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OREGON STATE SANITARY AUTHORITY MEETING MATERIALS

Note - there are some fragile 11x17 maps + 8.5x14 sheets in here

DEQ

State of Oregon
Department of Environmental Quality

AGENDA

State Sanitary Authority Meeting

1:30 p.m., August 23, 1968

Jackson County Court House, Medford

K. Sewage Disposal Plans for Bear Creek Basin - E. R. Lynd
   (1) Bear Creek Valley Sanitary Authority
   (2) City of Medford

L. Sewage Treatment Works Construction Grants

M. Wigwam Waste Wood Burner Problems - H. W. McKenzie
   (1) Southern Oregon Timber Industries Ass'n. - Martin Craine
   (2) Steve Wilson Lumber, Phoenix - (status report)
   (3) Cheney Stud, Inc., Central Point - (status report)
   (4) Mt. Pitt Lumber Co., Central Point - (status report)
   (5) Boise Cascade Corporation, Central Point
   (6) Timber Products Co., Medford

N. Tax Credit Application
   (1) Sabroso Company - T-47

O. Renewal of Waste Discharge Permits
   (1) Multnomah County - Fanno Creek
   (2) Wah Chang, Albany

P. Waste Discharge Permits - Industrial
   (1) Carolina Pacific Plywood, White City
   (2) Fir Ply Company, White City
   (3) Medford Veneer & Plywood, White City
   (4) Olson-Lawyer Lumber Company, Medford
   (5) Reichhold Chemicals, White City
   (6) Rogue Valley Plywood, White City
   (7) White City Plywood, White City
   (8) Lawyer Veneer Company, Medford
   (9) U.S. Plywood-Champion Papers, Roseburg Division

Q. Waste Discharge Permits - Domestic
   (1) White City Sanitary District
   (2) Eagle Point
   (3) Grants Pass
   (4) Glendale
   (5) Green Sanitary District, Roseburg

MINUTES OF THE 131st MEETING

of the

Oregon State Sanitary Authority

Following a two and one-half hour tour of the Bear Creek, Medford and White City areas of Jackson County by the members and staff, the 131st meeting of the Oregon State Sanitary Authority was called to order by John D. Mosser, Chairman, at 1:35 p.m., August 23, 1968, in the Auditorium of the Jackson County Courthouse located at Main and Oakdale, Medford, Oregon. Other members present were H.P. Meierjurgen and Storrs S. Waterman. Mr. E.C. Harms, Jr. was present on the field trip.

Mr. B.A. McPhillips was unable to attend because of illness.

Participating staff members present were: Kenneth H. Spies, Secretary; Arnold B. Silver, Legal Counsel; E.J. Weathersbee, Deputy State Sanitary Engineer; Harold M. Patterson, Harold E. Milliken and J.A. Jensen, Assistant Chief Engineers; W.C. Westgarth, Director of Laboratories; Harold L. Sawyer, Supervisor, Waste Discharge Permit Program; Lloyd O. Cox, Supervisor, Industrial Waste Program; Edgar R. Lynd, Supervisor, Municipal Waste Treatment Program; Glen D. Carter, Water Quality Analyst; Harold W. McKenzie, Associate Engineer; and L.L. Baton, District Engineer.

Chairman Mosser opened the meeting by announcing the appointment of the following 12 persons as members of a Citizens Committee on Pollution Legislation: Herbert C. Hardy, Attorney, Portland, Chairman; Mrs. Grace B. Angerman, Attorney, Title Insurance Company, Portland; Jack G. Collins, First Assistant U.S. Attorney for Oregon, Portland; Thomas C. Donaca, Attorney, Associated Oregon Industries, Portland; Dr. Ronald A. Findley, Physician and Chairman of Oregon State Medical Society's Committee on Environmental Pollution, Eugene; Irvin H. Luiten, Oregon Manager Public Affairs, Weyerhaeuser Company, Portland; F.F. (Monte) Montgomery, General Insurance, Eugene; Glen E. Randall, Executive Secretary Oregon AFL-CIO, Salem; James A. Redden, Attorney, Medford; Michael H. Schmeer, Attorney, Portland; Mrs. Joseph E. Spang, League of Women Voters, Portland; and Palmer S. Torvend, County Agent, Hillsboro.

He said the Committee would hold its first meeting on August 24 to consider several environmental problems for which legislative proposals

might be developed for submission to the 1969 Oregon Legislature. The Committee is to complete its report by October 15, 1968.

SEWAGE DISPