and shall not equal or exceed the opacity indicated below when fired on the specific fuel for that limit for more than three (3) minutes in any one (1) hour:

<u>Boiler</u>	<u>Fuel</u>	<u>Opacity</u>	<u>Grains/SCF</u>	<u>Sulfur Dioxide</u>
1	N.G.*	20%	0.2	1,000 ppm
2,3,5,6,7	N.G./Oil**	20%	0.2	1,000 ppm
2,3	Sludge & Knots	40%	0.2	1,000 ppm

* N.G. refers to natural gas only

** N. G. /Oil refers to natural gas, or alternatively residual fuel oil.

7. The use of residual fuel oil containing more than two and one half percent (2.5%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Blow pit vent controls shall be improved by the installation of additional digester relief capability to reduce blow pit vent emissions to no more than three (3) pounds of SO₂ per adt and no more than 660 pounds of SO₂ per day according to the following schedule: *750*
- Components (additional relief capacity and additional heat exchanger) shall be purchased by no later than February 15, 1973.
 - Construction shall be started by no later than February 28, 1973.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

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PUBLISHERS PAPER COMPANY, Newberg Division

9. Continued

- c. Installation shall be completed by no later than August 1, 1973.
- d. Compliance shall be demonstrated by no later than September 1, 1973, using procedures on file with and approved by the Department of Environmental Quality.
- e. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each of these conditions.

10. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers #2, #3, #5, #6 and #7 while being fired with residual fuel oil by no later than July 1, 1973, and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than September 1, 1974, for review and approval by the Department of Environmental Quality.

11. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers #2 and #3 while being fired with waste sludge and knots by no later than July 1, 1973, and a report and analysis of the test results on or before ¹²²⁰ ~~May 1, 1974~~ ¹⁹⁷³; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than ~~September 1, 1974~~ ^{August 1, 1974}, for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

12. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored

PUBLISHERS PAPER COMPANY, Newberg Division

12. Continued

- c. Recovery furnace particulate emissions Three (3) times per month
- d. Production of unbleached pulp Summarized monthly from production records

13. The final monthly report required in condition No. 12 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.
14. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

15. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

16. No open burning shall be conducted at the plant site.

Special Conditions

17. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
18. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
19. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
20. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

Amount Due

\$175.00

Date Due

December 1, 1973

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

PUBLISHERS PAPER COMPANY, Newberg Division

Recom. Expir. Date: 12/31/74

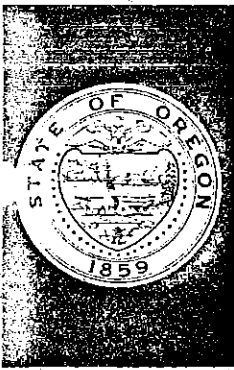
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21. This permit is subject to termination if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.



DEPARTMENT OF ENVIRONMENTAL QUALITY

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MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. H b, April 30, 1973, EQC Meeting

Air Contaminant Discharge Permit - Publishers Paper
Company, Oregon City (Continuance from April 2, 1973,
EQC Hearing)

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill at the south end of Main St. in downtown Oregon City. The pulping capacity at this facility is 230 tons per day of unbleached, air-dried sulfite pulp.
2. The pulp is produced in six (6) batch digesters three (3) of which have a capacity of 9.25 tons and three (3) a capacity of 6.25 tons per batch. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO_2) to the atmosphere. After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO_2 and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gas by means of mechanical collectors (principal mechanism for MgO removal) and a series of Venturi-scrubbers, which remove both SO_2 and MgO in a water solution. The scrubber effluent is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.

3. The current status of controls at this mill is as follows:
 - a. Digester blow SO_2 : The company proposed a system for control of blow pit vent emissions, to be installed first at Publisher's Newberg Division, modified as necessary to attain compliance, and the modified system to be installed at the Oregon City Division. This schedule indicates compliance by no later than August 1, 1974.
 - b. Recovery Furnace SO_2 : A fourth scrubbing stage is to be added to the existing three, and is to be operational by September 30, 1973. At that time, the Oregon City recovery furnace will have the same degree of control as does the recovery furnace at Newberg, which emits under 16 pounds of SO_2 per ton of pulp. Presently, SO_2 emissions at Oregon City average 370 ppm and 27 pounds per ton.
 - c. Recovery Furnace Particulate: Emissions have averaged 2.9 pounds per ton since the commencement of monitoring. They should decrease somewhat after the fourth scrubbing stage is installed.
 - d. Other sources of SO_2 are mainly from the pulp washing system and amount to 2 pounds per ton.
4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO_2 emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, and with residual oil during gas curtailment. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are operated on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by April 1, 1974, including a schedule to achieve compliance by February 1, 1973.

Evaluation

1. The sensitive location of this mill dictates the care needed in achieving compliance. It is necessary that the controls installed function well upon completion and placement in operation. Also,

the restricted nature of the rather crowded plant site makes installation of control facilities difficult and also restricts the possibilities of adding additional controls if necessary. These considerations led to the Company's proposing that the control techniques be implemented first at Newberg and, after eliminating errors, implementing them at Oregon City.

2. It is anticipated that adding the fourth scrubbing stage will bring the Oregon City recovery furnace easily within compliance.
3. The subsequent installation of blowpit vent emission controls should eliminate ambient nuisance SO₂ odors in Oregon City.
4. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: Twenty (20) pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery Furnace SO₂: Not to exceed 800 ppm as an hourly average.
 - c. Blow-pit Vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery Furnace Particulate: Not to exceed four (4) pounds per ton of pulp produced.
 - e. Power Boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, nor a smoke opacity equal to or greater than 20% for a period or periods aggregating three (3) minutes in any one (1) hour.
5. A five (5) year permit is now proposed for this facility instead of the original two (2) year permit since the company is well ahead of schedule for compliance with the sulfite regulations.

Summary

The Department has prepared a proposed Air Contaminant Discharge Permit in accordance with OAR, 340, Sections 20.033.02 through 20.033.20, to clearly identify the operating parameters discussed above, the emission restrictions imposed by the Department to preserve air quality and the rules of the Department of Environmental Quality. Public notice was issued on February 28, 1973, that testimony would be taken and consideration given

at a Public Hearing on April 2, 1973, at 2:00 p.m. at the Public Service Building in Portland. That hearing was continued until this time and place since the Commission desired to receive additional testimony and to have adequate time to familiarize themselves with this matter.

No public comments have been received as a result of the Public Notice procedures of the Department. The attached proposed permit was prepared incorporating the requirements and limitations of the Columbia Willamette Air Pollution Authority (CWAPA) relating to the operation of the steam boilers. The CWAPA has reviewed the proposed permit and no comments have been submitted.

The company did respond by letter dated March 9, 1973, (attached) and also presented testimony in Portland at the hearing.

The following substance changes are proposed as a result of review by the Attorney General's Office, the written and oral testimony presented by the company and a subsequent meeting between the Department and Publishers Paper Company on April 10, 1973:

Permitted Activities

A change in meaning has been made to delete a permit to "operate" the facility to a permit to "discharge" treated air contaminants.

Performance Standards and Emission Limitations

A wording change has been made to specify "Permittee" rather than infer reference to the permittee.

Condition #1:

No change.

Condition #2:

Reworded to clearly identify the date of September 30, 1973, at which time the recovery furnace SO₂ emissions shall not exceed any of the specific limits described in the permit. 2 (b) has been modified by eliminating the 500 ppm as a monthly average and substituting 3,000 pounds per day as a monthly average based on 15 lbs/ton at 200 adt/day average monthly production.

Conditions #3 and #4:

No change.

Condition #5:

Reworded by eliminating the 3 lb/adt and substituting specific particulate emission limits from the recovery furnace of 680 lbs/day as a monthly average (allowable per OAR, 340, Section 25-355 (4) would be: 4 lbs/adt x 200 adt/day = 800 lbs/day) and 880 lbs/day as a maximum particulate emission on any given day (4 lbs/adt x 220 adt/day maximum production.)

Condition #6:

No change.

New Condition #7:

Has been added to require a further limitation of particulate emissions from all "other vents" to 200 lbs/day and an opacity not to exceed 20%.

New Condition #8:

Has been added to limit chlorine emissions from the bleach plant to not exceed 0.1 lbs/adt and 23 lbs/day.

Conditions #7 and #8:

Renumbered as conditions #9 and #10. No change.

Compliance Demonstration Schedule

Condition #9:

Renumbered as condition #11. No change.

Conditions #10 and #11:

Renumbered as condition #12 and combines both old condition #10 and #11 with no change in meaning except that compliance demonstration for those interrelated requirements all become due on August 1, 1974.

Conditions #12, #13 and #14:

Renumbered as conditions #13, #14 and #15 and have been modified to reflect proper condition reference numbers. In addition conditions #13 and #14 have had the date for testing and reporting of boiler emissions adjusted from April 1, 1974, to December 31, 1973, and for submission of a control program from September 1, 1974, to April 1, 1974.

Conditions #15, #16, #17, #18 and #19:

Renumbered as conditions #16, #17, #18, #19 and #20. No change.

Prohibited Activities

New Condition #21:

This condition places a further restriction on the permittee prohibiting any discharges of air contaminants not covered by this permit which would exceed the standards fixed by said permit or the rules of the Department.

Special Conditions

Condition #20:

Renumbered as condition #22 and has been changed to a Notice Condition relative to solid waste disposal.

Conditions #21 and #22:

Renumbered as conditions #23 and #24. No change.

New condition #25:

This condition requires permittee to make an application for a new permit if the substantial change is proposed affecting the discharge of air contaminants.

Condition #23:

Renumbered as condition #26 and modified to reflect a five (5) year permit.

Condition #24:

Renumbered as condition #27. No change.

Director's Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 03-1850, for Publishers Paper Company, Oregon City Division be issued with the above noted changes.


DIARMUID F. O'SCANNLAIN

HHB:sb
1-18-73

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/77
Page 1 of 7

APPLICANT:

PUBLISHERS PAPER COMPANY
419 Main Street
Oregon City, OR 97045

REFERENCE INFORMATION

File Number 03-1850
Appl. No.: 0014 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
None		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to discharge treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit from its 230 ton per day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, and steam generating boiler facilities, including those processes and activities directly related or associated thereto located at Oregon City, Oregon.

REVISED

19 APR 1973

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a mill site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced, and 4,600 pounds per day after August 1, 1974.
2. The recovery furnace SO₂ emissions shall be kept to the lowest practicable levels at all times and shall not exceed any of the following conditions after September 30, 1973:
 - a. 800 ppm as an hourly average
 - b. 3,000 pounds per day as a monthly average
 - c. Fifteen (15) pounds per adt and 3,450 pounds per day as a maximum daily emission.
3. The blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 690 pounds per day after August 1, 1974.
4. SO₂ emissions from sources other than the recovery furnace and blow pit vent shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed two (2) pounds per ton and 460 pounds per day after August 1, 1974.
5. The Recovery furnace particulate emissions shall not exceed the following:
 - a. 680 pounds per day as a monthly average
 - b. 880 pounds per day as a maximum on any given day.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
 Prepared by the Staff of the
 Department of Environmental Quality
 PUBLISHERS PAPER COMPANY, Oregon City

Recom. Expir. Date: 12/31/77
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 Appl. No: 0014
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6. All steam generating boiler particulate emissions shall comply with the following:

<u>Boiler</u>	<u>Fuel</u> ⁽¹⁾	<u>Capacity</u> ⁽²⁾ <u>Steam</u>	<u>Opacity</u> ⁽³⁾	<u>Grains/SCF</u> ⁽⁴⁾	<u>Sulfur Dioxide</u>	<u>Bachrach</u>
A,B,C, and D	N.G.	140,000 (4 boilers)	20%	0.2	1,000 ppm	----
A,B,C, and D	Res. Oil	140,000 (4 boilers)	20%	0.2	1,000 ppm	4
G	N.G.	85,000	20%	0.2	1,000 ppm	----
G	Res. Oil	85,000	20%	0.2	1,000 ppm	4
G	Sludge & Knots	85,000	40%	0.2	1,000 ppm	----
4	N.G.	30,000	20%	0.2	1,000 ppm	----
5	N.G.	35,000	20%	0.2	1,000 ppm	----

(1) "N.G." refers to natural gas, "Res. Oil" to "residual fuel oil".
 The use of fuels other than these is prohibited unless prior approval is obtained from the Department of Environmental Quality.

(2) Steam Capacity in pounds per hour.

(3) Shall not equal or exceed the indicated opacity for a period or periods aggregating three (3) minutes in any one (1) hour and excluding uncombined water.

(4) Grains per standard cubic foot, corrected to twelve percent (12%) CO₂ or fifty percent (50%) excess air.

7. Particulate emissions from all other vents as described in the permit application shall not exceed:
 - a. 200 pounds per day.
 - b. A period or periods aggregating three (3) minutes in any one (1) hour equal to or greater than twenty percent (20%) opacity in the exhaust gases, exclusive of uncombined water.
8. Chlorine emissions from the bleach plant shall not exceed 0.1 pounds per adt and 23 pounds per day.
9. The use of residual fuel oil containing more than two and one-half percent (2 1/2%) sulfur by weight is prohibited.
10. The use of residual fuel oil containing more than one and three quarters percent (1 3/4%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

11. Recovery furnace SO₂-emission controls shall be provided according to the following schedule:
 - a. Ordering major units of equipment to be completed by no later than February 1, 1973.
 - b. Construction to begin by no later than February 1, 1973.
 - c. Construction completed by no later than September 15, 1973.
 - d. Compliance demonstrated by December 1, 1973, in accordance with testing procedures on file at the Department of Environmental Quality or with recognized applicable standard methods approved in advance by the Department.
12. Blow-pit vent SO₂-emission controls and other source SO₂-emission controls exclusive of the recovery furnace and blow pit vent, shall be provided according to the following schedule:
 - a. Detailed engineering to begin by no later than June 1, 1973.
 - b. Ordering components to begin by no later than September 1, 1973.
 - c. Construction to begin by no later than September 1, 1973.
 - d. Construction to be completed by June 30, 1974.
 - e. Compliance demonstrated by August 1, 1974, in accordance with testing procedures on file at the Department of Environmental Quality or with recognized applicable standard methods approved in advance by the Department.

13. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each part of Conditions 11 and 12.

14. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers A, B, C, D, and G while being fired with residual fuel oil by no later than July 1, 1973 and a report and analysis of the test results by no later than December 31, 1973; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than April 1, 1974 for review and approval by the Department of Environmental Quality.

15. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boiler G while being fired with waste sludge and knots by no later than July 1, 1973 and a report and analysis of the test results by no later than December 31, 1973; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring boiler G into compliance with condition No. 6 by no later than February 1, 1975, shall be submitted by no later than April 1, 1974 for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

16. The permittee shall effectively monitor the operation and maintenance of the sulfite pulp and paper production and control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with the testing, monitoring and reporting procedures on file at the Department of Environmental Quality or in conformance with recognized applicable standard methods approved in advance by the Department, and shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

17. The final monthly report required in condition 16. submitted during any calendar year shall also include the quantities and types of fuels used during the calendar year.

18. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

19. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

20. No open burning shall be conducted at the plant site.

21. Permittee is prohibited from causing or allowing discharges of air contaminants from sources not covered by this permit so as to cause the plant site to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.

Special Conditions

22. (NOTICE CONDITION) All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

23. The permittee shall allow Department of Environmental Quality representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise to conduct all necessary functions related to this permit.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

PUBLISHERS PAPER COMPANY, Oregon City

Recom. Expir. Date: 12/31/77

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Appl. No: 0014

File No: 03-1850

24. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

25. The permittee will be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.

26. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
\$175.00	December 1, 1973
\$175.00	December 1, 1974
\$175.00	December 1, 1975
\$175.00	December 1, 1976

27. This permit is subject to revocation if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

PUBLISHERS PAPER COMPANY
OREGON CITY, OREGON

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill at the south end of Main St. in downtown Oregon City. The pulping capacity at this facility is 230 tons per day of unbleached, air-dried sulfite pulp.
2. The pulp is produced in six batch digesters three (3) of which have a capacity of 9.25 tons and three (3) a capacity of 6.25 tons per batch. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO_2) to the atmosphere. After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO_2 and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gas by means of mechanical collectors (principal mechanism for MgO removal) and a series of Venturi-scrubbers, which remove both SO_2 and MgO in a water solution. The scrubber effluent is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO_2 : The company proposed a system for control of blow pit vent emissions, to be installed first at Publisher's Newberg Division, modified as necessary to attain compliance, and the modified system to be installed at the Oregon City Division. This schedule indicates compliance by no later than August 1, 1974.
 - b. Recovery Furnace SO_2 : A fourth scrubbing stage is to be added to the existing three, and is to be operational by September 30, 1973. At that time, the Oregon City recovery furnace will have the same degree of control as does the recovery furnace at Newberg, which emits under 16 pounds of SO_2 per ton of pulp. Presently, SO_2 emissions at Oregon City average 370 ppm and 27 pounds per ton.
 - c. Recovery Furnace Particulate: Emissions have averaged 2.9 pounds per ton since the commencement of monitoring. They should decrease somewhat after the fourth scrubbing stage is installed.
 - d. Other sources of SO_2 are mainly from the pulp washing system and amount to 2 pounds per ton.

4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO_2 emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, with residual oil as a back-up. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are operated on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by September 1, 1974, including a schedule to achieve compliance by February 1, 1975. The date for submission of this compliance schedule was chosen to allow for including that schedule in the next permit, due to be issued by December 31, 1974 (the expiration date of this permit).

Evaluation

1. The sensitive location of this mill dictates the care needed in achieving compliance. It is necessary that the controls installed function well upon completion and placement in operation. Also, the restricted nature of the rather crowded plant site makes installation of control facilities difficult and also restricts the possibilities of adding additional controls if necessary. These considerations led to the Company's proposing that the control techniques be implemented first at Newberg and, after eliminating errors, implementing them at Oregon City.
2. It is anticipated that adding the fourth scrubbing stage will bring the Oregon City recovery furnace easily within compliance.
3. The subsequent installation of blowpit vent emission controls should eliminate ambient nuisance SO_2 odors in Oregon City.
4. The applicable limits on emissions from this mill are:
 - a. Mill-site SO_2 : 20 pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery Furnace SO_2 : Not to exceed 800 ppm as an hourly average.
 - c. Blow-pit Vent SO_2 : Not to exceed 0.2 pounds of SO_2 per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery Furnace Particulate: Not to exceed 4 pounds per ton of pulp produced.
 - e. Power Boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO_2 or 50% excess air, nor a smoke opacity equal to or greater than 20% opacity.

5. The SO₂ compliance program will not be complete until August, 1974. By that time, measurements will have been taken to establish the compliance status of the power boilers while they are fueled by oil. The emission rates after compliance and the power boiler compliance schedules should be included in a permit, so that the recommended duration of this permit is for two (2) years (until Dec. 31, 1974).

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Publishers Paper Company, Oregon City Division.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74
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APPLICANT:

PUBLISHERS PAPER COMPANY
419 Main Street
Oregon City, Oregon

REFERENCE INFORMATION

File Number 03-1850
Appl. No.: 0014 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to operate its 230 ton/day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, cook chemical preparation facilities, cook chemical recovery facilities, and steam-generating boiler facilities, including those processes and activities directly related or associated thereto located at Oregon City, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a mill site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced, and 4,600 pounds per day after August 1, 1974.
2. The recovery furnace SO₂ emissions shall:
 - a. Be kept to lowest practicable levels at all times.
 - b. Not exceed any of the following conditions after September 30, 1973:
 1. 800 ppm as an hourly average
 2. 500 ppm as a monthly average
 3. 15 pounds per adt and 3,450 pounds per day.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

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for PUBLISHERS PAPER COMPANY

3. The blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 690 pounds per day after August 1, 1974.
4. SO₂ emissions from sources other than the recovery furnace and blow pit vent shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed two (2) pounds per ton and 460 pounds per day after August 1, 1974.
5. The recovery furnace particulate emissions shall not exceed three (3) pounds per adt and 690 pounds per day nor equal or exceed 20% opacity for a time period aggregating more than three (3) minutes in any one hour.
6. All steam generating boiler particulate emissions shall comply with the following:

iler	Fuel	Steam	Opacity	Grains/SCF	Sulfur Dioxide	Bachrach
	(1)	Capacity (2)	(3)	(4)		
A,B,C, and D	N.G.	140,000 (4 boilers)	20%	0.2	1000 ppm	-----
A,B,C, and D	Res. Oil	140,000 (4 boilers)	20%	0.2	1000 ppm	4
G	N.G.	85,000	20%	0.2	1000 ppm	-----
G	Res. Oil	85,000	20%	0.2	1000 ppm	4
G	Sludge & Knots	85,000	40%	0.2	1000 ppm	-----
4	N.G.	30,000	20%	0.2	1000 ppm	-----
5	N.G.	35,000	20%	0.2	1000 ppm	-----

- (1) "N.G." refers to natural gas, "Res. Oil" to "residual fuel oil" The use of fuels other than these is prohibited unless approved by the Department of Environmental Quality.
- (2) Steam Capacity in pounds per hour.
- (3) Shall not equal or exceed the indicated opacity for more than three (3) minutes in any one (1) hour.
- (4) Grains per standard cubic foot, corrected to twelve percent (12%) CO₂ or fifty percent (50%) excess air.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74
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PUBLISHERS PAPER COMPANY

7. The use of residual fuel oil containing more than two and one-half percent (2 1/2%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three quarters percent (1 3/4%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Recovery furnace SO₂-emission controls shall be provided according to the following schedule:
 - a. Ordering major units of equipment to be completed by no later than February 1, 1973.
 - b. Construction to begin by no later than February 1, 1973.
 - c. Construction completed by no later than September 15, 1973.
 - d. Compliance demonstrated by December 1, 1973.
10. Blow-pit vent SO₂-emission controls shall be provided according to the following schedule:
 - a. Detailed engineering to begin by no later than June 1, 1973.
 - b. Ordering components to begin by no later than September 1, 1973.
 - c. Construction to begin by no later than September 1, 1973.
 - d. Construction to be complete by June 30, 1974.
 - e. Compliance demonstrated by August 1, 1974.
11. Other source SO₂-emission controls, exclusive of the recovery furnace and blow pit vent, shall be provided according to the following schedule:
 - a. A description of each emission point to be controlled and the method of control shall be submitted for review and approval by no later than May 1, 1973.
 - b. Detailed engineering for control of the emission points selected shall be complete by no later than August 1, 1973.
 - c. Construction shall be started by no later than August 1, 1973.
 - d. Construction shall be completed by no later than December 1, 1973.
 - e. Compliance shall be demonstrated by January 1, 1974.

12. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each part of Conditions 9, 10, and 11 above.
13. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers A, B, C, D, and G while being fired with residual fuel oil by no later than July 1, 1973 and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than September 1, 1974 for review and approval by the Department of Environmental Quality.
14. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boiler G while being fired with waste sludge and knots by no later than July 1, 1973 and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring boiler G into compliance with condition No. 6 by no later than February 1, 1975, shall be submitted by no later than September 1, 1974 for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

15. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

PUBLISHERS PAPER COMPANY

16. The final monthly report required in condition No.15 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.
17. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

18. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, And Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

19. No open burning shall be conducted at the plant site.

Special Conditions

20. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
21. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
22. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
23. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

Amount Due

Date Due

\$175.00

December 1, 1973

24. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

PUBLISHERS PAPER COMPANY
OREGON CITY, OREGON

Background

1. Publishers Paper Company operates a sulfite pulp and paper mill at the south end of Main St. in downtown Oregon City. The pulping capacity at this facility is 230 tons per day of unbleached, air-dried sulfite pulp.
2. The pulp is produced in six batch digesters three (3) of which have a capacity of 9.25 tons and three (3) a capacity of 6.25 tons per batch. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO₂) to the atmosphere. After discharge from the digesters, the pulp is washed of spent sulfite (cook) liquor and of dissolved wood solids, which amount to approximately half the weight of chips charged initially. This liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include SO₂ and magnesium oxide (MgO) from the cook liquor. These compounds are removed from the flue gas by means of mechanical collectors (principal mechanism for MgO removal) and a series of Venturi-scrubbers, which remove both SO₂ and MgO in a water solution. The scrubber effluent is "fortified" with sulfur dioxide gas produced in a sulfur burner and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO₂: The company proposed a system for control of blow pit vent emissions, to be installed first at Publisher's Newberg Division, modified as necessary to attain compliance, and the modified system to be installed at the Oregon City Division. This schedule indicates compliance by no later than August 1, 1974.
 - b. Recovery Furnace SO₂: A fourth scrubbing stage is to be added to the existing three, and is to be operational by September 30, 1973. At that time, the Oregon City recovery furnace will have the same degree of control as does the recovery furnace at Newberg, which emits under 16 pounds of SO₂ per ton of pulp. Presently, SO₂ emissions at Oregon City average 370 ppm and 27 pounds per ton.
 - c. Recovery Furnace Particulate: Emissions have averaged 2.9 pounds per ton since the commencement of monitoring. They should decrease somewhat after the fourth scrubbing stage is installed.
 - d. Other sources of SO₂ are mainly from the pulp washing system and amount to 2 pounds per ton.

4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a Barton coulometric titrator for monitoring SO₂ emissions from the recovery furnace. Particulate measurements at present are made with an impinger train.
5. The power boilers are fueled with natural gas, with residual oil as a back-up. Stack tests, to be performed during the Winter of 1973-1974 (period of maximum gas curtailment), are required to establish the compliance status of the furnaces while they are operated on oil. If compliance cannot be demonstrated, a compliance program is required to be submitted by September 1, 1974, including a schedule to achieve compliance by February 1, 1975. The date for submission of this compliance schedule was chosen to allow for including that schedule in the next permit, due to be issued by December 31, 1974 (the expiration date of this permit).

Evaluation

1. The sensitive location of this mill dictates the care needed in achieving compliance. It is necessary that the controls installed function well upon completion and placement in operation. Also, the restricted nature of the rather crowded plant site makes installation of control facilities difficult and also restricts the possibilities of adding additional controls if necessary. These considerations led to the Company's proposing that the control techniques be implemented first at Newberg and, after eliminating errors, implementing them at Oregon City.
2. It is anticipated that adding the fourth scrubbing stage will bring the Oregon City recovery furnace easily within compliance.
3. The subsequent installation of blowpit vent emission controls should eliminate ambient nuisance SO₂ odors in Oregon City.
4. The applicable limits on emissions from this mill are:
 - a. Mill-site SO₂: 20 pounds per ton of air-dried, unbleached pulp produced.
 - b. Recovery Furnace SO₂: Not to exceed 800 ppm as an hourly average.
 - c. Blow-pit Vent SO₂: Not to exceed 0.2 pounds of SO₂ per minute per ton of pulp produced in the digesters, averaged over 15 minutes.
 - d. Recovery Furnace Particulate: Not to exceed 4 pounds per ton of pulp produced.
 - e. Power Boilers: Residual fuel oil sulfur not to exceed 2.5% by weight, and by July 1, 1974, not to exceed 1.75% by weight. Particulate not to exceed 0.2 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air, nor a smoke opacity equal to or greater than 20% opacity.

5. The SO₂ compliance program will not be complete until August, 1974. By that time, measurements will have been taken to establish the compliance status of the power boilers while they are fueled by oil. The emission rates after compliance and the power boiler compliance schedules should be included in a permit, so that the recommended duration of this permit is for two (2) years (until Dec. 31, 1974).

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Publishers Paper Company, Oregon City Division.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

2/20/77

Recommended Expiration Date: 12/31/74

Page 1 of 5

APPLICANT:

PUBLISHERS PAPER COMPANY
419 Main Street
Oregon City, Oregon

REFERENCE INFORMATION

File Number 03-1850
Appl. No.: 0014 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
none		

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER

2621

Permitted Activities

Until such time as this permit expires or is modified or revoked, PUBLISHERS PAPER COMPANY is herewith permitted to operate its 230 ton/day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, cook chemical preparation facilities, cook chemical recovery facilities, and steam-generating boiler facilities, including those processes and activities directly related or associated thereto located at Oregon City, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a mill site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced, and 4,600 pounds per day after August 1, 1974.
2. The recovery furnace SO₂ emissions shall:
 - a. Be kept to lowest practicable levels at all times.
 - b. Not exceed any of the following conditions after September 30, 1973:
 1. 800 ppm as an hourly average.
 2. ³⁰⁰⁰500 ppm as a monthly average
 3. 15 pounds per adt and 3,450 pounds per day.

200
19
5000

230
15
150
AS

170
45
590
170
280 arc

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

Page 2 of 5

Appl. No.: 0014

File No.: 03-1850

for PUBLISHERS PAPER COMPANY

3. The blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed three (3) pounds per adt and 690 pounds per day after August 1, 1974.
4. SO₂ emissions from sources other than the recovery furnace and blow pit vent shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Not exceed two (2) pounds per ton and 460 pounds per day after August 1, 1974.
5. The recovery furnace particulate emissions shall not exceed three (3) pounds per adt and 690 pounds per day nor equal or exceed 20% opacity for a time period aggregating more than three (3) minutes in any one hour.
48170 = 650 *as monthly average & maximum daily average of 880 lbs/day*
at times 20 max
6. All steam generating boiler particulate emissions shall comply with the following:

Boiler	Fuel	Steam Capacity (2)	Opacity (3)	Grains/SCF (4)	Sulfur Dioxide	Bachrach
A, B, C, and D	N.G.	140,000 (4 boilers)	20%	0.2	1000 ppm	-----
A, B, C, and D	Res. Oil	140,000 (4 boilers)	20%	0.2	1000 ppm	4
G	N.G.	85,000	20%	0.2	1000 ppm	-----
G	Res. Oil	85,000	20%	0.2	1000 ppm	4
G	Sludge & Knots	85,000	40%	0.2	1000 ppm	-----
4	N.G.	30,000	20%	0.2	1000 ppm	-----
5	N.G.	35,000	20%	0.2	1000 ppm	-----

- (1) "N.G." refers to natural gas, "Res. Oil" to "residual fuel oil" The use of fuels other than these is prohibited unless approved by the Department of Environmental Quality.
- (2) Steam Capacity in pounds per hour.
- (3) Shall not equal or exceed the indicated opacity for more than three (3) minutes in any one (1) hour.
- (4) Grains per standard cubic foot, corrected to twelve percent (12%) CO₂ or fifty percent (50%) excess air.

PUBLISHERS PAPER COMPANY

7. The use of residual fuel oil containing more than two and one-half percent (2 1/2%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three quarters percent (1 3/4%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Recovery furnace SO₂-emission controls shall be provided according to the following schedule:
 - a. Ordering major units of equipment to be completed by no later than February 1, 1973.
 - b. Construction to begin by no later than February 1, 1973.
 - c. Construction completed by no later than September 15, 1973.
 - d. Compliance demonstrated by December 1, 1973.
10. Blow-pit vent SO₂-emission controls shall be provided according to the following schedule:
 - a. Detailed engineering to begin by no later than June 1, 1973.
 - b. Ordering components to begin by no later than September 1, 1973.
 - c. Construction to begin by no later than September 1, 1973.
 - d. Construction to be complete by June 30, 1974.
 - e. Compliance demonstrated by August 1, 1974.
11. ^{and} Other source SO₂-emission controls, exclusive of the recovery furnace and blow pit vent, shall be provided according to the following schedule:
 - a. A description of each emission point to be controlled and the method of control shall be submitted for review and approval by no later than May 1, 1973.
 - b. Detailed engineering for control of the emission points selected shall be complete by no later than August 1, 1973.
 - c. Construction shall be started by no later than August 1, 1973.
 - d. Construction shall be completed by no later than December 1, 1973.
 - e. Compliance shall be demonstrated by January 1, 1974.

12. The permittee shall notify the Department of Environmental Quality in writing within 14 days of the completion of each part of Conditions 9, 10, and 11 above.
13. The permittee shall submit to the Department of Environmental Quality for review and approval a detailed program and time schedule of tests to evaluate visible and particulate emissions from boilers A, B, C, D, and G while being fired with residual fuel oil by no later than July 1, 1973 and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring any boiler which does not comply with condition No. 6 into compliance by no later than February 1, 1975, shall be submitted by no later than September 1, 1974 for review and approval by the Department of Environmental Quality.
14. The permittee shall submit to the Department of Environmental Quality a detailed program and time schedule of tests to evaluate visible and particulate emissions from boiler G while being fired with waste sludge and knots by no later than July 1, 1973 and a report and analysis of the test results by no later than May 1, 1974; further, if such tests and evaluations do not demonstrate compliance with permit condition No. 6, a detailed compliance schedule setting forth a program to bring boiler G into compliance with condition No. 6 by no later than February 1, 1975, shall be submitted by no later than September 1, 1974 for review and approval by the Department of Environmental Quality.

Monitoring and Reporting

15. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

PUBLISHERS PAPER COMPANY

- 16. The final monthly report required in condition No.15 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.
- 17. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Emergency Reduction Plan

- 18. The Company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, And Emergencies as they are Declared and Terminated by the Department of Environmental Quality.

Prohibited Activities

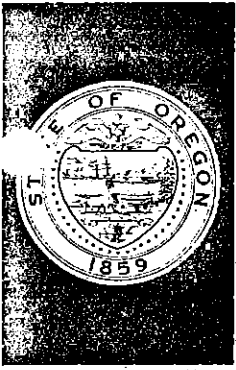
- 19. No open burning shall be conducted at the plant site.

Special Conditions

- 20. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
- 21. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
- 22. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
- 23. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
\$175.00	December 1, 1973

- 24. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5301

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

TO: Environmental Quality Commission
From: Director
Subject: Agenda Item No. I, April 30, 1973, EQC Meeting

Unified Sewerage Agency, Washington County - Sewerage
Facilities Construction Program

Background

On September 26, 1969, the Environmental Quality Commission issued an order prohibiting further sewer connections to all sewage plants in the Tualatin Basin until satisfactory progress could be made toward implementing a master plan for solution of the water quality problems in the basin. Some 25 sewage treatment plants were located on the Tualatin River and its tributaries, nearly all of which lies within Washington County. During the 1960's this was the most rapidly growing area in the state and the increased waste loads plus low stream flows exceeded the assimilative capacity of streams within the basin creating health hazards and nuisance conditions. A master plan was developed by Washington County to provide for interceptor lines that would consolidate the waste at fewer locations where advanced treatment would be provided. In order to accommodate growth and development within the basin during the implementation period, an implementation schedule for the Tualatin Basin Sewerage Master Plan including an interim facility plan was developed. This schedule was approved by the Department of Environmental Quality on January 22, 1970.

On December 19, 1969, the Environmental Quality Commission held a

hearing on proposed Water Quality Standards for the Tualatin Basin. These standards were adopted January 30, 1970. The implementation plan for the standards, which was adopted as administrative policy was by reference tied to the master plan implementation schedule.

On February 3, 1970, the Unified Sewerage Agency was created by the voters of Washington County. The Agency has the primary responsibility of implementing the master plan. On April 21, 1970, \$36 million in bonds were approved for implementation of the master plan. In general the implementation program was developed to meet the following guidelines:

- 1) Permanent plants should meet water quality standards before the low stream flow period of 1974.
- 2) Intermediate range interim facilities (5 to 9 year life) should be improved so as to meet basin standards during the low flow summer months if possible within the framework of reasonable expenditure.
- 3) Short ranged interim facilities (4 years life or less) should be maintained with minimum investment in improvements so as to meet interim treatment standards.

Under this program, further degradation of water quality in the basin would be stopped and immediate improvement in some areas would be initiated. Under the proposed facility completion schedules, Water Quality Standards would not be met in the most intensively developed Fanno Creek and Upper Beaverton Creek Basins and in the main stem of the Tualatin River until the summer and fall of 1974. The Lower Beaverton Creek Basin would not be brought into compliance with standards until 1979.

A system of interties and interim expansions have been completed to allow maximum utilization of interim facilities

The essence of the presently approved implementation program and interim facility plan is summarized as follows:

Permanent Sewage Treatment Plants

Banks)	Upgrade to meet Water Quality Standards by adding land disposal system prior to low flow season of 1974.
Gaston)	
Laurelwood Academy)	
Hillsboro (West Side)		Complete plant expansion and expand irrigation disposal system to meet standards prior to low flow 1974.
Rock Creek (Hillsboro)		Expand and upgrade on an interim basis to meet standards by end of 1974. Further major expansion by 1979.
Forest Grove		Expand and upgrade to meet standards by June 1973.
Durham		Construct new major plant to meet standards by October 1972.

Intermediate Range Interim Facilities

Aloha (Major interim plant)		Expand and upgrade and maintain in service until phase out in 1979 by connection to expanded Rock Creek plant.
Primate Center		Improve treatment and go to summer land disposal until elimination in 1979.

Somerset West Improve plant and go to summer land disposal until elimination in 1979.

Short Range Interim Plants

Uplands Eliminate by end of 1971 by connection to Sunset Valley. (done)

Sunset Valley)

Tektronix)

Oak Hills)

Hillsboro Jr. High School)

Cedar Hills)

Beaverton)

Fanno Creek)

Metzger)

Tigard)

Peerless Truck & Trailer)

King City)

Southwood Park)

Sherwood)

Tualatin)

Cornelius Eliminate by connection to Forest Grove.

On May 15, 1970 following successful formation and funding of the Unified Sewerage Agency, the ban on sewer connections was lifted on all existing plants having reserve treatment capacity. Other plants undergoing modifications had the ban lifted upon completion of such work

provided it was completed prior to the low flow season 1971. Waste Discharge Permits were issued to all plants in the basin. Limitations were placed on effluent quality with the expectation that many of these plants would be phased out by the end of 1973. These waste discharge permits now need to be renewed.

Evaluation of Progress

Since formation of the Unified Sewerage Agency considerable progress has been made in the area of interceptor design and construction, interim plant expansion and upgrading and interties to increase flexibility of operation. Plans have been approved for first phase expansion of the Hillsboro Rock Creek Plant by the City of Hillsboro. The plans for the Durham Plant are presently being reviewed. Plans for the Forest Grove Plant expansion and the Cornelius-Forest Grove Intertie are also complete. However, the time schedule originally proposed in USA's implementation and financial plan is more than one year behind schedule at the present time. Construction has not yet started on the Durham Plant and related interceptors, the Hillsboro Rock Creek Plant or the Forest Grove expansion and intertie.

At least two reasons given for these delays are (1) the timing of formation of the Agency and the subsequent bond authorization election made it impossible to meet the 1970 construction requirements, and (2) the federal funding and receipt of grant monies coupled with the long-term Congressional action on the Federal Water Quality Act of 1972 are producing further delays. Also, there was some initial delay in site selection for the Durham Plant.

At the present time there is considerable uncertainty with regard to funding the federal grant portion of the approved projects, making it impossible to predict a construction schedule. The most optimistic schedule would require at least two more low flow seasons for operation of most of the interim facilities with construction extending to the summer of 1975.

The Federal Water Pollution Control Act Amendments of 1972 and implementation of this Act have significantly altered the construction grant program. Grants now must be 75%. Projects where construction is initiated without Federal Grant Program approval are disqualified from obtaining grants later. Projected funding is curtailed and no grant offers are being made at present due to an EPA freeze on funds. It is becoming highly doubtful whether any grants will be awarded within the next six or more months. EPA is altering the requirements which applicants must meet so frequently that it is becoming questionable whether anyone could qualify for a grant even if funds were released. This poses severe problems for all Oregon projects including those of USA.

The delays experienced to date have taken their toll in increased project costs. The \$36 million dollar bond issue approved by USA in 1970 was adequate to fund the ten year master plan construction program with the assistance of 30% federal grants. Today, most of that \$36 million is necessary to fund the same ten year program with the aid of 75% grants. Increased costs resulting from further delays may make it necessary to go back to the voters for more money.

Proposed Revised Construction Schedules

USA has provided DEQ with a proposed revision in major facility construction schedules as follows:

<u>Facility</u>	<u>Cost</u>	<u>Days to complete after receipt of Grant</u>	<u>Completion Date if Grant is offered by 7/1/73</u>
Durham Plant	\$14,046,375	730	7/75
Interceptors to Durham Plant	2,122,000	440	9/74
Cedar Mill Trunk	803,000	150	12/73

<u>Facility</u>	<u>Cost</u>	<u>Days to complete after receipt of Grant</u>	<u>Completion Date if grant is offered by 7/1/73</u>
Forest Grove Expansion	1,687,000	365	7/74
Cornelius-Forest Grove Intertie	331,600	270	4/74
Rock Creek Interim / Expansion (by Hillsboro)	1,190,000	390	8/74

A number of other related interceptor projects with one-year construction schedules are also ready to proceed.

USA also has initiated initial work to accelerate the further expansion of the Rock Creek Plant and related interceptors from 1979 to 1977.

Interim Facility Evaluation

The delays experienced to date raise serious questions relative to capability of interim facilities to accommodate growth trends in the basin.

USA has provided DEQ with their evaluation of interim facility capacity available to accommodate new development. The detailed evaluation is complex due to the interties between plants. In general, USA's evaluation can be summarized as follows:

If construction of the ^{*Rush*} plant is initiated immediately, and if the Rock Creek Plant expansion is accelerated from 1979 to 1977, and if the Sunset plant is allowed to continue operating at a somewhat reduced steady state loading rate

at its present design efficiency until 1977, then, projected normal growth and development can be accommodated with minimal need for curtailment. If construction does not begin immediately on the Durham Plant, or if the Sunset Plant must be taken off line as soon as possible or if growth begins to exceed projection, severe building curtailments will be necessary.

DEQ's assessment of available interim plant capacities is perhaps less optimistic than is USA's. The treatment plants are being pushed to operate at the upper limits of design capacity. The projection of USA for the Fanno Creek Basin appears reasonable. The Metzger and Fanno Creek Plants are performing well. Assuming the growth rate projections are realistic and the Durham Plant is placed under construction immediately, the Metzger Plant should have capacity to handle the projected growth.

The DEQ staff is, however, very concerned about the Beaverton Creek Basin. The only plant which has any significant capacity for new connections is the Aloha Plant. If the Sunset, Tektronix and Oak Hills Plants are to be eliminated before the end of 1974 in accordance with the interim facility plan, most of the capacity in the Aloha system will essentially be utilized thus necessitating a significant building curtailment in the area. Water Quality Standards in the Upper Beaverton Creek Drainage Basin would not be met, however, until 1975 or later when the Durham Plant is completed and the Cedar Hills and Beaverton Plants can be eliminated. In order to avoid the building curtailment, USA would like to maintain the Sunset Plant in operation until 1977.

The Aloha Plant is presently experiencing operational problems which require immediate action to correct. The Sunset Plant also is

not performing properly due to both physical and operational problems. As a result, it is considered necessary to proceed with plans to eliminate the Sunset Plant as soon as possible unless a plan can be submitted to modify the plant to improve performance and reliability such that an approval can be granted for its continued use.

Evaluation of Water Quality

A recent survey of conditions in the Beaverton Creek drainage shows that degradation of water quality and violation of standards still exist as in past years. Such degradation and standards violations can be expected to occur until all plants discharging to Beaverton Creek are eliminated through implementation of the master plan. Similar conditions can be expected in the Fanno Creek Basin. However, pending completion of master plan facilities, it is very critical that existing plants be operated within their design capabilities and at peak efficiency so as to prevent a worsening of present water quality conditions.

Summary and Conclusions

1. Considerable progress has been made toward implementation of Master Plan facilities even though delays have been encountered.
2. Further progress is presently blocked by new EPA grant requirements and failure of EPA to release promised funds and award grants so construction can begin.
3. Water Quality Standards in the Tualatin Basin will continue to be violated until Master Plan facilities are completed and all discharges to the Tualatin River tributaries are eliminated. By diligent operation of existing facilities and limitation of new connections to stay within design capacities, further degradation of water quality can be prevented.

4. Correction of operational problems at some facilities is needed. In particular, sludge disposal at most plants is a problem which requires immediate attention.

Director's Recommendations

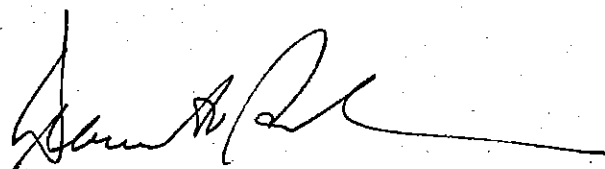
The Director's recommendations are as follows:

1. The general revised implementation schedule for Master Plan facilities should be approved. This includes delay of completion of the Durham Plant until July 1975 and acceleration of the Rock Creek Plant to December 1977. Deadlines for phase out of interim plants must be adjusted accordingly.
2. If the Durham Plant is not placed under construction by July 1, 1973, USA should be required to immediately develop and submit to DEQ a program for curtailment of building in the Fanno Creek Basin so as to assure that treatment facilities are not overloaded.
3. USA should be required to immediately further evaluate the facilities in the Beaverton Creek Basin and propose a revised plan for control of connections pending completion of the Master Plan facilities in 1977.

Such program and plan should evaluate and present alternatives which include phasing out the Sunset, Oak Hills, and Tektronix Plants and improving and maintaining one or more of the plants in operation under reduced loading condition until 1977.
4. Renewal Waste Discharge Permits should be issued immediately for all sewage treatment plants in the Tualatin Basin. Conditions of these permits should require greatly improved monitoring and reporting of operations including sampling of

the stream quality above and below each discharge. Permits should allow connections only where demonstrated capacity exists and should also clearly allow DEQ to prohibit or curtail connections to any plant where violations occur or where it appears that permit conditions and standards may not be met.

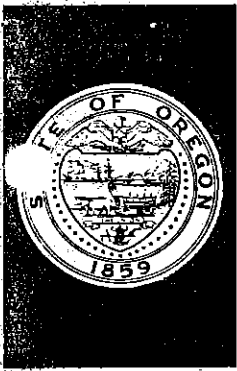
5. USA should be required to submit to DEQ within 60 days a detailed interim plan for handling and disposal of sludge from all treatment plants within the Agency.



DIARMUID F. O'SCANNLAIN

HLS:ak

April 19, 1973



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5301

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item No. J, April 30, 1973, EQC Meeting
Sewerage Works Construction Priorities List Revisions

Background

At its December 21, 1972 meeting, the Environmental Quality Commission adopted a revised system for priority classifications for Sewerage Works Construction Grants. (Copy attached) The EQC also adopted a priority list for FY 73 - 74 projects.

Additional information now available to the Department suggests the need to reclassify 5 projects on the list and add 4 new projects to the list.

Proposed Additions

The proposed changes are summarized in the following table:

<u>Name</u>	<u>Present Condition</u>	<u>Project Description</u>	<u>Est. Cost</u>	<u>Priority Points</u>
Bly S.D.	Health Hazard	Interceptor and Treatment plant	\$254,192	Reclass from 70 to 90
Milwaukie	Overloaded STP and pump station to be eliminated, connect to regional system	East interceptor	684,090	Reclass from 60 to 80
Prineville	Documented health hazard	Interceptor	398,000	Reclass from 70 to 90
McMinnville	Periodic bypasses of raw sewage from obsolete overloaded pump stations	Interceptor to eliminate pump stations	235,000	Reclass from 70 to 90
Newport	Failing subsurface systems constitute health hazard	Interceptor to Marine Science Center	145,900	Reclass from 70 to 90
Huntington	Lacks adequate disinfection facilities	Chlorination facilities	20,500	90
Jordan Valley	Health Hazard	Interceptor and treatment plant	298,167	90
Port of Port Orford	New requirements necessitate connection of fish plants to city system	Interceptor to City of Port Orford	27,500	80
Veneta	Potential health hazard (Only part of city served by sewers)	Lagoon expansion	316,250	70

Director's Recommendation

It is recommended that the above-proposed revisions and additions to the FY 73 - 74 Sewerage Works Construction Grants Priority List be approved.



DIARMUID F. O'SCANNLAIN

HLS:ak

April 18, 1973

1

SEWERAGE WORKS CONSTRUCTION GRANTS

PRIORITY CLASSIFICATIONS

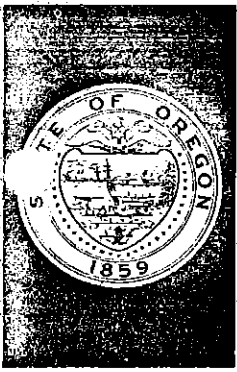
<u>Priority Class</u>	<u>Existing Condition and Proposed Action</u>
90	<p>No sewerage facilities exist or existing facilities provide less than secondary treatment. Inadequate sewage collection, treatment and disposal facilities causes a direct hazard to public health and/or results in inadequately treated wastes being discharged to public waters.</p> <p style="padding-left: 40px;">Proposed action will provide for adequate collection, treatment and disposal of wastes such that health hazards are eliminated and such that a minimum of secondary treatment is provided and such that water quality and waste treatment standards are met.</p>
80	<p>Existing facilities provide secondary treatment. Improvements are needed to correct deficiencies, correct a presently overloaded condition, eliminate a small interim treatment facility, or upgrade the facilities to meet water quality standards or new or more stringent waste treatment requirements or standards.</p> <p style="padding-left: 40px;">Proposed facilities will bring individual public agency into compliance with standards and department water quality control program requirements.</p>
70	<p>No community sewerage facilities exist at present in the area. A potential public health hazard exists due to failure of some subsurface disposal facilities and the potential failure of other such systems.</p> <p style="padding-left: 40px;">Proposed action will provide adequate facilities for collection, treatment and disposal of wastes.</p>
60	<p>Existing facilities generally provide secondary treatment. Improvement, expansion, or construction of new facilities is proposed to provide for projected future growth.</p> <p style="padding-left: 40px;">Proposed facilities will insure that treatment and discharge standards will be met in the future.</p>

Priority for other potentially eligible facilities such as storm water separation, infiltration control, collection systems, and other categories will be established at a later date as necessary.

NOTES

- a) If ranking within a major category should become necessary, such ranking will be done by the EQC based on readiness to proceed and financial need.
- b) No grant will be given to any project which is not in agreement with adopted and approved area-wide or regional plans.

Adopted December 21, 1972



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5301

TOM McCALL
GOVERNOR

DIARMUID F. O'SCANNLAIN
Director

To: Environmental Quality Commission
From: Director
Subject: Agenda Item K, April 30, 1973, EQC Meeting

Tax Credit Applications

Attached are review reports on 6 Tax Credit Applications. These applications and the recommendations of the Director are summarized on the attached table.



DIARMUID F. O'SCANNLAIN

WEG:ahe

April 23, 1973

TAX CREDIT APPLICATIONS

<u>Applicant</u>	<u>Appl. No.</u>	<u>Facility</u>	<u>Claimed Cost</u>	<u>% Allocable to Pollution Control</u>	<u>Director's Recommendation</u>
Willamette Industries, Inc. Griggs Division	T-341	Wood waste residue handling system	\$91,027.39	80% or more	Issue
Weyerhaeuser Company Cottage Grove Plant	T-398	Elimination of fugitive emissions of fly-ash at truck loading station	14,210	80% or more	Issue
Weyerhaeuser Company Cottage Grove Plant	T-406	Fly-ash conveyor	7,131		Deny
Boise Cascade Corporation	T-423	Sanderdust emission control	57,416.62	80% or more	Issue
Western Kraft Corporation Albany Mill Division	T-436	Additional aerators, expansion of filter beds, and related electrical controls and piping	26,704	80% or more	Issue
Fir-Ply, Incorporated	T-448	Wigwam waste burner modification	26,395.58	80% or more	Issue

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

1. Applicant

Willamette Industries, Inc.
Griggs Division
1002 Executive Building
Portland, OR 97204

The applicant operates a plywood manufacturing plant located about seven (7) miles north of Lebanon on the Lebanon-Scio road.

This application was received on April 20, 1972. A report from the Mid-Willamette Valley Air Pollution Authority was received on August 3, 1972, and a corrected report from the Authority was received on September 6, 1972. This file had been inadvertently closed and was reopened April 3, 1973.

2. Description of Facility

The claimed facility is a wood waste residue handling system and hog installed in order to terminate the operation of the wigwam waste burner and consists of the following:

1. Jeffrey WB45 Hog with 250 HP motor
2. Wood waste chain conveyor
3. Blow pipe system and blowers
4. Hog fuel storage bin
5. Necessary foundations, electrical controls, etc.

The facility was completed and placed in service in July, 1971.

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

Facility Costs: \$91,027.39 (Accountant's certification was provided).

3. Evaluation of Application

The Mid-Willamette Valley Air Pollution Authority has reported that the Authority required this installation, they reviewed the plans and finally, they inspected the final installation which has resulted in the phase-out on the wigwam waste burner.

The system collects the wood waste residues, except sanderdust, from the mill and processes it into hog fuel that is stored and eventually sold as fuel for hog fuel boilers. Air pollution from the hog fuel storage bins is controlled by cyclones mounted on each bin.

It is concluded that this installation does reduce air pollution through the phase-out of the wigwam waste burner. Increased revenue earned from the sale of hog fuel made possible by this installation is approximately \$9,200 per year or about the same as the depreciation, on a 10 year basis, for the installation. Therefore, it is concluded that the company will have a net yearly loss in the operation of this installation.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$91,027.39 with 80% or more of the costs allocated to pollution control be issued for the facility claimed in Tax Application T-341.

RAR:sb
4-19-73

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

1. Applicant

Weyerhaeuser Company
Cottage Grove Plant
P. O. Box 275
Springfield, OR 97477

The applicant operates a plywood plant and miscellaneous wood products manufacturing facility at Cottage Grove, Oregon.

This application was received on December 18, 1972, and the report from the Lane Regional Air Pollution Authority was received on April 4, 1973.

2. Description of Facility

The facility claimed in this application which eliminated fugitive emissions of fly-ash at the truck loading station is described to consist of the following:

1. Johnson-March Model V 180 Verticlone conditioner
2. 72 inch dia. hopper
3. Detroit rotary seal feeder and control valve
4. Necessary foundations, structural framework and electrical controls

The facility was completed and placed in operation in January, 1972.

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

Facility Costs: \$14, 210.00 (Accountant's certification was provided).

3. Evaluation of Application

The report from the Lane Regional Air Pollution Authority stated that this facility was not required by the Authority. The Authority, however, did inspect and approve the operation of the completed facility.

The company stated purpose of this installation was to control fugitive emissions of fly-ash during the truck loading operations. The material, as collected and stored in the hopper, is extremely dry and fine. If it were loaded directly into the dump truck in this condition, a certain amount of the fly-ash would be discharged to the atmosphere as dust. This installation conditions the dry fly-ash by wetting it with water so that none of the material is inadvertently discharged to the atmosphere as dust during the truck loading operation.

It is concluded that this facility does operate satisfactorily and does prevent fugitive emissions of fly-ash to the atmosphere during the truck loading operation. It is further concluded that the costs allocated to pollution control should be 80% or more.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$14,210 with 80% or more of the costs allocated to pollution control be issued for the facility claimed in Tax Application T-398.

RAR:sb
4-19-73

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

1. Applicant

Weyerhaeuser Company
Cottage Grove Plant
P. O. Box 275
Springfield, OR 97477

The applicant operates facilities at Cottage Grove that produces lumber, plywood and other miscellaneous wood products.

This application was received on January 15, 1973. The report from the Lane Regional Air Pollution Control Authority was received on March 28, 1973.

2. Description of Facility

The facility claimed in this application is described to consist of the following:

1. A fly-ash screw conveyor, 64 ft. long, connecting the ash collection station and the hog fuel conveyor.

The facility was completed and placed in service in April, 1972.

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

Facility Costs: \$7,131.00 (Cost verification was provided).

3. Evaluation of Application

The report from the Lane Regional Air Pollution Authority states that this installation was not required, but that the Authority did review the plans and specifications for the installation and the work was done in accordance with these plans. The Authority also states that this installation would only be used in emergencies and, to date, the Authority has not observed it in operation.

This installation was made to cover emergency situations when the truck-trailer receiving the fly-ash is filled and not replaced promptly with another empty trailer. In such cases, the fly-ash is diverted by this facility back into the hog fuel that is being fed to the boilers. Without this fly-ash diversion

system, the company contends that the fly-ash would spill out onto the ground until such time when the filled trailer was replaced with an empty one.

The claimed facility will prevent the occurrence of spilled fly-ash when the truck-trailers are not moved promptly. However, when the filled trailer is not moved and when the fly-ash is diverted back to the hog fuel boiler, the net effect will be increased particulate emissions from the boiler stacks. In effect, instead of the fly-ash being spilled on the ground as a solid waste, it is loaded back into the boiler and a percentage of it will be discharged into the air as an air pollutant in the form of particulates.

It is concluded that this system does not operate to reduce air pollution and is therefore not eligible for a Pollution Control Facility Certificate.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate be denied for the facility claimed in Tax Application T-406.

RAR:sb
4-19-73

Date 4-19-73State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Boise Cascade Corporation
P. O. Box 610
LaGrande, OR 97850

The applicant operates a particleboard plant at Island City, Oregon.

This application was received on February 15, 1973.

2. Description of Claimed Facility

The facility claimed in this application which controlled the emission of sanderdust to the atmosphere is described to consist of the following:

1. 2 Carter-Day 144 R J 60 filter units
2. Sanderdust collection and handling ducts.
3. Necessary foundations, fans, motors and electrical controls

The facility was completed and placed in operation in September, 1972.

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

Facility Costs: \$57,416.62 (Accountant's certification was provided).

3. Evaluation of Application

The company was required to reduce the particulate emissions from the particleboard plant in order to attain compliance with OAR, Chapter 340, Section 25-320 (2). The Department reviewed and approved plans and specifications for this installation.

This installation accomplished the removal of two (2) - 12 foot dia. cyclones and their replacement with the Carter-Day filter units.

Particulate emissions to the atmosphere were reduced about 60 lb/hr or about 210 tons/year.

It is concluded that this facility does operate satisfactorily and did reduce particulate emissions to the atmosphere.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$57,416.62 with 80% or more of the costs allocated to pollution control be issued for the facility claimed in Tax Application T-423.

RAR:sb
4-19-73

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

1. Applicant

Western Kraft Corporation
Albany Mill Division
P. O. Box 339
Albany, Oregon 97321

The applicant owns and operates an integrated pulp and paper mill which utilizes the standard sulfate (Kraft) process and the neutral sulfate semi-chemical (NSSC) process in the manufacturing of pulp and paper products at Albany, Linn County, Oregon.

2. Description of Facilities

The claimed facility consists of two additional aerators for the aerated stabilization basin, an expansion of the filter beds which increased the existing filter beds by approximately 28 acres, and related electrical controls and piping.

The claimed facility was placed in operation in August, 1972.

Certification is claimed under the 1969 Act with 100% allocated to pollution control.

Facility Cost: \$26,704 (Accountant's certification was submitted)

3. Evaluation of Claimed Facility

Prior to the addition of the two aerators, the dissolved oxygen in the aerated lagoon during the winter, varied from 0.2 mg/l to 0.5 mg/l. (During the winter, all wastewater goes to the aerated lagoon following primary settling.) With the D.O. this low, a medium sized spill would have upset the aerated system. With the two additional aerators, the aeration horsepower has been increased by 25% and the aerated lagoon can better resist effects of fluctuating waste loads, and provide a factor of safety in operations.

The expansion of the filter beds will allow more primary treated effluent to be diverted from the aerated lagoon, allowing the company to meet the BOD discharge limitations as imposed by their Waste Discharge Permit.

It is concluded that these facilities were installed for pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Certificate bearing the cost of \$26,704 with 80% or more of the cost allocated to pollution control be issued for the facilities claimed in Tax Application No. T-436.

Date 4-19-73

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

1. Applicant

Fir-Ply, Inc.
7975 11th Street
White City, OR 97501

The applicant operates a plywood manufacturing plant at White City, OR.

This application was received on April 4, 1973.

2. Description of Facility

The facility claimed in this application is described as a modification of a wigwam waste burner and consists of the following:

1. Top Damper
2. Under-fire and Over-fire air systems
3. Ignition system
4. Temperature recording system
5. Automatic control system

The facility was completed and put into operation in March, 1972.

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

Facility costs \$26,395.58 (Accountant's cost certification was provided).

3. Evaluation of Application

This facility was installed in accordance with a Department of Environmental Quality approved compliance program and approved plans and specifications.

The completed modified wigwam waste burner was demonstrated to the Department as being capable of operating in compliance with OAR, Chapter 340, Section 25-020.

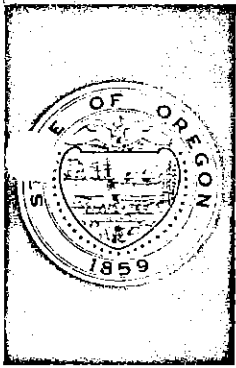
This facility did reduce emissions of particulate matter by an estimated 190 tons/year and CO₂ emission by an estimated 459 tons/year.

This facility does operate in a satisfactory manner and has reduced emissions of particulate matter and CO₂ by an estimated 649 tons/year.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$26,395.58 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-448.

PJ:sb
4-19-73



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5395

TOM McCALL
GOVERNOR

MEMORANDUM

DIARMUID F. O'SCANNLAIN
Director

To: Environmental Quality Commission

ENVIRONMENTAL QUALITY
COMMISSION

From: The Director

B. A. McPHILLIPS
Chairman, McMinnville
EDWARD C. HARMS, JR.
Springfield

Subject: Agenda Item L, for April 30, 1973, EQC Meeting

STORRS S. WATERMAN
Portland

Air Contaminant Discharge Permit, Boise Cascade Corpora-
tion, Salem, (Continuance of April 2, 1973 EQC Public
Hearing)

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

Background

Boise Cascade Corporation has operated the present 250 T/day (average production) ammonia-base sulfite pulp and paper mill since it was acquired in 1964 from the Columbia River Paper Company. The first liquid Waste Discharge Permit issued by the Water Quality Control Division of the Department of Environmental Quality in December, 1967, required that a waste liquor chemical recovery system be installed and placed in operation prior to July 1, 1972. Construction of this \$6.5 million project was begun in the summer of 1969. Initial start-up trials were made in April, 1972, and regular use was commenced on July 5, 1972. As reported in many press releases issued during the summer and fall months of 1972 and finally in the staff report to the EQC at the Salem meeting on December 21, 1972, many unforeseen problems occurred with the system.

Boise Cascade makes pulp from chips in six batch-type digesters (pressure cookers) with a cook liquor of dissolved sulfur dioxide (sulfurous acid) and ammonium bisulfite. At the end of a cook, the digesters are relieved of much of their pressure, and the contents blown under the remaining pressure into a "blow pit," where the pulp is washed. The cook liquor at the time of the blow still has much sulfur dioxide dissolved in it, most of which comes out of solution when the liquor-pulp mixture reaches the blow pit. For approximately fifteen minutes during each blow, blow pit emissions average some 20-30,000 parts per million sulfur dioxide (2-3%) and 70-80 pounds of sulfur dioxide per ton of pulp along with a great quantity of water vapor. These emissions are discharged through two blow-pit vent stacks to the atmosphere. Blows occur about once each hour.

The spent sulfite liquor which remains is washed from the pulp. At that time, it contains sulfur dioxide tied up as ammonium sulfite and about half the weight of the chips originally fed to the digester. The purpose of the recovery system is to regenerate cook liquor from the sulfur in the spent liquor and to use the heating value obtained from burning the dissolved wood solids to generate steam. This also reduces the water pollution which used to be caused by draining the spent liquor to the river. The recovery system was installed to meet water pollution control requirements as the spent liquor is too strong to discharge to a normal water pollution control treatment system. Recovery is accomplished by evaporating the spent liquor from its original 10% solids up to 50% solids - then using the evaporated liquor as fuel for a recovery furnace. Furnace flue gases are scrubbed with an ammonia solution, the scrubber effluent ("weak acid") is then fortified with sulfur dioxide generated in a sulfur burner, and the resulting "strong acid" sent back to the digester area for re-use as fresh cook liquor.

The recovery system at the Boise Cascade, Salem mill was originally scheduled for startup in April, 1972. The initial trials were not successful, for mechanical reasons. After further "de-bugging," and trial runs, the system was placed in operation on July 5, 1972, with the intention of making adjustments in the process controls. It soon developed that major adjustments would have to be made. The furnace air supply was excessive, necessitating bricking up ducts which conducted cooling air to auxiliary fuel burners (done July 12, 1972). The next problem was with the absorption section, which either washed out SO_2 from the flue gas and generated a dense fume, or had a clear discharge but didn't wash SO_2 . Being able to run the furnace for periods greater than a few hours (which had not been possible from April through the end of June) made it feasible to call in a consultant to establish optimum furnace parameters. By July 20, furnace operating conditions had been established, but frequent plugging of the evaporators became the major problem, limiting operating runs to a matter of days. This was diagnosed as being caused by excessive pulp fibers in the weak black liquor which collected in the evaporator bodies and resulted in the plugging. Liquor adhering to the fibers ^{polymerized} "polymerized" (became like a plastic), necessitating long shutdowns for cleaning. Fiber filters were ordered, and arrived at the mill in the last week of July.

Meanwhile, continual monitoring of ambient sulfur dioxide had been started in the Century Tower in Mid-July, and has continued to the present. Peaks recorded on the monitor have been identified with peak emissions from the blow pit vent. Ten-minute grab samples, taken by hand also had been collected during the early part of July when furnace emissions were high. These grab-samples were discontinued when the furnace emissions were reduced to less than 1000 ppm, for at that point ambient concentrations from the furnace emissions decreased to less than the minimum sensitivity of the technique.

Subsequent to August 5, the recovery system has operated with good control of emissions from the recovery furnace with the exception of a few upsets. The digesters remain uncontrolled and apparently now are the major, if not the sole, remaining source of SO₂ odors. The design of the digester control system has been completed except for details like the pipe size and connection locations which are dictated by the purchase of specific components. Purchase of components has commenced, with some items ordered ahead of schedule. Completion of the system will depend on the delivery of specific items. First emphasis is being given to completion of the added relief system which is intended to allow relieving the digesters nearly to atmospheric pressure, prior to their being pumped out. Completion of the relief system will itself allow some reduction of digester emissions by drawing off sulfur dioxide which now escapes to the atmosphere. Completion of the entire pump-out system, originally scheduled for early 1974, is now anticipated to be prior to December, 1973.

The Department has met with Boise Cascade several times to accelerate the completion of the pump-out system, and will continue to work to that end. Boise Cascade has committed itself to making all the haste it can, and will install components as they arrive, so that the limiting factor for completing the system remains the delivery time of purchased items.

Other than the SO₂ emissions that presently occur during digester blows, the two apparent unsolved air quality problems that remain are excessive amounts of particulate and density (opacity) of the recovery furnace "plume" and the need for improved reliability and effectiveness of operation of the overall chemical recovery and emission control system.

The presently proposed permit is intended to bring all of these items under best practicable control.

Discussion of Proposed Air Contaminant Discharge Permit

The Department has prepared a Proposed Air Contaminant Discharge Permit to clearly identify the operating parameters, emission restrictions and rules of the Department pursuant to OAR 340, Sections 20-033.02 through 20-033.20. The Department issued public notice on February 28, 1973, that consideration would be given at the April 2, 1973, EQC Meeting in Portland for issuance of the Proposed Air Contaminant Discharge Permit. The Public Hearing was continued until the April 30, 1973, EQC Meeting in Salem to provide maximum opportunity for public understanding and comment.

As a result of the Public Notice procedure of the Department a petition with 75 signatures was received from the Marion County Children's Services Division which "would seriously object to the state granting permission to Boise Cascade to discharge air pollutants from its Salem plant." The petition which is appended to this report went on to say that the undersigned "endorse your goals for clean water and air, and would see granting of this type permit a step in the wrong direction." It should be pointed out that the purpose of the permit program is to draw all of the emission and operating requirements together and issue a single permit which allows the state to conduct a more rigorous control program than might otherwise be practicable.

The proposed permit is a Multiple Source Permit and was prepared by the Mid-Willamette Valley Air Pollution Authority and the Department, and contains restrictions and limitations applicable to both the Department and Regional Authority rules. Comments from the company were received by letter dated March 15, 1973, and at the Public Hearing in Portland on April 2, 1973, and are attached. The company has requested until July 1, 1974, to demonstrate compliance of the digester pump-out system. The company is committed to a program to complete this installation prior to December 31, 1973. It is felt that a run-in period will be necessary to verify stability of newly

installed equipment. The company has indicated that a production capacity of 330 adt per day will be achievable after completion of the control program. The company also stated that this control system was designed to meet a 500 ppm emission concentration at the 330 adt per day production capacity rather than the 400 ppm limit proposed by this permit. The permit application and, to date, the emission data and production capacity, as reported to the Department, does not indicate that production has reached a level of 330 adt per day. Further, the Department has not approved any production increases for this mill since 1969 and would not recommend any plant production increases until compliance with all applicable regulations is demonstrated. The company has stated that since all SO₂ emission points will be collected and discharged through a single stack the proposed limit of eighteen (18) pounds of SO₂ per adt is more restrictive than the allowable under OAR 340, Section 25-355(2), which would allow twenty (20) pounds of SO₂ per adt on a mill site basis. The Department is of the opinion that other small point sources may have some emissions of SO₂ such as the steam power boilers when firing residual fuel oil during natural gas curtailments which are not currently controlled or counted as a part of the twenty (20) pound limitation. The company has further suggested that the pump-out system be allowed an SO₂ emission of 0.2 pounds per minute per ton in accordance with OAR 340, Section 25-355(2)(a).

The Department considers that the eighteen (18) pounds of SO₂ per adt from the recovery furnace is achievable and reasonable. However, it is agreed that 20 lb/T on a total mill-site basis should be allowed as a maximum emission. The company requested that an extended time be allowed for controlling particulate emissions from the recovery furnace from the current reported level of 5.5 pounds per adt to less than 4.0 pounds per adt if furnace and scrubber optimization does not bring about this reduction. Since this is a small amount (1.5 pounds per adt), improvement within the current facility has a reasonable chance of success. If furnace and scrubber optimization fails to

provide the necessary reduction then a formal compliance schedule would be required, a new permit prepared accordingly and further Public Hearings would have to be held.

The following specific changes in the initially proposed permit are now proposed as a result of review by the Attorney General's Office, written comment submitted by the company at the public hearing on April 2, 1973, and a subsequent meeting between the Department and Boise Cascade Corporation on April 10, 1973:

A change in meaning has been made to delete a permit to "operate" the facility to a permit to "discharge" treated air contaminants.

Section A - Sulfite Pulp and Paper

Performance Standards and Emission Limits

A wording change has been made to specify "Permittee" rather than to only infer reference to the permittee.

Condition #1: The date for final compliance demonstration has been extended to July 1, 1974, from December 31, 1973, to allow the company time to shake-down the pump-out system without violating the permit conditions. In addition, further restrictions were incorporated in condition #1 emissions of SO₂ from the recovery system.

Condition #2: A wording change has been made to clarify the date that this condition in actuality becomes condition #1, a recovery system rather than just the recovery furnace. Condition #2(c) has been added to further limit SO₂ emissions and condition #2(d) has had a typographical error corrected (5,590 to 5,580 pounds per day).

Condition #3: The wording has been modified for clarity and 3(b) has been eliminated since compliance is required under conditions #1 and #9 (now renumbered as condition #8).

Condition #4: Deleted.

Condition #5: Renumbered as condition #4 with an additional limitation requiring opacity not to equal or exceed 20% for an aggregated period of three (3) minutes in any one (1) hour.

Condition #6: Renumbered as condition #5 with a correction under 6 (b) requiring visual opacity not to equal or exceed 20% rather than 40%.

Conditions #7 and #8: Renumbered as conditions #6 and #7.

Condition #9: Renumbered as condition #8 and the date for submission of purchase orders to confirm the progress relative to the digester pump-out system has been extended to May 15, 1973, from March 15, 1973, in that this date has already elapsed.

Conditions #10, #11, #12 and #13:

Renumbered as conditions #9, #10, #11, and #12.

Section B - Torula Yeast Manufacturing

Permitted Activities

A change in meaning has been made to delete a permit to "operate" the facility to a permit to "discharge" treated air contaminants. Further, the input of 9,000 pounds per hour was in error and has been corrected to 14,500 pounds per hour in accordance with consultation with MWVAPA and the company.

Performance Standards and Emission Limits

The wording was changed to specify "Permittee" rather than to only infer reference to the permittee. In addition the particulate emissions on a process weight basis have been increased to 12.8 pounds per hour based on 14,500 pounds per hour input from 9.36 pounds per hour on 9,000 pounds per hour input under condition #1(b).

Condition #2: No change.

Monitoring and Reporting

Conditions #1, #2, #3 and #4: Renumbered as conditions #3, #4, #5 and #6.

Section C - General Requirements

Emergency Reduction Plan

Condition #1: No change.

Prohibited Activities

Condition #2: No change.

New Condition #3: This condition places a further restriction on the permittee prohibiting any discharges of air contaminants not covered by this permit which would exceed the standards fixed by said permit or the rules of the Department.

Special Conditions

Condition #3: Renumbered as condition #4 and has been changed to a Notice Condition relative to solid waste disposal.

Conditions #4 and #5: Renumbered as conditions #5 and #6.

New Condition #7: This condition requires permittee to make an application for a new permit if a substantial change is proposed affecting the discharge of air contaminants.

Conditions #6 and #7: Renumbered as conditions #8 and #9.

SUMMARY AND CONCLUSIONS

1. Since 1967 Boise Cascade has been in the process of implementing a comprehensive air and water control program to meet requirements of the DEQ and its predecessor the State Sanitary Authority. The program, costing many millions of dollars, includes the following:
 - a) Primary treatment of liquid wastes.
 - b) Secondary treatment of liquid wastes.
 - c) Chemical recovery system and control of atmospheric emissions.
2. The company's liquid waste load has been reduced by approximately 95% and its water pollution control problem essentially resolved except for a continuing requirement for further reduction of effluent color.
3. In the process of solving its river pollution problems, air pollution problems were created which have been more difficult, costly and time-consuming to solve than anticipated by the company and the Department.
4. SO₂ emissions from the recovery furnace are presently well controlled and are generally below regulatory limits. (SO₂ emissions from the recovery furnace presently average 400 ppm concentration and .17 lbs of SO₂ per ton of pulp produced, compared to 800 ppm hourly average and 20 lbs per ton on a mill-site basis, allowed by regulation)

5. Two major parts of the company's control program remain to be completed. These include:
 - a) Installation of a digester "pump-out" system to relieve digester pressures slowly and route the odorous off-gases through the control system and thereby doing away with the present practice of "blowing" digesters under pressure to the atmosphere. (This will eliminate SO₂ concentrations of 20-30,000 ppm and total SO₂ amounting to 70-80 lbs/ton of production.)
 - b) Reduction of particulate emissions from present levels of 5 1/2 lbs/ton to 4 lbs/ton or less and reduction of "plume" opacity from the present range of 40 to 50% opacity to 20% or less.
6. Compliance with the presently proposed permit conditions will ~~meet or exceed the Department Sulfite Pulp Mill regulations;~~ however, because of the mill's sensitive location still further reductions in emissions may be required to completely solve the community air quality problem.

Director's Recommendation

The Director recommends that the proposed Air Contaminant Discharge Permit, No. 24-4171, for Boise Cascade Corporation, Salem Paper Group, be issued with the above noted changes and with such further changes as may be considered appropriate in light of information developed as a result of this hearing.


DIARMUID F. O'SCANNLAIN

4/24/73

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74

Page 1 of 8

APPLICANT:

BOISE CASCADE CORPORATION
Paper Group
Salem, Oregon

REFERENCE INFORMATION

File Number: 24-4171
Appl. No.: 0012 Received: 11/1/72
Other Air Contaminant Sources at ths Site:

Source SIC Permit No.

Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STATIONARY INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER 2621
TORULA YEAST MANUFACTURE 2821

Permitted Activities

Until such time as this permit expires or is modified or revoked, BOISE CASCADE CORPORATION is herewith permitted to discharge treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit from its 310 ton per day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, and steam generating boiler facilities, including those processes and activities directly related or associated thereto located at Salem, Oregon.

Divisions of Permit Specifications:

Page

Section A - Sulfite Pulp and Paper 2
Section B - Torula Yeast Manufacture 5
Section C - General Requirements 7

REVISED

19 APR 1973

SECTION A - SULFITE PULP AND PAPER

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emission of air contaminants are kept at the lowest practicable levels, and in addition:

1. After July 1, 1974, sulfur dioxide (SO₂) emissions from the sulfite pulp mill (including the recovery system) shall not exceed the following:
 - a. 800 ppm as an hourly average
 - b. 5,000 pounds^{250 T} per day as a monthly average
 - c. Twenty (20) pounds per unbleached, air-dried ton (adt) and 6,200 pounds per day as a maximum daily emission^{310 T}

2. Until completion of this digester pump-out system the recovery furnace SO₂ emissions shall not exceed the following:
 - a. 800 ppm as an hourly average
 - b. 400 ppm as a monthly average
 - c. Eighteen (18) pounds per ton and 4,500 pounds per day as a monthly average^{250 tons}
 - d. Eighteen (18) pounds per ton and 5,580 pounds per day^{310 tons}

3. Blow pit vent SO₂ emissions shall be kept to the lowest practicable levels at all times.

4. As soon as practicable but not later than July 1, 1974, the recovery system particulate emissions shall not exceed the following:
 - a. Four (4) pounds per adt of pulp produced.
 - b. An opacity equal to or greater than twenty percent (20%) for an aggregated time or more than three (3) minutes in any one (1) hour exclusive of uncombined moisture.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

BOISE CASCADE CORPORATION

Recom. Expir. Date: 12/31/74

Page 3 of 8

Appl. No: 0012

File No: 24-4171

5. Emissions from the steam-generating boilers, fired by natural gas and alternatively residual fuel oil, shall not exceed:

- a. Two-tenths (0.2) grain per standard cubic foot, at twelve percent (12%) carbon dioxide (CO₂) or at fifty percent (50%) excess air.
- b. An opacity equal to or greater than twenty percent (20%) for an aggregated time of more than three (3) minutes in any one (1) hour.
- c. One thousand (1,000) ppm of sulfur dioxide (SO₂).

6. The use of residual fuel oil containing more than two and one-half percent (2.5%) sulfur by weight is prohibited.

7. The use of residual fuel oil containing more than one and three-quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

8. Permittee shall continue the installation of blow pit vent SO₂ emission controls, as approved by the Department of Environmental Quality, according to the following schedule:

- a. Purchase orders for remaining components and for all site preparation and erection work as issued, shall be confirmed in writing by no later than May 15, 1973.
- b. Construction shall be completed by no later than December 31, 1973.
- c. In the event that the company is unable to demonstrate compliance by December 31, 1973, the company shall submit reports to the Department on not less than a monthly basis relative to the problems encountered and the procedures and time schedules implemented to solve those problems.
- d. Compliance shall be demonstrated as soon as possible after the installation is completed, but in no case later than July 1, 1974.
- e. The permittee shall notify the Department of Environmental Quality in writing within fourteen (14) days of the completion of each of these conditions, and further, shall submit an interim progress report by not later than August 1, 1973, describing the construction status for installing the components of the blow-pit vent control system.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

BOISE CASCADE CORPORATION

Recom. Expir. Date: 12/31/74

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9. By no later than August 1, 1973, the permittee shall determine and submit a report to the Department of Environmental Quality summarizing the mechanism and location of particulate formation in the recovery system, and the minimizing of emissions possible through operating-parameter optimization.

10. The permittee shall effectively monitor the operation and maintenance of the sulfite pulp and paper production and control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with the testing, monitoring and reporting procedures on file at the Department of Environmental Quality or in conformance with recognized applicable standard methods approved in advance by the Department, and shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week until completion of digester pump-out system
b. Recovery system sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

11. The final monthly report required in condition 10. submitted during any calendar year shall also include quantities and types of fuels used during that calendar year.

12. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

SECTION B - TORULA YEAST MANUFACTURING

Permitted Activities

Until such time as this permit expires or is modified or revoked, BOISE CASCADE CORPORATION is herewith permitted to discharge treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit from its 1,400 pound per hour (dry basis) Torula Yeast Plant (14,500 pound/hour spent sulfite liquor input) consisting of fermenters, separators, wash tanks, pasteurizer, spray dryer with exhaust cyclones and scrubber, and packing station exhaust baghouse collector located at Salem, Oregon.

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating control equipment at full efficiency and effectiveness, such that the emission of air contaminants are kept at the lowest practicable levels, and in addition:

1. Particulate emissions from the plant shall not:
 - a. Exceed 0.1 grain per standard cubic foot of exhaust gas from any single source.
 - b. Exceed 12.8 pounds per hour from all emission sources in the plant at a production rate of 1,400 pounds per hour.

2. Air contaminant emissions from any single source of emission shall not be as dark or darker in shade as that designated as number one (No. 1) on the Ringelmann Chart or equal to or greater than twenty (20%) percent opacity for a period of more than three (3) minutes in any (1) hour.

Monitoring and Reporting

3. The permittee shall effectively monitor the operation and maintenance of the Torula Yeast production and control facilities. A record of all such data shall be maintained and made available upon request by the Department of Environmental Quality or the Mid-Willamette Valley Air Pollution Authority (Regional Authority). Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file at the Department of Environmental Quality or Regional Authority, or in conformance with recognized applicable standard methods approved in advance by the Department and Regional Authority.

4. At the end of each calendar year a report shall be submitted including annual production and operating hours to both the Department of Environmental Quality and the Mid-Willamette Valley Air Pollution Authority (MWVAPA).

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

BOISE CASCADE CORPORATION

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5. Any scheduled maintenance of operating or emission control equipment which would result in any violation of this permit shall be reported at least twenty-four (24) hours in advance to the Department of Environmental Quality and the Mid-Willamette Valley Air Pollution Authority (MWVAPA).

6. Any upsets or breakdowns which result in any violations of this permit shall be reported within one (1) hour to the Department of Environmental Quality and the Mid-Willamette Valley Air Pollution Authority (MWVAPA).

SECTION C - GENERAL REQUIREMENTS

Emergency Reduction Plan

1. The company shall establish and maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality, or Mid-Willamette Air Pollution Authority (Regional Authority).

Prohibited Activities

2. No open burning shall be conducted at the plant site.

3. Permittee is prohibited from causing or allowing discharges of air contaminants from sources not covered by this permit so as to cause the plant site to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.

Special Conditions

4. (NOTICE CONDITION) All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.

5. ~~The permittee shall allow Department of Environmental Quality~~ representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise to conduct all necessary functions related to this permit.

6. No alteration, modification, or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.

7. The permittee will be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.

8. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

Amount Due

\$175.00

Date Due

December 1, 1973

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

BOISE CASCADE CORPORATION

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9. This permit is subject to revocation if the Department of Environmental Quality finds:

- a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
- b. That there has been a violation of any of the conditions contained herein.
- c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

Boise Cascade Corporation
Salem, Oregon

Background

1. Boise Cascade Corporation operates a sulfite pulp and paper mill at Commercial and Trade Streets in downtown Salem. The pulp capacity is 310 tons per day of air-dried, unbleached sulfite pulp.
2. The pulp is produced in six batch digesters each with a capacity of 12.5 tons. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO_2) to the atmosphere. The pulp is washed of spent sulfite (cook) liquor and dissolved wood solids (which amount to approximately half the weight of chips initially charged) in the blow pits. The liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include flyash and SO_2 . Almost all of the flyash is removed in a mechanical collector while the SO_2 and the remaining flyash is treated for removal in a scrubber. The scrubber effluent is fortified with sulfur dioxide gas produced in a sulfur burner, and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO_2 : The company is installing a system for pumping pulp out of the digesters instead of blowing it out under pressure as is the present practice. The system is scheduled for completion by December 1, 1973 at which time the emissions of SO_2 from digester blows should be reduced essentially to zero.
 - b. Recovery furnace SO_2 : Emissions of SO_2 average 350 ppm and 17.5 pounds of SO_2 per ton of pulp produced.
 - c. The other source of SO_2 is the acid plant, which is under one (1) pound per ton.
 - d. Recovery furnace particulate presently averages 5.5 pounds per ton. A compliance schedule is included in the permit which will result in compliance with the limit of four (4) pounds per ton of particulate by December 31, 1974. That the emissions are not presently in compliance is a part of the failure of this installation to perform as guaranteed. The control technique to be applied is not yet determined. It may happen that compliance can be achieved by optimizing operating parameters, in which case compliance would be possible quite readily. If equipment must be added, however, that equipment must be designed, ordered, delivered, installed, placed in operation and tested. The compliance schedule as presented in the permit is based on allowing a five-month analytical and test period to determine

whether parameter optimization will yield compliance, while simultaneously requiring the preliminary engineering which would be required for the controls which will be needed if that optimization does not achieve compliance.

4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a DuPont Model 460 SO₂ Photometric (ultraviolet) monitor for recovery furnace SO₂, and the Oregon-Washington Committee method (manual sampling technique) for blow pit vent emissions.
5. The power boilers are fueled with natural gas, with residual oil as a backup.
6. Mid-Willamette Valley Air Pollution Authority provided permit criteria for the Torula Yeast Plant, located on the mill site. The emission limits are based on the Authority's general tables relating emissions to process weight.

Evaluation

1. The location of this mill requires that control of emissions be highly efficient. The pump-out system for digester control is maximum control efficiency, essentially 100%. The permit conditions and compliance schedule embodies the proposal submitted by the company in response to the Sulfite Mill Emission Regulation and approved by the Department of Environmental Quality. It is expected that the installation of a pump-out system essentially will eliminate SO₂ odors in the vicinity of this mill.
2. The applicable limits on air contaminant discharges from this mill are:
 - a. Plant-site SO₂: 20 pounds per ton of pulp produced
 - b. Recovery furnace SO₂: Not to exceed 800 ppm as an hourly average
 - c. Recovery furnace particulate: Four (4) pounds per ton
 - d. Digester SO₂: Commented on in paragraph 1 above
3. The permit duration is proposed to terminate after controls are installed, so that post-control, normal emissions can be incorporated into a new permit. The expiration date that is proposed to be December 31, 1974.

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Boise Cascade for its Salem mill.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
DEPARTMENT OF ENVIRONMENTAL QUALITY

Recommended Expiration Date: 12/31/74

Page 1 of 6

APPLICANT:

BOISE CASCADE CORPORATION
Paper Group
Salem, Oregon

REFERENCE INFORMATION

File Number 24-4171
Appl. No.: 0012 Received: 11/1/72
OTHER AIR Contaminant Sources at this Site:

<u>Source</u>	<u>SIC</u>	<u>Permit No.</u>
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Source(s) Permitted to Discharge Air Contaminants:

NAME OF AIR CONTAMINANT SOURCE

STANDARD INDUSTRY CODE AS LISTED

SULFITE PULP AND PAPER
TORULA YEAST MANUFACTURE

2621
2821

Permitted Activities

Until such time as this permit expires or is modified or revoked, BOISE CASCADE PAPER GROUP is herewith permitted to operate its 310 ton/day (pulp capacity) sulfite pulp and paper mill consisting of pulp and paper making facilities, cook chemical preparation facilities, cook chemical recovery facilities, and steam-generating boiler facilities, including those processes and activities directly related or associated thereto located at Salem, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with the requirements, limitations, and conditions of this permit.

Divisions of Permit Specifications:

Page

Section A - Sulfite Pulp and Paper
Section B - Torula Yeast Manufacture
Section C - General Requirements

2
5
6

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

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BOISE CASCADE CORPORATION

SECTION A - SULFITE PULP AND PAPER

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a mill-site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced after December 31, 1973.
2. The recovery furnace SO₂ emissions shall not exceed the following:
 - a. 800 ppm as an hourly average
 - b. 400 ppm as a monthly average
 - c. Eighteen (18) pounds per adt and 5,590 pounds per day.
3. Blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Be reduced to essentially no discharge after December 31, 1973.
4. SO₂ emissions from sources other than the recovery furnace and boilers #4, #5, and #6, shall:
 - a. Be kept to lowest practicable levels at all times.
 - b. Not exceed one (1) pound per adt.
5. Recovery furnace particulate emissions shall not exceed four (4) pounds per ton after July 1, 1974.
6. The steam-generating boilers, fired by natural gas and alternatively residual fuel oil, shall not exceed:
 - a. Two-tenths (0.2) grain per standard cubic foot, at twelve percent (12%) carbon dioxide (CO₂) or at fifty percent (50%) excess air.
 - b. An opacity equal to or greater than forty percent (40%) for an aggregated time of more than three (3) minutes in any one (1) hour.
 - c. One thousand (1000) ppm of sulfur dioxide (SO₂).

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
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BOISE CASCADE CORPORATION

7. The use of residual fuel oil containing more than two and one-half percent (2.5%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three-quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Installation of blow pit vent SO₂ emission controls, as approved by the Department of Environmental Quality, shall continue to proceed according to the following schedule:
 - a. Purchase orders for remaining components and for all site preparation and erection work to be issued by no later than March 15, 1973.
 - b. Construction to be completed by no later than December 1, 1973.
 - c. Compliance to be demonstrated by no later than January 15, 1974.
 - d. The permittee shall notify the Department of Environmental Quality in writing within fourteen (14) days of the completion of each of these conditions, and further, shall submit an interim progress report by no later than August 1, 1973 describing the construction status for installing the components of the blow-pit vent control system.
10. Recovery furnace particulate control shall be implemented according to the following schedule:
 - a. The mechanism and location of particulate formation, and chemical composition of the particulate shall be determined and reported to the Department of Environmental Quality by no later than July 1, 1973.
 - b. The alternative methods that may be implemented, in the event that optimizing furnace and scrubber parameters should fail to provide compliance, shall be reported to the Department of Environmental Quality and described in terms of efficiency, cost, and time required to install by no later than July 1, 1973.
 - c. If parameter optimization does not yield compliance, an alternative method shall be selected and plans, specifications and a construction schedule shall be submitted to the Department of Environmental Quality by no later than September 15, 1973.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS
Prepared by the Staff of the
Department of Environmental Quality
BOISE CASCADE CORPORATION

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10. (continued)

- d. Major equipment items shall be ordered and placement of orders confirmed in writing to the Department of Environmental Quality by no later than December 15, 1973.
- e. An interim report on construction progress shall be submitted by no later than July 1, 1974.
- f. Compliance shall be demonstrated by no later than December 31, 1974.

Monitoring and Reporting

11. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week
b. Recovery furnace sulfur dioxide emissions	Continually monitored
c. Recovery furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

12. The final monthly report required in condition No. 11 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.
13. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

PROPOSED AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Prepared by the Staff of the
Department of Environmental Quality

Recom. Expir. Date: 12/31/74

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Appl. No: 0012

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BOISE CASCADE CORPORATION

SECTION B - TORULA YEAST MANUFACTURING

Permitted Activities

Until such time as this permit expires or is modified or revoked, BOISE CASCADE is herewith permitted to operate its 1400 pound/hour dry basis Torula Yeast Plant (9000 pound/hour spent sulfite liquor input) consisting of fermenters, separators, wash tanks, pasteurizer, spray dryer with exhaust cyclones and scrubber, and packaging station exhaust baghouse collector located at Salem, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

1. Particulate emissions from the plant shall not:
 - a. Exceed 0.1 grain per standard cubic foot of exhaust gas from any single source.
 - b. Exceed 9.36 pounds per hour from all emission sources in the plant at a production rate of 1400 pounds per hour, or such lower levels of emission as may be achievable with the present control equipment.
2. Air contaminant emissions from any single source of emission shall not be as dark or darker in shade as that designated as number one (No. 1) on the Ringelmann Chart or equal to or greater than twenty (20) percent opacity for a period of more than three (3) minutes in any one (1) hour.

Monitoring and Reporting

1. The operation of the plant shall be regularly monitored and inspected to insure that compliance with all applicable rules and regulations is maintained. All air contaminant control equipment shall be inspected regularly; records shall be maintained of the dates of inspection and maintenance and such records shall be made available at the plant site for review when requested.
2. At the end of each calendar year a report shall be submitted including annual production and operating hours.
3. Any scheduled maintenance of operating or emission control equipment which would result in any violation of this permit shall be reported at least twenty-four (24) hours in advance.
4. Any upsets or breakdowns which result in any violations of this permit shall be reported within one (1) hour.

BOISE CASCADE CORPORATION

SECTION C - GENERAL REQUIREMENTS

Emergency Reduction Plan

1. The Company shall establish and Maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality, or Regional Authority.

Prohibited Activities

2. No open burning shall be conducted at the plant site.

Special Conditions

3. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
4. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
5. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
6. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

Amount Due

Date Due

\$175.00

December 1, 1973

7. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

BOISE CASCADE CORPORATION

STATEMENT TO THE OREGON ENVIRONMENTAL COMMISSION REGARDING THE PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT FOR THE SULFITE MILL AT SALEM, OREGON

April 2, 1973

My name is Jim Fahlstrom, I am the Resident Manager of the Boise Cascade Sulfite Pulp and Paper Mill at Salem, Oregon.

I would like to open my statement by emphasizing that the Boise Cascade Corp. is aware that its Salem Sulfite Mill is situated in a highly sensitive area. We, therefore, realize that if ever a well-balanced pollution-control job had to be done, it has to be done efficiently and thoroughly at this location.

It was on this basis that we decided that only the newest and most technologically efficient sulfite recovery system would be acceptable to meet both the water and air pollution problems at our Salem Mill. This recovery system was primarily designed and installed to solve the water pollution problem without creating an air pollution problem. We advised both the commission and public that since these problems are interrelated, there would be a temporary increase in the air pollution problem. I say temporary, because we are presently in the midst of an accelerated program to install a million dollar digester pump-out system to essentially eliminate the SO₂ emissions which are periodically released from our digesters. Since this emission, although of short duration, is of relatively high concentration, it is the most irritating to the public. The accelerated program will have this system completed by this December, approximately four (4) months ahead of our original compliance schedule. This reflects our concern with the

environment, our willingness to work with the Department of Environmental Quality, and to make a special effort when there is a special problem.

Our recovery boiler and absorption-scrubber system was designed for an average 500 ppm SO₂ emission at the approved designed tonnage of 330 unbleached AD tons per day. Since the initial problems with the start-up of our recovery system we have maintained our SO₂ emissions below the average 500 ppm and far below the 800 ppm hourly average of the sulfite regulation. It should be pointed out that this is an efficiency of 95% removal of SO₂ and the 500 ppm SO₂ concentration is one-half the concentration allowed from a power boiler burning residual oil to heat the buildings in downtown Salem. In order to maintain this lower emission level of SO₂ we have changed the balance of chemical control at the sacrifice of increasing our particulate emissions. In the design of our ammonia base chemical recovery system we expected extremely low particulate emissions based on our liquor ash content which is less than 1% or approximately one-tenth of that of Magnesium based liquors. No other mill burning ammonia base liquors at this time had experienced particulate problems but, then, none were designed to reduce their SO₂ emission to 500 ppm. It undoubtedly will be necessary to operate at closer to the regulation limits in order to reduce the emission of particulates.

Under Section 2(b), the 400 ppm SO₂ as a monthly average has apparently been imposed because we are presently operating at this point. This, in effect, penalizes us for trying to be good and responsible neighbors and citizens. As already stated, this is not a simply-solved problem; we are operating in this range but are not meeting the particulate standard, which is surely the lesser of the two evils. We will always try to operate

this system so as to minimize our emissions but to impose this extremely low SO₂ limit on this mill without recognizing the difficulty of this problem or the improvements to be made once our digester pump-out system is completed, is totally unrealistic and unfair. As stated in your staff's report, and I quote, "The installation of a (digester) pump-out system essentially will eliminate SO₂ odors in the vicinity of this mill." We, therefore, suggest that items 2(a) and (b) under Section A of the permit read as follows:

2. The recovery furnace SO₂ emissions shall not exceed
 - a) 800 ppm as an hourly average
 - b) 500 ppm as a monthly average

The staff background report on this permit states that our pulp capacity is 310 tons per day of air-dried, unbleached sulphite pulp. The company has consistently used a 330 AD ton capacity level as a basis for design of both air and water pollution abatement facilities, all of which have been approved by the staff of the Department of Environmental Quality. Production was rising before the installation of our recovery system. Production since that time has been reduced as a result of operational difficulties of which we are all aware. We had assumed we were in complete agreement with the staff that this is a 310 AD ton capacity plant. We are, therefore, unable to understand the staff's recommendation to impose a monthly average of (5,000) five thousand pounds of SO₂ per day which would limit the mill to 250 AD tons per day. The actual capacity of 310 AD tons is reflected by the limit of 6,200 pound SO₂ per day which the staff used as a maximum daily emission. Therefore, we suggest item (1) under Section A of the permit read as follows:

1. After July 1, 1974, sulfur dioxide emissions from the sulfite pulp mill, including the recovery system, shall not exceed 20 pounds per unbleached, air dried ton of pulp produced or 6,200 pounds of SO₂ per day as a monthly average based on the mill's present pulping capability of 310 AD tons of unbleached pulp per day.

Also, the Sulfite Regulations when issued, included a letter from the Director of the DEQ specifically stating and I quote:

"The 20 pound/ton is a plant-site limit, so that an acceptable compliance schedule proposal will have to show that all sources together will not exceed that limit. It is anticipated that compliance will be difficult to achieve with the recovery furnace alone, and emission from other sources including the digesters will be essentially zero."

We presently have three point sources of emission, which will be reduced to one, utilizing the recovery furnace as the sole emission point. (The power boilers are not treated as part of the sulfite mill under OAR 25-380.) On this basis, the limit of 18 pounds of SO₂ per AD ton as suggested by the staff is too restrictive since these other sources will contribute to it. It is therefore suggested that Items 2c, 3 and 4 be struck and a new paragraph be inserted to read:

The total mill SO₂ emissions excluding power boilers shall not exceed 20 pounds per AD ton and 6,200 pounds per day (based on 310 AD tons per day).

Item 10 outlines a compliance schedule for meeting particulate emissions standards by July 1, 1974. We want the commission to understand that at the time of adoption the Sulfite Mill Regulation on September 17, 1971, there were no data available on the particulate emissions from an ammonia base recovery system. Our recovery system was in the midst of installation and all conditions indicated there would be no problem with meeting the particulate emission limit. But as explained earlier, as the result of maintaining a low SO₂ emission, we find our particulate is not under 4 lb. per ton, but 5.5 to 6.0 lb. per ton. This is a relatively small amount of emission to remove but because of the fineness of the particle could be extremely expensive. All we are asking for is sufficient time, and 9 months is truly a minimal amount of time, to experiment and research process changes such as firing conditions of the boiler and operating conditions in the absorption-scrubber. Simultaneously, we will be testing various filtering media to remove the fine particles. If the investigation shows that the internal methods will not do the job, and we hope to complete it within the nine months, then we will be faced with a major capital expenditure to remove 1.5 - 2.0 lb. of innocuous particulate per ton of pulp by addition of external equipment and a compliance schedule will be submitted. We feel it is not too much to ask the commission for this time even if a variance from the regulation is required based on the circumstances. We wish to emphasize again that the digester pump-out system which is a major control system to reduce the SO₂ odor is 4 months ahead of schedule. The timetable we are discussing relates to the final marginal improvement in particulate emission control. We, therefore, suggest Item 10 of Section A of the permit read as follows:

The mechanism and location of particulate formation in the recovery system, and the minimizing of emissions possible through operating-parameter optimization shall be determined and reported by no later than December 1, 1973.

Another requirement of this permit which is more stringent than imposed on other industries, is that of the opacity limit placed on recovery boilers. A recovery boiler is very similar to a hog-fuel boiler in that it is burning a high moisture and variable fuel which if wasted would add to water or solid waste pollution. It is unrealistic to impose a 20% opacity limit rather than the 40% opacity limit applicable to a hog-fuel boiler. The wet plume from a recovery boiler makes a reading of opacity extremely difficult which is a further reason for applying a limit of 40% opacity.

The last recommendation made by the staff appears to create unintended problems. This requirement would prevent the discharge of air from our bleach plant, chip blowing system, building exhaust fans, etc., since all of these discharges have some degree of air contaminates. It is therefore suggested that this read:

"Discharge of air contaminates from sources not covered by this permit so as to cause the plant site to exceed the standards fixed by this permit are prohibited."

Paper Group

1600 S.W. 4th Avenue
Portland, Oregon 97201
(503) 224-7250

March 15, 1973

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
MAR 16 1973

AIR QUALITY CONTROL



Boise Cascade

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Mr. Clint Ayers

Gentlemen:

In response to your letter of March 8, 1973 regarding the proposed Air Contaminant Discharge Permit for the Boise Cascade Salem Sulfite Mill, File No. 24-4171, we wish to make the following comments:

Referring to the proposed permit outline:

Page 2, part 1 of Section A - Sulfite Pulp and Paper

The compliance schedule for the blow-pit emissions was originally April 1974. We have volunteered to accelerate the completion date for this project to December 31, 1973. However, to use this as the compliance date for the total mill is felt to be unrealistic. We therefore request that the outside date of July 1, 1974 contained in the Sulfite Mill Regulation be allowed for total mill compliance in case unforeseen problems occur after completion of the installation. This additional period allowed for total mill compliance would then allow sufficient time to make corrections to the system, if needed.

Page 2, part 2

The establishment of a monthly average SO₂ standard of 400 ppm based on today's production is again totally unrealistic. The present average production rate has been limited due to ash problems, etc. in the recovery furnace area, however, these are being resolved and the mill designed production capacity of 330 AD tons per day will be attained. At this production rate, our system was designed to meet a 500 ppm emission whereas the regulation was set at a 800 ppm. It is therefore suggested that the monthly average SO₂ emission be at least 500 ppm to allow for full productive capacity and should the design limit be found to be in error, that further allowances be made, providing the 800 ppm hourly average is not exceeded.

Page 2, part 2c

The Sulfite Mill Regulations set a stringent limit of 20 pounds of SO₂ per AD ton of unbleached pulp for a total mill emission. The use of a total was done deliberately since each mill has a different number of emission point

Mr. Clint Ayers
March 15, 1973
Page Two

sources. We presently have three point sources of emission but plan to reduce this to one, utilizing the recovery furnace stack as the sole emission point. On this basis, the limit of 18 pounds of SO₂ per AD ton is too restrictive since these other sources will contribute to it. It is therefore suggested that Page 2, parts 2c, 3b and 4b be struck and a new paragraph be inserted to read:

The total mill SO₂ emissions excluding power boilers shall not exceed 20 pounds per AD ton and 6,600 pounds per day (based on 330 AD tons per day).

Page 2, part 3b

Until the digester pump-out system has demonstrated that essentially no discharge will evolve as designed, we feel that undue restriction has been placed on this yet uncompleted system. It is suggested that some allowance be made for this system at this time up to the regulation limitation of 0.2 pounds SO₂ per minute per ton.

Part 4b would also be covered above.

Page 2, part 5 and Page 3, parts 10, a,b,c,d,e and f

It is as yet uncertain whether the recovery furnace particulate emissions are truly exceeding the four (4) pounds per AD ton. This is a result of the limited number of tests obtained to-date and uncertainty of the correct application of the test procedure. We have been reporting the higher readings in order to be completely above-board in our reports. If it should prove we are presently in compliance, then the wording of paragraph 5 is no problem and paragraph 10 would be unnecessary. On the other hand, if it is determined that we are not in compliance then the compliance schedule is far too restrictive in light of the dimension of the problem. Based on the miniscule amount of particulate to be further removed to attain 4 pounds per AD ton, it is requested that sufficient time be allotted to investigate the various alternatives for solving this problem so it may be done in an economically reasonable manner. We are therefore requesting, should the particulate emission be found to be in excess of 4 pounds per AD ton, that the following compliance schedule be approved:

Complete Particulate Emission Study	December 1, 1973
Complete Preliminary Engineering	February 1, 1974
Submit Construction Schedule	May 1, 1974
Submit Progress Report	November 1, 1974
Compliance	May 1, 1975

This schedule represents the earliest date to derive a satisfactory program for reducing the particulate levels, particularly if an additional system is required. The original system was installed with the addition of a multiclone system for removal of particulate even though our spent liquor has an ash under 1% and no other ammonia base recovery system had made this provision. It should be understandable that it is not desirable to add a further large expenditure to achieve a relatively small reduction in particulate emission.

Mr. Clint Ayers
March 15, 1973
Page Three

Page 4, part 11c

At such time as the particulate levels are under control and stable operation has been attained, it is recommended that the testing schedule requirements be reduced from 3 to 2 tests per month.

Permit Expiration Date

Setting December 31, 1974 as the permit expiration date provides only 21 months duration. We request a longer permit period to give us an adequate period of time to bring emissions under control, perfect operating practice and accumulate performance data. December 31, 1976 is recommended as the expiration date for this permit.

Page 5, section B, part 1 (Performance Standards)


The process weight quantity of 9000#/hr. is too low. Based on the design production rate of 1400# of yeast production per hour, we would have an input of 14,500# spent liquor solids per hour. It is requested that the particulate emission limit be based upon 14,500#/hr. process rate.

Page 5, part 2 (Performance Standards)

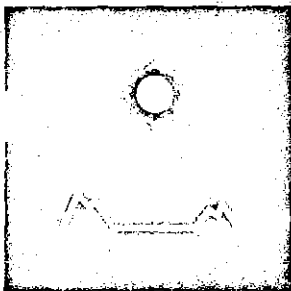
We would appreciate more detail on the definition of the Ringelmann No. 1 and 20% opacity standards as applied to the Yeast Plant emission itself. We would like to know how these standards apply to the existing plume.

Very truly yours,

BOISE CASCADE/PAPER GROUP


Joe Kolberg
Manager Environmental Control

JK:cjs



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

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

March 26, 1973

Department of Environmental Quality
1234 S.W. Morrison St.
Portland, Oregon 97205

Attn: Mr. Harold Patterson

Gentlemen:

SUBJ: REVIEW OF DRAFT AIR CONTAMINANT DISCHARGE PERMIT FOR
BOISE CASCADE CORPORATION, SALEM

I have several comments on this proposed permit for your
consideration:

A. Performance Standards and Emission Limits

1. Section 2. Recovery furnace SO₂ restrictions: I note you have added a monthly average emission limit and that Publishers Paper in Newberg can apparently achieve much lower levels than Boise Cascade in Salem. Could paragraphs 2 and 5 be tied to a new paragraph based on OAR 20-001, highest and best practical treatment, to insure some stimulus exists to continue efforts to reduce recovery boiler SO₂ and particulate emissions?

2. Section 3. Blow pit vent SO₂ emissions: Please note that the December 31, 1973 compliance date listed here does not agree with the January 15, 1974 compliance date listed in paragraph 10.

3. Section 5. Recovery furnace particulate emissions: Again, please note that the July 1, 1974 compliance date listed here does not agree with the December 31, 1974 date listed in paragraph 10. Any compliance date after July, 1974, violates OAR 25-365.

MWVAPA strongly urges DEQ to include a visible emission restriction of 20% opacity for the recovery furnace, as stated in OAR 21-015.

4. Section 6. Power boilers: Please note that OAR 21-015 restricts visible emissions to No. 1 Ringelmann and 20%, not 40% as you have cited. The Authority has had some complaints on black smoke and we have observed No. 5 Ringelmann emissions from these boilers.



5. Proposed new paragraph - fugitive emissions: The Authority has received complaints of wood dust and fall-out from Boise Cascade in the business district adjacent to the mill. The mill also handles some bulk chemicals with fugitive emissions.

6. Proposed new paragraph - highest and best practical treatment: As stated above, there is a specific need to reference paragraphs 2 and 5 to OAR 20-001. Boise Cascade must in time further reduce recovery boiler SO2 and particulate emissions.

B. Compliance Demonstration Schedule

9 and 10. Please note comments above concerning final compliance dates.

C. Monitoring and Reporting

11, 12, 13. These are excellent sections which we shall use as a guide in our own program.

I have telephoned these comments to you to insure availability to your staff. The two most critical items from our viewpoint are to see that a visible emission standard is included for the recovery boiler and to clarify the final compliance date for the recovery boiler.

Sincerely yours,



Michael D. Roach
Director

MDR:DM:db:963/018

The undersigned employees of the Marion County Children's Services Division would seriously object to the state granting permission to Boise Cascade to discharge air pollutants from its Salem plant.

We endorse your goals for clean water and air, and would see the granting of this type permit a step in the wrong direction.

- | | |
|---------------------------------|-----------------------------------|
| 1. <i>Levy B. Snider</i> | 26. <i>Ernie Andersen</i> |
| 2. <i>Marilyn D. Skisner</i> | 27. <i>Carol Foltz</i> |
| 3. <i>Larry Wolfe</i> | 28. <i>Cathy Braun</i> |
| 4. <i>Linda Dore</i> | 29. <i>Jean Dodge</i> |
| 5. <i>James R. Frazier</i> | 30. <i>Jerry L. Mabus</i> |
| 6. <i>Sheri Penfold</i> | 31. <i>Ron Hartwig</i> |
| 7. <i>Michael Wilk</i> | 32. <i>Jockie Van Dyke</i> |
| 8. <i>Dorothy Quince</i> | 33. <i>Bonnie Glennie</i> |
| 9. <i>Edda Cox</i> | 34. <i>Dorothy Sundrick</i> |
| 10. <i>Robert M. Conductor</i> | 35. <i>James H. Baber</i> |
| 11. <i>Richard Clark</i> | 36. <i>Stacia Drummond</i> |
| 12. <i>Helen M. Higginson</i> | 37. <i>Terry Horton</i> |
| 13. <i>Myrle Smith</i> | 38. <i>John E. Vaagen</i> |
| 14. <i>John J. Johnson</i> | 39. <i>Laura M. Quace</i> |
| 15. <i>Chad Tunney</i> | 40. <i>Malcolm D. Kabor</i> |
| 16. <i>Arthur Kennedy</i> | 41. <i>Dorene Elder</i> |
| 17. <i>Barbara McKee</i> | 42. <i>Vera K. Mattos</i> |
| 18. <i>Dolores Myers</i> | 43. <i>Fenny Bellamy</i> |
| 19. <i>Rakona White</i> | 44. <i>[Signature]</i> |
| 20. <i>Candace C. Wight</i> | 45. <i>Sandra Newton</i> |
| 21. <i>James Dixon</i> | 46. <i>Laren Pierson</i> |
| 22. <i>Delphine Kuhns</i> | 47. <i>Kathy Hansen</i> |
| 23. <i>Virginia C. Allender</i> | 48. <i>[Signature]</i> |
| 24. <i>Lorena J. Cole</i> | 49. <i>Judy Gitchey</i> |
| 25. <i>Vary Kammack</i> | 50. <i>Spezz</i> |

The undersigned employees of the Marion County Children's Services Division would seriously object to the state granting permission to Boise Cascade to discharge air pollutants from its Salem plant.

We endorse your goals for clean water and air, and would see the granting of this type permit a step in the wrong direction. Continued:

- | | |
|---------------------------|----------------|
| 51. Vicki Boyley | 76. |
| 52. Don Thomas | 77. |
| 53. Marilyn Grumme | 78. |
| 54. Cheryl Dan | 79. |
| 55. Charles Mullen | 80. |
| 56. Jo Anne Gutz | 81. |
| 57. Sylvia Nelson | 82. |
| 58. Dennis H. Thompson | 83. |
| 59. Sharon Neesteeper | 84. |
| 60. Curtis D. Field | 85. |
| 61. Howard D. Clore | 86. |
| 62. Gaele Hay | 87. |
| 63. Don Oxford | 88. |
| 64. Mary L. Smith | 89. |
| 65. Jean Sabatini | 90. |
| 66. Gloria Faney | 91. |
| 67. Aylee Hymmes | 92. |
| 68. Margaret McArthur | 93. |
| 69. Concepcion S. Vazquez | 94. |
| 70. Sandra Edwards | 95. |
| 71. Jayne D. Pauler | 96. |
| 72. Ellen Chambers | 97. |
| 73. Beck Bailey | 98. |
| 74. Sharon Dary | 99. |
| 75. Ray. F. Groten | 100. |

B-C Seeks Permit For Air Pollution

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Pulse Cascade Corporation has filed an application with the state for a permit to discharge air pollutants from its Salem plant.

Anyone wishing to verify information concerning the applicant or applicant may do so in writing to the Department of Environmental Quality (DEQ), Portland, prior to Dec. 23.

The full text of the application, including maps, plans and other material, is open

for public inspection at the DEQ Air Contaminant Discharge Permit Program, 1274 S.W. Morrison St., Portland, DEQ said.

Pulse Cascade is seeking an air contaminant discharge permit for emissions from its sulfite pulp and paper production in Salem.

The Eskimo population was probably never more than 100,000.





Boise Cascade

Paper Group

P.O. Box 2089
Salem, Oregon 97308
(503) 362-2421

25 April 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Diarmuid F. O'Scannlain
Director

Re: NC 165, Installation of a
Seventh Digester at the
Salem Sulfite Pulp Mill,
EI 24-4171, SIC 2621

Gentlemen:

In your letter dated April 11, 1973 approving this installation, you include the following statement:

- "1. Installation of a seventh digester will not itself increase production of sulfite pulp at this mill over present levels, or an average monthly production of 250 air-dried, unbleached tons per day."

This statement causes the Company grave concern. It includes an erroneous conclusion that the average plant production is 250 air-dried, unbleached tons per day. As the Department is fully aware, the Salem plant has a practical production capacity of 310 ADT and a capacity of 330 ADT per day has been used as the basis for design of all pollution control equipment planned or installed in the past several years. The recent depressed level of actual production is a result of break-in of the recovery boiler system which interrupted a progressively increasing production level through the spring of 1972. Production for April, 1973 will be 280 ADT per day if no shut-down occurs in the last few days of the month. These production figures are shown on the attached graph.

Department of Environmental Quality
Portland, Oregon 97205

April 25, 1973
Page Two

The new digester is designed to maintain this production level after installation of the digester pumping system, a step that has been fully approved by the DEQ staff. Your letter of April 11 represents a reversal of position and introduces a curtailment of production that we feel exceeds the department's regulatory powers.

Very truly yours,

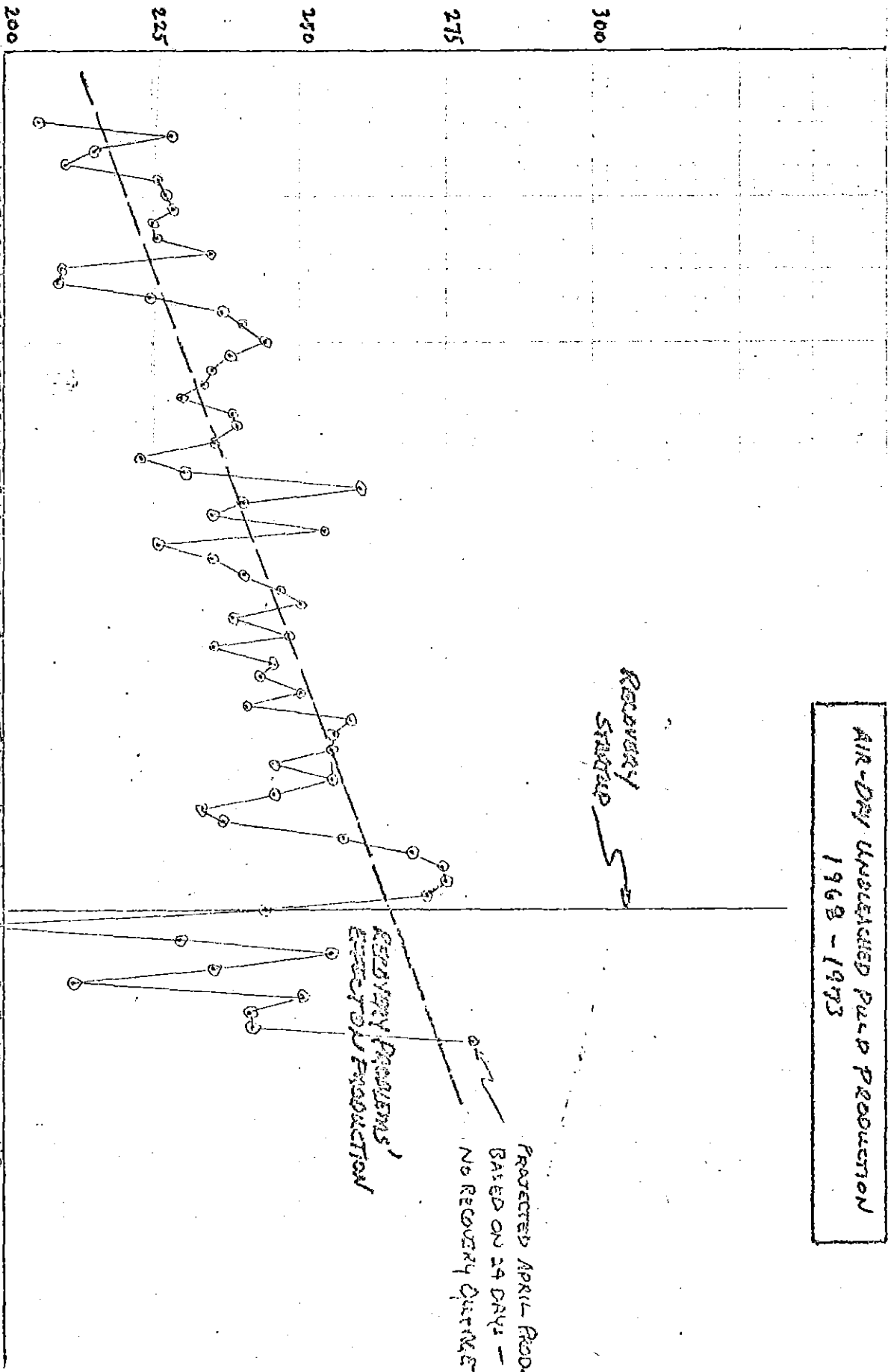


C. J. Fahlstrom
Resident Manager

CJF/dt

Attachment

AVERAGE MONTHLY PRODUCTION
A. D. UNBL. TONS / DAY



AIR-DRY UNBLEACHED PULP PRODUCTION
1968 - 1973

RECOVERY STARTED

RECOVERY PROBLEMS!
EFFECT ON PRODUCTION

PROJECTED APRIL FLOOD.
BASED ON 24 DAYS -
NO RECOVERY OUTPUT.

JANUARY 1968 FEBRUARY 1968 MARCH 1968 APRIL 1968 MAY 1968 JUNE 1968 JULY 1968 AUGUST 1968 SEPTEMBER 1968 OCTOBER 1968 NOVEMBER 1968 DECEMBER 1968 JANUARY 1969 FEBRUARY 1969 MARCH 1969 APRIL 1969 MAY 1969 JUNE 1969 JULY 1969 AUGUST 1969 SEPTEMBER 1969 OCTOBER 1969 NOVEMBER 1969 DECEMBER 1969 JANUARY 1970 FEBRUARY 1970 MARCH 1970 APRIL 1970 MAY 1970 JUNE 1970 JULY 1970 AUGUST 1970 SEPTEMBER 1970 OCTOBER 1970 NOVEMBER 1970 DECEMBER 1970 JANUARY 1971 FEBRUARY 1971 MARCH 1971 APRIL 1971 MAY 1971 JUNE 1971 JULY 1971 AUGUST 1971 SEPTEMBER 1971 OCTOBER 1971 NOVEMBER 1971 DECEMBER 1971 JANUARY 1972 FEBRUARY 1972 MARCH 1972 APRIL 1972 MAY 1972 JUNE 1972 JULY 1972 AUGUST 1972 SEPTEMBER 1972 OCTOBER 1972 NOVEMBER 1972 DECEMBER 1972 JANUARY 1973 FEBRUARY 1973 MARCH 1973 APRIL 1973 MAY 1973 JUNE 1973 JULY 1973 AUGUST 1973 SEPTEMBER 1973 OCTOBER 1973 NOVEMBER 1973 DECEMBER 1973

TIME, MONTHS

BOISE CASCADE CORP., SALEM, OREGON
SILVER HILL
PCS



Boise Cascade

Paper Group

P. O. Box 2089
Salem, Oregon 97308
(503) 362-2421

25 April 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Diarmuid F. O'Scannlain
Director

Gentlemen:

Attached is a supplement to the written statement we presented
to the Environmental Quality Commission on April 2, 1973.

We would intend to make this presentation at the April 30
hearing in Salem.

Yours very truly,

C. J. Fahlstrom
Resident Manager

Attachment

CJF/dt

BOISE CASCADE CORPORATION

SUPPLEMENTAL STATEMENT TO THE OREGON ENVIRONMENTAL QUALITY
COMMISSION REGARDING THE PROPOSED AIR CONTAMINANT DISCHARGE
PERMIT FOR THE SULFITE MILL AT SALEM, OREGON

April 30, 1973

C. J. Fahlstrom
Resident Manager
Boise Cascade/Paper Group
Salem, Oregon

On April 2, 1973 we submitted to the Commission a comprehensive statement on this proposed permit. Since that time we have met with the Department Staff without resolving a basic impasse over the plant production level. The staff maintains the position that our production must be reduced to 250 ADT per day from the design capacity of 310 - 330 ADT per day. The staff position was reiterated in a letter dated April 11, 1973 approving installation at the mill of a seventh digester which is designed to offset a production loss because of the new digester pumping system currently planned for operation by December 1, 1973. This letter and our reply are attached.

The Company cannot accept a reversal of Department position to impose a 20% reduction in production at this mill. Under current regulations the mill is entitled to operate within a monthly average daily SO₂ emission limit of 20 pounds per ADT of production, or 6,200 pounds for 310 ADT per day. The imposition of a 5,000 pound per day monthly average limit as proposed by the staff in Condition 1 of the permit is, in the company's view, illegal as well as unreasonable and discriminatory. If this condition is retained in the permit, the Company will have to consider legal remedies to challenge the Commission's position.

Department of Environmental Quality
Air Quality Control Division

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

Boise Cascade Corporation
Salem, Oregon

Background

1. Boise Cascade Corporation operates a sulfite pulp and paper mill at Commercial and Trade Streets in downtown Salem. The pulp capacity is 310 tons per day of air-dried, unbleached sulfite pulp.
2. The pulp is produced in six batch digesters each with a capacity of 12.5 tons. Pulp batches are discharged at approximately one-hour intervals, with accompanying discharges of sulfur dioxide (SO_2) to the atmosphere. The pulp is washed of spent sulfite (cook) liquor and dissolved wood solids (which amount to approximately half the weight of chips initially charged) in the blow pits. The liquor is evaporated to approximately 50% solids and incinerated in a recovery furnace. The combustion products include flyash and SO_2 . Almost all of the flyash is removed in a mechanical collector while the SO_2 and the remaining flyash is treated for removal in a scrubber. The scrubber effluent is fortified with sulfur dioxide gas produced in a sulfur burner, and returned to the digester area for reuse as a cooking liquor.
3. The status of controls at this mill is:
 - a. Digester blow SO_2 : The company is installing a system for pumping pulp out of the digesters instead of blowing it out under pressure as is the present practice. The system is scheduled for completion by December 1, 1973 at which time the emissions of SO_2 from digester blows should be reduced essentially to zero.
 - b. Recovery furnace SO_2 : Emissions of SO_2 average 350 ppm and 17.5 pounds of SO_2 per ton of pulp produced.
 - c. The other source of SO_2 is the acid plant, which is under one (1) pound per ton.
 - d. Recovery furnace particulate presently averages 5.5 pounds per ton. A compliance schedule is included in the permit which will result in compliance with the limit of four (4) pounds per ton of particulate by December 31, 1974. That the emissions are not presently in compliance is a part of the failure of this installation to perform as guaranteed. The control technique to be applied is not yet determined. It may happen that compliance can be achieved by optimizing operating parameters, in which case compliance would be possible quite readily. If equipment must be added, however, that equipment must be designed, ordered, delivered, installed, placed in operation and tested. The compliance schedule as presented in the permit is based on allowing a five-month analytical and test period to determine

whether parameter optimization will yield compliance, while simultaneous requiring the preliminary engineering which would be required for the controls which will be needed if that optimization does not achieve compliance.

4. The monitoring and reporting program is to be performed according to procedures approved by the Department. This mill uses a DuPont Model 460 SO₂ Photometric (ultraviolet) monitor for recovery furnace SO₂, and the Oregon-Washington Committee method (manual sampling technique) for blow pit vent emissions.
5. The power boilers are fueled with natural gas, with residual oil as a backup.
6. Mid-Willamette Valley Air Pollution Authority provided permit criteria for the Torula Yeast Plant, located on the mill site. The emission limits are based on the Authority's general tables relating emissions to process weight.

Evaluation

1. The location of this mill requires that control of emissions be highly efficient. The pump-out system for digester control is maximum control efficiency, essentially 100%. The permit conditions and compliance schedule embodies the proposal submitted by the company in response to the Sulfite Mill Emission Regulation and approved by the Department of Environmental Quality. It is expected that the installation of a pump-out system essentially will eliminate SO₂ odors in the vicinity of this mill.
2. The applicable limits on air contaminant discharges from this mill are:
 - a. Plant-site SO₂: 20 pounds per ton of pulp produced
 - b. Recovery furnace SO₂: Not to exceed 800 ppm as an hourly average
 - c. Recovery furnace particulate: Four (4) pounds per ton
 - d. Digester SO₂: Commented on in paragraph 1 above
3. The permit duration is proposed to terminate after controls are installed, so that post-control, normal emissions can be incorporated into a new permit. The expiration date that is proposed to be December 31, 1974.

Recommendation

It is recommended that the attached proposed permit be reviewed for issuance to Boise Cascade for its Salem mill.

BOISE CASCADE CORPORATION

SECTION A - SULFITE PULP AND PAPER

Performance Standards and Emission Limits

All air contaminant-generating processes and all air-contaminant-control equipment shall be maintained and operated at maximum efficiency and effectiveness, such that emissions of air contaminants are kept to lowest practicable levels, and in addition:

1. Sulfur dioxide (SO₂) emissions on a mill-site basis shall not exceed twenty (20) pounds per unbleached, air-dried ton (adt) of pulp produced after December 31, 1973. *Concentration 200 ppm as hourly average*
2. *July 1 1974*
the incorporation of the system
The recovery furnace SO₂ emissions shall not exceed the following:
 - a. 800 ppm as an hourly average
 - b. 400 ppm as a monthly average *500*
 - c. Eighteen (18) pounds per adt and 5,590 pounds per day. *250-5000*
20 lb/adt file Jan
3. Blow pit vent SO₂ emissions shall:
 - a. Be kept to the lowest practicable levels at all times.
 - b. Be reduced to essentially no discharge after December 31, 1973.
4. *check*
SO₂ emissions from sources other than the recovery furnace and boilers #4, #5, and #6, shall:
 - a. Be kept to lowest practicable levels at all times.
 - b. Not exceed one (1) pound per adt.
5. Recovery furnace particulate emissions shall not exceed four (4) pounds per ton after July 1, 1974.
6. The steam-generating boilers, fired by natural gas and alternatively residual fuel oil, shall not exceed:
 - a. Two-tenths (0.2) grain per standard cubic foot, at twelve percent (12%) carbon dioxide (CO₂) or at fifty percent (50%) excess air.
 - b. An opacity equal to or greater than forty percent (40%) for an aggregated time of more than three (3) minutes in any one (1) hour.
 - c. One thousand (1000) ppm of sulfur dioxide (SO₂).

BOISE CASCADE CORPORATION

7. The use of residual fuel oil containing more than two and one-half percent (2.5%) sulfur by weight is prohibited.
8. The use of residual fuel oil containing more than one and three-quarters percent (1.75%) sulfur by weight is prohibited after July 1, 1974.

Compliance Demonstration Schedule

9. Installation of blow pit vent SO₂ emission controls, as approved by the Department of Environmental Quality, shall continue to proceed according to the following schedule:
 - a. Purchase orders for remaining components and for all site preparation and erection work to be issued by no later than March 15, 1973.
 - b. Construction to be completed by no later than December 1, 1973.
 - c. Compliance to be demonstrated by no later than January 15, 1974.
 - d. The permittee shall notify the Department of Environmental Quality in writing within fourteen (14) days of the completion of each of these conditions, and further, shall submit an interim progress report by no later than August 1, 1973 describing the construction status for installing the components of the blow-pit vent control system.
10. Recovery furnace particulate control shall be implemented according to the following schedule:
 - a. The mechanism and location of particulate formation, and chemical composition of the particulate shall be determined and reported to the Department of Environmental Quality by no later than July 1, 1973.
 - b. The alternative methods that may be implemented, in the event that optimizing furnace and scrubber parameters should fail to provide compliance, shall be reported to the Department of Environmental Quality and described in terms of efficiency, cost, and time required to install by no later than July 1, 1973.
 - c. If parameter optimization does not yield compliance, an alternative method shall be selected and plans, specifications and a construction schedule shall be submitted to the Department of Environmental Quality by no later than September 15, 1973.

10. (continued)

- d. Major equipment items shall be ordered and placement of orders confirmed in writing to the Department of Environmental Quality by no later than December 15, 1973.
- e. An interim report on construction progress shall be submitted by no later than July 1, 1974.
- f. Compliance shall be demonstrated by no later than December 31, 1974.

Monitoring and Reporting

11. The operation and maintenance of the sulfite pulp and paper production and control facilities shall be effectively monitored. A record of all such data shall be maintained and a summary submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file with and approved by the Department of Environmental Quality, and shall include, but not necessarily be limited to, the following parameters and frequencies:

<u>Parameter</u>	<u>Minimum Frequency</u>
a. Digester blow pit vent sulfur dioxide emissions	Once per week <i>until the ^{digestor} steam system is operational completed</i>
b. Recovery ^{system} furnace sulfur dioxide emissions	Continually monitored <i>until</i> Dec. 31, 1975
c. Recovery ^{system} furnace particulate emissions	Three (3) times per month
d. Production of unbleached pulp	Summarized monthly from production records

- 12. The final monthly report required in condition No. 11 submitted during any calendar year shall include the quantities and types of fuels used during that calendar year.
- 13. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence

BOISE CASCADE CORPORATION

SECTION B - TORULA YEAST MANUFACTURING

Permitted Activities

Until such time as this permit expires or is modified or revoked, BOISE CASCADE is herewith permitted to operate its 1400 pound/hour dry basis Torula Yeast Plant (9000 pound/hour spent sulfite liquor input) consisting of fermenters, separators, wash tanks, pasteurizer, spray dryer with exhaust cyclones and scrubber, and packaging station exhaust baghouse collector located at Salem, Oregon, and to discharge therefrom treated exhaust gases containing air contaminants in conformance with requirements, limitations, and conditions of this permit.

Performance Standards and Emission Limits

1. Particulate emissions from the plant shall not:
 - a. Exceed 0.1 grain per standard cubic foot of exhaust gas from any single source.
 - b. Exceed 9.36 pounds per hour from all emission sources in the plant at a production rate of 1400 pounds per hour, or such lower levels of emission as may be achievable with the present control equipment.
2. Air contaminant emissions from any single source of emission shall not be as dark or darker in shade as that designated as number one (No. 1) on the Ringelmann Chart or equal to or greater than twenty (20) percent opacity for a period of more than three (3) minutes in any one (1) hour.

Monitoring and Reporting

1. The operation of the plant shall be regularly monitored and inspected to insure that compliance with all applicable rules and regulations is maintained. All air contaminant control equipment shall be inspected regularly; records shall be maintained of the dates of inspection and maintenance and such records shall be made available at the plant site for review when requested.
2. At the end of each calendar year a report shall be submitted including annual production and operating hours.
3. Any scheduled maintenance of operating or emission control equipment which would result in any violation of this permit shall be reported at least twenty-four (24) hours in advance.
4. Any upsets or breakdowns which result in any violations of this permit shall be reported within one (1) hour.

BOISE CASCADE CORPORATION

SECTION C - GENERAL REQUIREMENTS

Emergency Reduction Plan

1. The Company shall establish and Maintain a "Preplanned Abatement Strategy", filed with and approved by the Department of Environmental Quality, and implemented in response to Air Pollution Alerts, Warnings, and Emergencies as they are Declared and Terminated by the Department of Environmental Quality, or Regional Authority.

Prohibited Activities

2. No open burning shall be conducted at the plant site.

Special Conditions

3. All solid wastes or residues shall be disposed of in manners and at locations approved by the Department of Environmental Quality.
4. Department of Environmental Quality representatives shall be permitted access to the plant site at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, and otherwise conducting necessary functions related to this permit.
5. No alteration, modification or expansion of the subject sulfite pulp and paper production facilities shall be made without prior notice to and approval by the Department of Environmental Quality.
6. The Annual Compliance Determination Fee shall be submitted to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>	<u>Date Due</u>
\$175.00	December 1, 1973

7. This permit is subject to termination if the Department of Environmental Quality finds:
 - a. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application.
 - b. That there has been a violation of any of the conditions contained herein.
 - c. That there has been a material change in quantity or character of air contaminants emitted to the atmosphere.

BOISE CASCADE CORPORATION

STATEMENT TO THE OREGON ENVIRONMENTAL COMMISSION REGARDING THE PROPOSED
AIR CONTAMINANT DISCHARGE PERMIT FOR THE SULFITE MILL AT SALEM, OREGON

April 2, 1973

My name is Jim Fahlstrom, I am the Resident Manager of the Boise Cascade Sulfite Pulp and Paper Mill at Salem, Oregon.

I would like to open my statement by emphasizing that the Boise Cascade Corp. is aware that its Salem Sulfite Mill is situated in a highly sensitive area. We, therefore, realize that if ever a well-balanced pollution-control job had to be done, it has to be done efficiently and thoroughly at this location.

It was on this basis that we decided that only the newest and most technologically efficient sulfite recovery system would be acceptable to meet both the water and air pollution problems at our Salem Mill. This recovery system was primarily designed and installed to solve the water pollution problem without creating an air pollution problem. We advised both the commission and public that since these problems are interrelated, there would be a temporary increase in the air pollution problem. I say temporary, because we are presently in the midst of an accelerated program to install a million dollar digester pump-out system to essentially eliminate the SO₂ emissions which are periodically released from our digesters. Since this emission, although of short duration, is of relatively high concentration, it is the most irritating to the public. The accelerated program will have this system completed by this December, approximately four (4) months ahead of our original compliance schedule. This reflects our concern with the

environment, our willingness to work with the Department of Environmental Quality, and to make a special effort when there is a special problem.

Our recovery boiler and absorption-scrubber system was designed for an average 500 ppm SO₂ emission at the approved designed tonnage of 330 unbleached AD tons per day. Since the initial problems with the start-up of our recovery system we have maintained our SO₂ emissions below the average 500 ppm and far below the 800 ppm hourly average of the sulfite regulation. It should be pointed out that this is an efficiency of 95% removal of SO₂ and the 500 ppm SO₂ concentration is one-half the concentration allowed from a power boiler burning residual oil to heat the buildings in downtown Salem. In order to maintain this lower emission level of SO₂ we have changed the balance of chemical control at the sacrifice of increasing our particulate emissions. In the design of our ammonia base chemical recovery system we expected extremely low particulate emissions based on our liquor ash content which is less than 1% or approximately one-tenth of that of Magnesium based liquors. No other mill burning ammonia base liquors at this time had experienced particulate problems but, then, none were designed to reduce their SO₂ emission to 500 ppm. It undoubtedly will be necessary to operate at closer to the regulation limits in order to reduce the emission of particulates.

Under Section 2(b), the 400 ppm SO₂ as a monthly average has apparently been imposed because we are presently operating at this point. This, in effect, penalizes us for trying to be good and responsible neighbors and citizens. As already stated, this is not a simply-solved problem; we are operating in this range but are not meeting the particulate standard, which is surely the lesser of the two evils. We will always try to operate

this system so as to minimize our emissions but to impose this extremely low SO₂ limit on this mill without recognizing the difficulty of this problem or the improvements to be made once our digester pump-out system is completed, is totally unrealistic and unfair. As stated in your staff's report, and I quote, "The installation of a (digester) pump-out system essentially will eliminate SO₂ odors in the vicinity of this mill." We, therefore, suggest that items 2(a) and (b) under Section A of the permit read as follows:

2. The recovery furnace SO₂ emissions shall not exceed
 - a) 800 ppm as an hourly average
 - b) 500 ppm as a monthly average

The staff background report on this permit states that our pulp capacity is 310 tons per day of air-dried, unbleached sulphite pulp. The company has consistently used a 330 AD ton capacity level as a basis for design of both air and water pollution abatement facilities, all of which have been approved by the staff of the Department of Environmental Quality. Production was rising before the installation of our recovery system. Production since that time has been reduced as a result of operational difficulties of which we are all aware. We had assumed we were in complete agreement with the staff that this is a 310 AD ton capacity plant. We are, therefore, unable to understand the staff's recommendation to impose a monthly average of (5,000) five thousand pounds of SO₂ per day which would limit the mill to 250 AD tons per day. The actual capacity of 310 AD tons is reflected by the limit of 6,200 pound SO₂ per day which the staff used as a maximum daily emission. Therefore, we suggest item (1) under Section A of the permit read as follows:

1. After July 1, 1974, sulfur dioxide emissions from the sulfite pulp mill, including the recovery system, shall not exceed 20 pounds per unbleached, air dried ton of pulp produced or 6,200 pounds of SO₂ per day as a monthly average based on the mill's present pulping capability of 310 AD tons of unbleached pulp per day.

Also, the Sulfite Regulations when issued, included a letter from the Director of the DEQ specifically stating and I quote:

"The 20 pound/ton is a plant-site limit, so that an acceptable compliance schedule proposal will have to show that all sources together will not exceed that limit. It is anticipated that compliance will be difficult to achieve with the recovery furnace alone, and emission from other sources including the digesters will be essentially zero."

We presently have three point sources of emission, which will be reduced to one, utilizing the recovery furnace as the sole emission point. (The power boilers are not treated as part of the sulfite mill under OAR 25-380.) On this basis, the limit of 18 pounds of SO₂ per AD ton as suggested by the staff is too restrictive since these other sources will contribute to it. It is therefore suggested that Items 2c, 3 and 4 be struck and a new paragraph be inserted to read:

The total mill SO₂ emissions excluding power boilers shall not exceed 20 pounds per AD ton and 6,200 pounds per day (based on 310 AD tons per day).

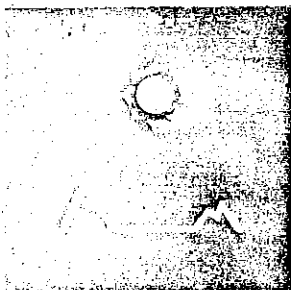
Item 10 outlines a compliance schedule for meeting particulate emissions standards by July 1, 1974. We want the commission to understand that at the time of adoption the Sulfite Mill Regulation on September 17, 1971, there were no data available on the particulate emissions from an ammonia base recovery system. Our recovery system was in the midst of installation and all conditions indicated there would be no problem with meeting the particulate emission limit. But as explained earlier, as the result of maintaining a low SO₂ emission, we find our particulate is not under 4 lb. per ton, but 5.5 to 6.0 lb. per ton. This is a relatively small amount of emission to remove but because of the fineness of the particle could be extremely expensive. All we are asking for is sufficient time, and 9 months is truly a minimal amount of time, to experiment and research process changes such as firing conditions of the boiler and operating conditions in the absorption-scrubber. Simultaneously, we will be testing various filtering media to remove the fine particles. If the investigation shows that the internal methods will not do the job, and we hope to complete it within the nine months, then we will be faced with a major capital expenditure to remove 1.5 - 2.0 lb. of innocuous particulate per ton of pulp by addition of external equipment and a compliance schedule will be submitted. We feel it is not too much to ask the commission for this time even if a variance from the regulation is required based on the circumstances. We wish to emphasize again that the digester pump-out system which is a major control system to reduce the SO₂ odor is 4 months ahead of schedule. The timetable we are discussing relates to the final marginal improvement in particulate emission control. We, therefore, suggest Item 10 of Section A of the permit read as follows:

The mechanism and location of particulate formation in the recovery system, and the minimizing of emissions possible through operating-parameter optimization shall be determined and reported by no later than December 1, 1973.

Another requirement of this permit which is more stringent than imposed on other industries, is that of the opacity limit placed on recovery boilers. A recovery boiler is very similar to a hog-fuel boiler in that it is burning a high moisture and variable fuel which if wasted would add to water or solid waste pollution. It is unrealistic to impose a 20% opacity limit rather than the 40% opacity limit applicable to a hog-fuel boiler. The wet plume from a recovery boiler makes a reading of opacity extremely difficult which is a further reason for applying a limit of 40% opacity.

The last recommendation made by the staff appears to create unintended problems. This requirement would prevent the discharge of air from our bleach plant, chip blowing system, building exhaust fans, etc., since all of these discharges have some degree of air contaminates. It is therefore suggested that this read:

"Discharge of air contaminates from sources not covered by this permit so as to cause the plant site to exceed the standards fixed by this permit are prohibited."



MID WILLAMETTE VALLEY AIR POLLUTION AUTHORITY

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

March 26, 1973

Department of Environmental Quality
1234 S.W. Morrison St.
Portland, Oregon 97205

Attn: Mr. Harold Patterson

Gentlemen:

SUBJ: REVIEW OF DRAFT AIR CONTAMINANT DISCHARGE PERMIT FOR
BOISE CASCADE CORPORATION, SALEM

I have several comments on this proposed permit for your consideration:

A. Performance Standards and Emission Limits

1. Section 2. Recovery furnace SO₂ restrictions: I note you have added a monthly average emission limit and that Publishers Paper in Newberg can apparently achieve much lower levels than Boise Cascade in Salem. Could paragraphs 2 and 5 be tied to a new paragraph based on OAR 20-001, highest and best practical treatment, to insure some stimulus exists to continue efforts to reduce recovery boiler SO₂ and particulate emissions?

2. Section 3. Blow pit vent SO₂ emissions: Please note that the December 31, 1973 compliance date listed here does not agree with the January 15, 1974 compliance date listed in paragraph 10.

3. Section 5. Recovery furnace particulate emissions: Again, please note that the July 1, 1974 compliance date listed here does not agree with the December 31, 1974 date listed in paragraph 10. Any compliance date after July, 1974, violates OAR 25-365.

MWVAPA strongly urges DEQ to include a visible emission restriction of 20% opacity for the recovery furnace, as stated in OAR 21-015.

4. Section 6. Power boilers: Please note that OAR 21-015 restricts visible emissions to No. 1 Ringelmann and 20%, not 40% as you have cited. The Authority has had some complaints on black smoke and we have observed No. 5 Ringelmann emissions from these boilers.



Page 2
DEQ
March 26, 1973

5. Proposed new paragraph - fugitive emissions: The Authority has received complaints of wood dust and fall-out from Boise Cascade in the business district adjacent to the mill. The mill also handles some bulk chemicals with fugitive emissions.

6. Proposed new paragraph - highest and best practical treatment: As stated above, there is a specific need to reference paragraphs 2 and 5 to OAR 20-001. Boise Cascade must in time further reduce recovery boiler SO2 and particulate emissions.

B. Compliance Demonstration Schedule

9 and 10. Please note comments above concerning final compliance dates.

C. Monitoring and Reporting

11, 12, 13. These are excellent sections which we shall use as a guide in our own program.

I have telephoned these comments to you to insure availability to your staff. The two most critical items from our viewpoint are to see that a visible emission standard is included for the recovery boiler and to clarify the final compliance date for the recovery boiler.

Sincerely yours,



Michael D. Roach
Director

MDR:DM:db:963/018



Boise Cascade

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
MAR 16 1973

AIR QUALITY CONTROL

Paper Group

1600 S.W. 4th Avenue
Portland, Oregon 97201
(503) 224-7250

March 15, 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Mr. Clint Ayers

Gentlemen:

In response to your letter of March 8, 1973 regarding the proposed Air Contaminant Discharge Permit for the Boise Cascade Salem Sulfite Mill, File No. 24-4171, we wish to make the following comments:

Referring to the proposed permit outline:

Page 2, part 1 of Section A - Sulfite Pulp and Paper

The compliance schedule for the blow-pit emissions was originally April 1974. We have volunteered to accelerate the completion date for this project to December 31, 1973. However, to use this as the compliance date for the total mill is felt to be unrealistic. We therefore request that the outside date of July 1, 1974 contained in the Sulfite Mill Regulation be allowed for total mill compliance in case unforeseen problems occur after completion of the installation. This additional period allowed for total mill compliance would then allow sufficient time to make corrections to the system, if needed.

Page 2, part 2

The establishment of a monthly average SO₂ standard of 400 ppm based on today's production is again totally unrealistic. The present average production rate has been limited due to ash problems, etc. in the recovery furnace area, however, these are being resolved and the mill designed production capacity of 330 AD tons per day will be attained. At this production rate, our system was designed to meet a 500 ppm emission whereas the regulation was set at a 800 ppm. It is therefore suggested that the monthly average SO₂ emission be at least 500 ppm to allow for full productive capacity and should the design limit be found to be in error, that further allowances be made, providing the 800 ppm hourly average is not exceeded.

Page 2, part 2c

The Sulfite Mill Regulations set a stringent limit of 20 pounds of SO₂ per AD ton of unbleached pulp for a total mill emission. The use of a total was done deliberately since each mill has a different number of emission point

Mr. Clint Ayers
March 15, 1973
Page Two

sources. We presently have three point sources of emission but plan to reduce this to one, utilizing the recovery furnace stack as the sole emission point. On this basis, the limit of 18 pounds of SO₂ per AD ton is too restrictive since these other sources will contribute to it. It is therefore suggested that Page 2, parts 2c, 3b and 4b be struck and a new paragraph be inserted to read:

The total mill SO₂ emissions excluding power boilers shall not exceed 20 pounds per AD ton and 6,600 pounds per day (based on 330 AD tons per day).

Page 2, part 3b

Until the digester pump-out system has demonstrated that essentially no discharge will evolve as designed, we feel that undue restriction has been placed on this yet uncompleted system. It is suggested that some allowance be made for this system at this time up to the regulation limitation of 0.2 pounds SO₂ per minute per ton.

Part 4b would also be covered above.

Page 2, part 5 and Page 3, parts 10, a,b,c,d,e and f

It is as yet uncertain whether the recovery furnace particulate emissions are truly exceeding the four (4) pounds per AD ton. This is a result of the limited number of tests obtained to-date and uncertainty of the correct application of the test procedure. We have been reporting the higher readings in order to be completely above-board in our reports. If it should prove we are presently in compliance, then the wording of paragraph 5 is no problem and paragraph 10 would be unnecessary. On the other hand, if it is determined that we are not in compliance then the compliance schedule is far too restrictive in light of the dimension of the problem. Based on the miniscule amount of particulate to be further removed to attain 4 pounds per AD ton, it is requested that sufficient time be allotted to investigate the various alternatives for solving this problem so it may be done in an economically reasonable manner. We are therefore requesting, should the particulate emission be found to be in excess of 4 pounds per AD ton, that the following compliance schedule be approved:

Complete Particulate Emission Study	December 1, 1973
Complete Preliminary Engineering	February 1, 1974
Submit Construction Schedule	May 1, 1974
Submit Progress Report	November 1, 1974
Compliance	May 1, 1975

This schedule represents the earliest date to derive a satisfactory program for reducing the particulate levels, particularly if an additional system is required. The original system was installed with the addition of a multiclone system for removal of particulate even though our spent liquor has an ash under 1% and no other ammonia base recovery system had made this provision. It should be understandable that it is not desirable to add a further large expenditure to achieve a relatively small reduction in particulate emission.

Mr. Clint Ayers
March 15, 1973
Page Three

Page 4, part 11c

At such time as the particulate levels are under control and stable operation has been attained, it is recommended that the testing schedule requirements be reduced from 3 to 2 tests per month.

Permit Expiration Date

Setting December 31, 1974 as the permit expiration date provides only 21 months duration. We request a longer permit period to give us an adequate period of time to bring emissions under control, perfect operating practice and accumulate performance data. December 31, 1976 is recommended as the expiration date for this permit.

Page 5, section B, part 1 (Performance Standards)

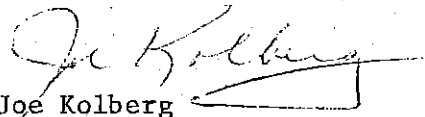
The process weight quantity of 9000#/hr. is too low. Based on the design production rate of 1400# of yeast production per hour, we would have an input of 14,500# spent liquor solids per hour. It is requested that the particulate emission limit be based upon 14,500#/hr. process rate.

Page 5, part 2 (Performance Standards)

We would appreciate more detail on the definition of the Ringelmann No. 1 and 20% opacity standards as applied to the Yeast Plant emission itself. We would like to know how these standards apply to the existing plume.

Very truly yours,

BOISE CASCADE/PAPER GROUP


Joe Kolberg
Manager Environmental Control

JK:cjs

Additional Condition for
Proposed Air Contaminant Discharge Permit
BOISE CASCADE CORPORATION
Salem Pulp Division

Permittee shall provide adequate controls and safeguards to prevent the escapement of ammonia (NH_3) from all handling and process systems in such quantities that cause ammonia odors to be detected off the plant premises.



Boise Cascade

Paper Group

P.O. Box 2089
Salem, Oregon 97308
(503) 362-2421

25 April 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Diarmuid F. O'Scannlain
Director

Re: NC 165, Installation of a
Seventh Digester at the
Salem Sulfite Pulp Mill,
EI 24-4171, SIC 2621

Gentlemen:

In your letter dated April 11, 1973 approving this installation, you include the following statement:

- "1. Installation of a seventh digester will not itself increase production of sulfite pulp at this mill over present levels, or an average monthly production of 250 air-dried, unbleached tons per day."

This statement causes the Company grave concern. It includes an erroneous conclusion that the average plant production is 250 air-dried, unbleached tons per day. As the Department is fully aware, the Salem plant has a practical production capacity of 310 ADT and a capacity of 330 ADT per day has been used as the basis for design of all pollution control equipment planned or installed in the past several years. The recent depressed level of actual production is a result of break-in of the recovery boiler system which interrupted a progressively increasing production level through the spring of 1972. Production for April, 1973 will be 280 ADT per day if no shut-down occurs in the last few days of the month. These production figures are shown on the attached graph.

Department of Environmental Quality
Portland, Oregon 97205

April 25, 1973
Page Two

The new digester is designed to maintain this production level after installation of the digester pumping system, a step that has been fully approved by the DEQ staff. Your letter of April 11 represents a reversal of position and introduces a curtailment of production that we feel exceeds the department's regulatory powers.

Very truly yours,

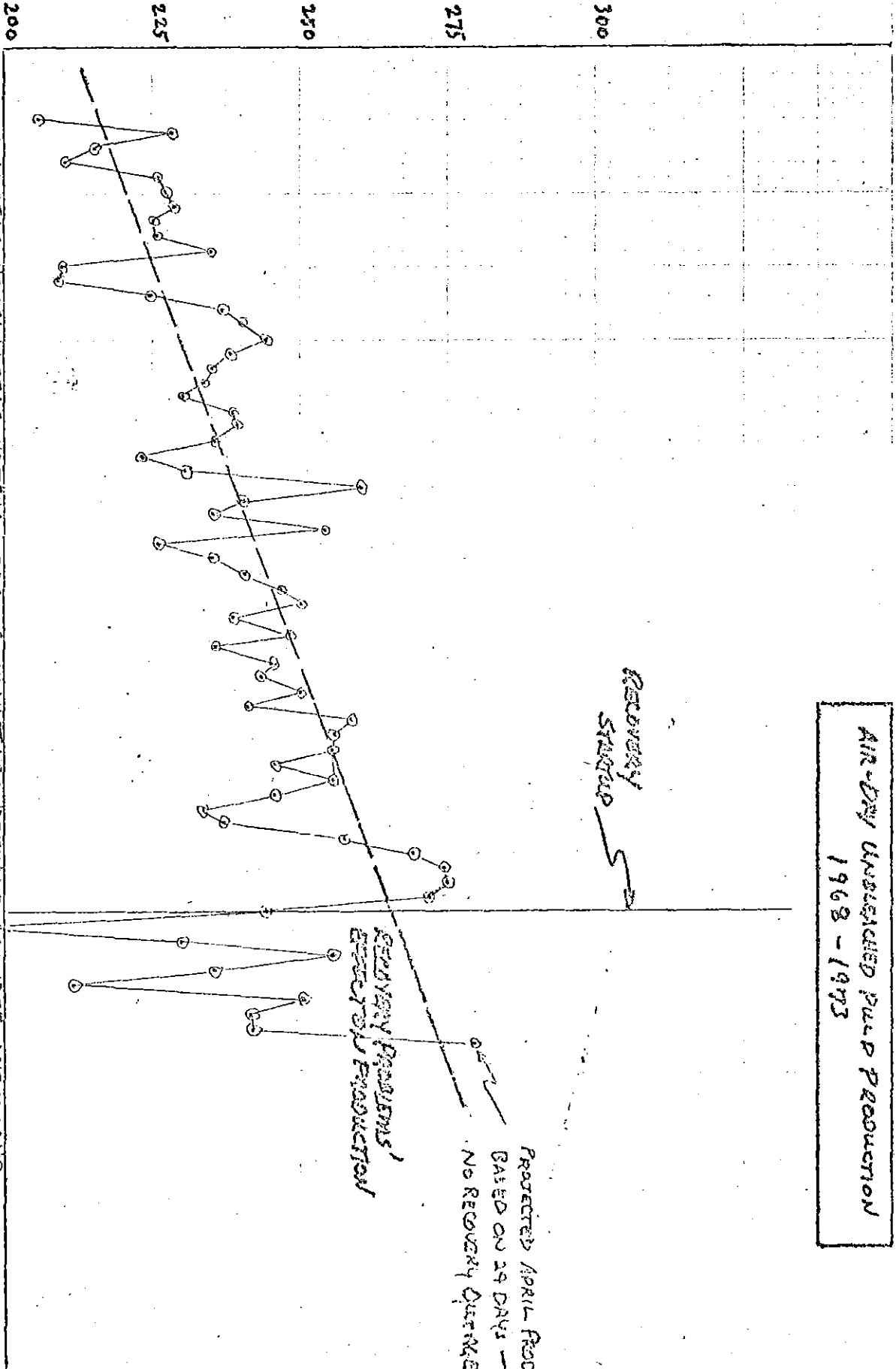


C. J. Fahlstrom
Resident Manager

CJF/dt

Attachment

AVERAGE MONTHLY PRODUCTION
A. D. UNBL. TONS / DAY



AIR-DRY UNBLEACHED PULP PRODUCTION
1968 - 1973

1968 1969 1970 1971 1972 1973

TIME, MONTHS

BOISE CASCADE CORP., SALEM, OREGON
SULFITE MILL
PCS



Boise Cascade

Paper Group

P. O. Box 2089
Salem, Oregon 97308
(503) 362-2421

25 April 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Diarmuid F. O'Scannlain
Director

Gentlemen:

Attached is a supplement to the written statement we presented
to the Environmental Quality Commission on April 2, 1973.

We would intend to make this presentation at the April 30
hearing in Salem.

Yours very truly,

C. J. Fahlstrom
Resident Manager

Attachment

CJF/dt

BOISE CASCADE CORPORATION

SUPPLEMENTAL STATEMENT TO THE OREGON ENVIRONMENTAL QUALITY
COMMISSION REGARDING THE PROPOSED AIR CONTAMINANT DISCHARGE
PERMIT FOR THE SULFITE MILL AT SALEM, OREGON

April 30, 1973

C. J. Fahlstrom
Resident Manager
Boise Cascade/Paper Group
Salem, Oregon

On April 2, 1973 we submitted to the Commission a comprehensive statement on this proposed permit. Since that time we have met with the Department Staff without resolving a basic impasse over the plant production level. The staff maintains the position that our production must be reduced to 250 ADT per day from the design capacity of 310 - 330 ADT per day. The staff position was reiterated in a letter dated April 11, 1973 approving installation at the mill of a seventh digester which is designed to offset a production loss because of the new digester pumping system currently planned for operation by December 1, 1973. This letter and our reply are attached.

The Company cannot accept a reversal of Department position to impose a 20% reduction in production at this mill. Under current regulations the mill is entitled to operate within a monthly average daily SO₂ emission limit of 20 pounds per ADT of production, or 6,200 pounds for 310 ADT per day. The imposition of a 5,000 pound per day monthly average limit as proposed by the staff in Condition 1 of the permit is, in the company's view, illegal as well as unreasonable and discriminatory. If this condition is retained in the permit, the Company will have to consider legal remedies to challenge the Commission's position.



Boise Cascade

Paper Group

P. O. Box 2089
Salem, Oregon 97308
(503) 362-2421

April 24, 1973

Department of Environmental Quality
1234 S.W. Morrison Street
Portland, Oregon 97304

Attention: Mr. Diarmuid O'Scannlain
Director

Gentlemen:

This letter will be the fourth progress report regarding our compliance schedule for Sulfite Mill SO₂ Emission Control as requested in Mr. L.B. Day's letter of April 17, 1972. The design, equipment purchase and delivery for our digester pumping system are discussed.

The majority of design work is finished except that some final design for electrical layout remains to be done.

All equipment has been ordered, and the equipment received to date includes the pumpout tank, miscellaneous piping and the condensers. Equipment soon to be delivered are the individual pumps, motors, and valves.

Some installation work has started which includes the pumpout tank and foundations, the condensers, and associated support structure. The piping header for the pumpout system, relief lines and piping to the acid plant are in the process of installation at the present time.

It is expected that all remaining equipment on order should be delivered by August, 1973 and by that time we expect to have the condensers and the digester relief system ready for operation.

The second phase will be installation of the pumping system, and remaining instrumentation and electrical systems.

It appears that startup and operation of this system by December 1, 1973 is assured.



Page - 2 -
DEQ
Jim Fahlstrom

Our next progress report, due July 15, 1973 will detail progress to date, final design detail and the projected construction schedule through the completion of the project.

Very truly yours,

BOISE CASCADE/Paper Group

A handwritten signature in cursive script that reads "C.J. Fahlstrom".

C.J. Fahlstrom
Resident Manager

JF:PS:mb

BOISE CASCADE CORPORATION

SUPPLEMENTAL STATEMENT TO THE OREGON ENVIRONMENTAL QUALITY
COMMISSION REGARDING THE PROPOSED AIR CONTAMINANT DISCHARGE
PERMIT FOR THE SULFITE MILL AT SALEM, OREGON

April 30, 1973

C. J. Fahlstrom
Resident Manager
Boise Cascade/Paper Group
Salem, Oregon

On April 2, 1973 we submitted to the Commission a comprehensive statement on this proposed permit. Since that time we have met with the Department Staff without resolving a basic impasse over the plant production level. The staff maintains the position that our production must be reduced to 250 ADT per day from the design capacity of 310 - 330 ADT per day. The staff position was reiterated in a letter dated April 11, 1973 approving installation at the mill of a seventh digester which is designed to offset a production loss because of the new digester pumping system currently planned for operation by December 1, 1973. This letter and our reply are attached.

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Page - 2 -
DEQ
Jim Fahlstrom

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Very truly yours,

BOISE CASCADE/Paper Group

C.J. Fahlstrom
Resident Manager

JF:PS:mb

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
APR 30 1973
AIR QUALITY CONTROL

5



Office Memorandum

OREGON STATE BOARD OF HEALTH

To : EJW

Date: 2 May 1973

From : CAA

Subject: Boise Cascade - Salem - Production

1. In Oct. 1969, the recovery system and lagoons were approved. The company's proposed 30% increase in production (from 215 ^{tons} ~~adt~~/day) was not allowed at that time. "The Commission acknowledged that further consideration could be given to the need for higher BOD discharges to accommodate increased production if and when it may be determined that the river can accept more wastes on an overall basis." The "215 t/d" is from a staff memo to the EQC on the company's proposal.

2. Production in 1966 was 68,876 o.d. (oven dry) tons, bleached, \approx 190 t/d
 1967 66,655 \approx 185
 1968 66,496 \approx 185

or, as air dry, unbl., approximately 215 in 1966
 210 in 1967
 210 in 1968

figuring 10% for air-dry and 3% for bleaching losses

Weekly reports in the summer of 1969 and 1970 indicate production (average weekly basis) to 260 adt/day.

3. Air quality reviews have been non-committal on production prior to 1972. ~~Reviews~~
- a. Overall review of the recovery system was based on the company's statement that SO_2 would be 500 ppm, and 11 lb SO_2 /adt. This was deemed to be within reqd contemplated at that time. (Approved in Apr, 1971, based on G's report of Jan, 1971).
- b. Material balances were submitted for 200 adt/day and 300 adt/day, with anticipated production to be between those extremes.

Office Memorandum •

OREGON STATE BOARD OF HEALTH

To :

Date:

From :

Subject:

4. Air Quality review of Co's compliance proposals for sulfite regs have also been made on production, EXCEPT the 7th digester was always reviewed in context of:
- It only made up production lost by the installation of a pump out system.
 - It was not to be placed in operation until the pump-out system was working.
5. The Co. included the 7th digester as a part of the pump-out system proposal, only to replace lost production.

Best Estimate
 .8 ppm

H/29/73

OCTOBER mean day

Average 24 hr SO₂ conc. from BC mill after pump-out system installed.

Best estimate $\mu\text{g}/\text{m}^3$

Distance from Plant.

direction from plant	0.5 KM	1 KM	2 KM	4 KM	10 KM
N	62	47	22	10	4
NE	27	18	8	4	2
E	14	9	4	2	1
SE	24	14	6	3	1
S	23	15	7	3	1
SW	15	10	4	2	1
W	6	4	1	1	1
NW	25	16	7	3	1

250 Ton production

ball up on 20 lbs/ton at completion of project

Maximum expected value for unidirectional wind: 196, 132, 59, 29, 12

std 260 $\mu\text{g}/\text{m}^3$ x once/yr.

These values are "Best estimate" figures but are not to be taken as absolute predictions. Notice they are derived from an average day as different from a typical day. Notice the trend for higher values in the north sector.

at 930 = 258

Estimated SO₂ ground level concentrations.

24 hour averages given in $\mu\text{g}/\text{m}^3$

Values based on emissions rate of 20th SO₂/Ton pulp.

Values are given for 3 locations in Salem and represent the expected values after the B.C. pump-out system is installed.

24 hr avg ground level concentration of SO₂ $\mu\text{g}/\text{m}^3$
(Based on climatological averages for October)

Production ADT/day		200	250	270	290	310	330
✓ Civic Center (0.3 mi South)	avg	18.8	23.5	25.4	27.3	29.1	31.0
	max	160	200	216	232	248	<u>264</u>
✓ Century Tower (0.25 mi East)	avg	12	15	16.2	17.4	18.6	19.8
	max	168	210	227	244	<u>260</u>	<u>277</u>
State Capitol (0.65 mi East)	avg	7	9	9.7	10.4	11.2	11.9
	max	99	124	134	144	154	164

Maximum values assume a constant wind direction from the plant with dispersion weighted for wind speed and stability category.

Ambient air standard — 260 μg SO₂ / m³ 24 hr avg not more than once per year.

Detailed Discussion of Atmospheric Emission
Problems & Control Programs at
Boise Cascade Pulp and Paper Mill - Salem
For Presentation at the
December 21, 1972 - Public Information Hearing

The Process

Boise Cascade makes pulp from chips in six batch-type digesters (pressure cookers) with a cook liquor of dissolved sulfur dioxide (sulfurous acid) and ammonium bisulfite. At the end of a cook, the digesters are relieved of much of their pressure, and the contents blown under the remaining pressure into a "blow pit," where the pulp is washed. The cook liquor at the time of the blow still has much sulfur dioxide dissolved in it, most of which comes out of solution when the liquor-pulp mixture reaches the blow pit. For approximately fifteen minutes during each blow, blow pit emissions average some 20-30,000 parts per million sulfur dioxide (2-3%) and 70-80 pounds of sulfur dioxide per ton of pulp along with a great quantity of water vapor. These emissions are discharged through two blow-pit vent stacks to the atmosphere. Blows occur about once each hour.

The spent sulfite liquor which remains is washed from the pulp. At that time, it contains sulfur dioxide tied up as ammonium sulfite and about half the weight of the chips originally fed to the digester. The purpose of the recovery system is to regenerate cook liquor from the sulfur in the spent liquor and to use the heating value obtained from burning the dissolved wood solids to generate steam. This also reduces the water pollution which used to be caused by draining the spent liquor to the river. The recovery system was installed to meet water pollution control requirements as the spent liquor is too strong to discharge to a normal water pollution control treatment system. Recovery is accomplished by evaporating the spent liquor from its original 10% solids up to 50% solids - then using the evaporated liquor as fuel for a recovery furnace. Furnace flue gases

are scrubbed with an ammonia solution, the scrubber effluent ("weak acid") is then fortified with sulfur dioxide generated in a sulfur burner, and the resulting "strong acid" sent back to the digester area for re-use as fresh cook liquor.

Recovery System Startup

The recovery system at the Boise Cascade, Salem mill was originally scheduled for startup in April, 1972. The initial trials were not successful, for mechanical reasons. After further "de-bugging," and trial runs, the system was placed in operation on July 5, 1972, with the intention of making adjustments in the process controls. It soon developed that major adjustments would have to be made. The furnace air supply was excessive, necessitating bricking up ducts which conducted cooling air to auxiliary fuel burners (done July 12, 1972). The next problem was with the absorption section, which either washed out SO₂ from the flue gas and generated a dense fume, or had a clear discharge but didn't wash SO₂. Being able to run the furnace for periods greater than a few hours (which had not been possible from April through the end of June) made it feasible to call in a consultant to establish optimum furnace parameters. By July 20, furnace operating conditions had been established, but frequent plugging of the evaporators became the major problem, limiting operating runs to a matter of days. This was diagnosed as being caused by excessive pulp fibers in the weak black liquor which collected in the evaporator bodies and resulted in the plugging. Liquor adhering to the fibers "polymerized" (became like a plastic), necessitating long shutdowns for cleaning. Fiber filters were ordered, and arrived at the mill in the last week of July.

Meanwhile, continual monitoring of ambient sulfur dioxide had been started in the Century Tower in mid-July, and has continued to the present. Peaks recorded on the monitor have been identified with peak emissions from the blow pit vent. Ten-minute grab samples, taken by hand also had been collected during the early part of July when furnace emissions were high. These grab-samples were discontinued

when the furnace emissions were reduced to less than 1000 ppm, for at that point ambient concentrations from the furnace emissions decreased to less than the minimum sensitivity of the technique.

Subsequent to signing the Consent Decree after shutting down on July 23 and startup on August 5, the recovery system has operated with good control of emissions from the recovery furnace with the exception of a few upsets. The digesters remain uncontrolled and apparently now are the major, if not the sole, remaining source of SO₂ odors. The design of the digester control system has been completed except for details like pipe size and connection locations which are dictated by the purchase of specific components. Purchase of components has commenced, with some items ordered ahead of schedule. Completion of the system will depend on the delivery times for specific items. Equipment delivery dates are expected to become firmed up in February 1973. First emphasis is being given to completion of the added relief system which is intended to allow relieving the digesters nearly to atmospheric pressure, prior to their being pumped out. Completion of the relief system will itself allow some reduction of digester emissions by drawing off sulfur dioxide which now escapes to the atmosphere. Completion of the entire pump-out system, originally scheduled for early 1974, is now anticipated to be prior to December, 1973.

The Department has met with Boise Cascade several times to accelerate the completion of the pump-out system, and will continue to work to that end. Boise Cascade has committed itself to making all the haste it can, and will install components as they arrive, so that the limiting factor for completing the system remains the delivery time of purchased items.

PHR/CAA:ljb

BOISE CASCADE CORPORATION

FINE PAPER DIVISION

SALEM, OREGON

TECHNICAL DEPARTMENT

PRODUCTION DATA 1971, 72 UNBL. A.D. TONS PER DAY

		ACCT.	TECH. DEPT		AVERAGES				
			W	A			ACCT	TECH. DEPT.	
							W	A	
JAN	1971	236	219	—					
FEB		245	219	—	1) AVE	1971	248	242	—
MAR		243	233	—	2) AVE	1971+			
APR		251	246	—	1st 6mo 1972		252	248	
MAY		242	239	—	3) AVE	1st 6mo			
JUN		258	259	—	1972		264	260	
JUL		256	250	—	4) AVE	Last 6mo			
AUG		255	255	—	1972		230	—	224
SEP		246	261	—	5) AVE	1972	246	—	240
OCT		256	250	—					
NOV		246	243	—	6) AVE	1st 3mo	245	247	241
DEC		233	223	—	1973				
JAN	1972	237	231	—					
FEB		257	257	—	HIGH MONTH		5/72 - 275 TONS		
MAR		268	268	262					
APR		274	273	262					
MAY		275	277	268					
JUN		272	WEEKLY	253					
JUL		244	REPORTS	238					
AUG		195		192					
SEP		230		234					
OCT		261		253					
NOV		236		232					
DEC		212	203	193					
JAN	1973	251	259	244					
FEB		242	241	236					
MAR		243	243	243					

BOISE CASCADE CORPORATION

SUPPLEMENTAL STATEMENT TO THE OREGON ENVIRONMENTAL QUALITY COMMISSION REGARDING THE PROPOSED AIR CONTAMINANT DISCHARGE PERMIT FOR THE SULFITE MILL AT SALEM, OREGON

April 30, 1973

C. J. Fahlstrom
Resident Manager
Boise Cascade/Paper Group
Salem, Oregon

On April 2, 1973 we submitted to the Commission a comprehensive statement on this proposed permit. Since that time we have met with the Department Staff without resolving a basic impasse over the plant production level. The staff maintains the position that our production must be reduced to 250 ADT per day from the design capacity of 310 - 330 ADT per day. The staff position was reiterated in a letter dated April 11, 1973 approving installation at the mill of a seventh digester which is designed to offset a production loss because of the new digester pumping system currently planned for operation by December 1, 1973. This letter and our reply are attached.

The Company cannot accept a reversal of Department position to impose a 20% reduction in production at this mill. Under current regulations the mill is entitled to operate within a monthly average daily SO₂ emission limit of 20 pounds per ADT of production, or 6,200 pounds for 310 ADT per day. The imposition of a 5,000 pound per day monthly average limit as proposed by the staff in Condition 1 of the permit is, in the company's view, illegal as well as unreasonable and discriminatory. If this condition is retained in the permit, the Company will have to consider legal remedies to challenge the Commission's position.



DEPARTMENT OF
ENVIRONMENTAL QUALITY

APR 16 1973 - 8:40 AM
OK
ST
4-19-73

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5357

TOM McCALL
GOVERNOR

April 11, 1973

DIARMUID F. O'SCANNLAIN
Director

ENVIRONMENTAL QUALITY
COMMISSION

B. A. McPHILLIPS
Chairman, McMinnville

EDWARD C. HARMS, JR.
Springfield

STORRS S. WATERMAN
Portland

GEORGE A. McMATH
Portland

ARNOLD M. COGAN
Portland

Boise Cascade Paper Group
315 Commercial Street S. E.
Salem, OR 97301

Attn: C. James Fahlstrom
Resident Manager

Re: NC 165, Installation of a
Seventh Digester at the Salem
Sulfite Pulp Mill, EI 24-4171,
SIC 2621

Gentlemen:


The referenced Notice of Construction and Application for Approval, No. NC 165, has been reviewed. It is concluded that the installation of a seventh digester, proposed to be complete in January, 1974, is in accordance with the compliance proposal for controlling digester SO₂ emissions as approved April 17, 1972, and therefore, the installation is approved subject to the following:

1. Installation of a seventh digester will not itself increase production of sulfite pulp at this mill over present levels, or an average monthly production of 250 air-dried, unbleached tons per day.
2. The digester will not be placed in operation until the pump-out system has been installed on all digesters and demonstrated to be working in accordance with its design purpose of eliminating digester SO₂ emissions to the atmosphere.

If there are any questions, please feel free to contact this Department.

Very truly yours,

DIARMUID F. O'SCANNLAIN
Director


E. J. Weathersbee
Deputy Director

CAA:sb
cc: Joe Kolberg
District Engineer



Boise Cascade

Paper Group

P. O. Box 2089
Salem, Oregon 97308
(503) 362-2421

25 April 1973

Department of Environmental Quality
1234 S. W. Morrison Street
Portland, Oregon 97205

Attention: Diarmuid F. O'Scannlain
Director

Re: NC 165, Installation of a
Seventh Digester at the
Salem Sulfite Pulp Mill,
EI 24-4171, SIC 2621

Gentlemen:

In your letter dated April 11, 1973 approving this installation, you include the following statement:

- "1. Installation of a seventh digester will not itself increase production of sulfite pulp at this mill over present levels, or an average monthly production of 250 air-dried, unbleached tons per day."

This statement causes the Company grave concern. It includes an erroneous conclusion that the average plant production is 250 air-dried, unbleached tons per day. As the Department is fully aware, the Salem plant has a practical production capacity of 310 ADT and a capacity of 330 ADT per day has been used as the basis for design of all pollution control equipment planned or installed in the past several years. The recent depressed level of actual production is a result of break-in of the recovery boiler system which interrupted a progressively increasing production level through the spring of 1972. Production for April, 1973 will be 280 ADT per day if no shut-down occurs in the last few days of the month. These production figures are shown on the attached graph.

The new digester is designed to maintain this production level after installation of the digester pumping system, a step that has been fully approved by the DEQ staff. Your letter of April 11 represents a reversal of position and introduces a curtailment of production that we feel exceeds the department's regulatory powers.

Very truly yours,



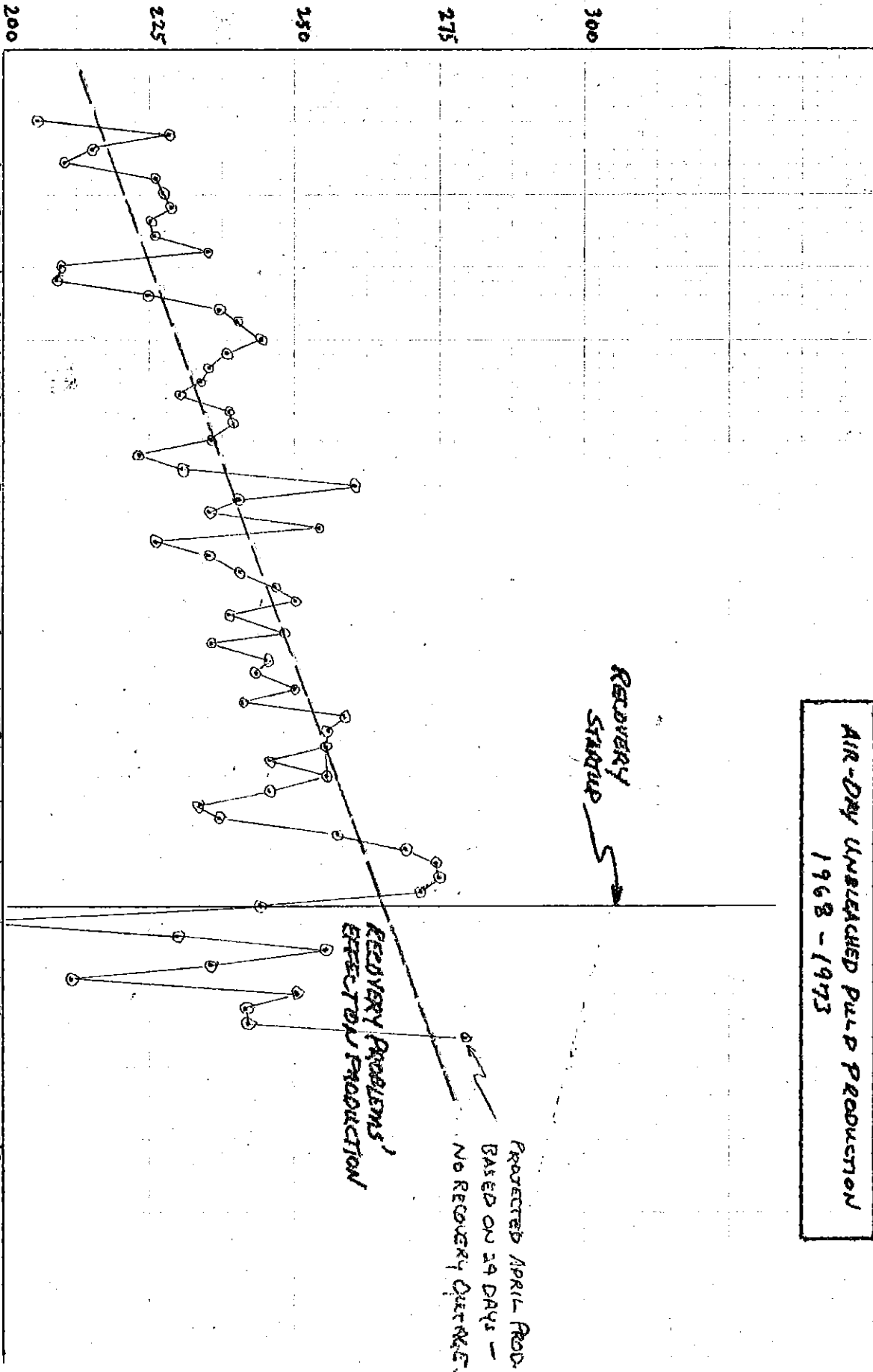
C. J. Fahlstrom
Resident Manager

CJF/de

Attachment

AVERAGE MONTHLY PRODUCTION
A. D. UNBL. TONS / DAY

AIR-DRY UNBLEACHED PULP PRODUCTION
1968 - 1973



1968 1969 1970 1971 1972 1973

TIME, MONTHS

BOISE CASCADE CORP., SALEM, OREGON
SALFITE MILL
PCS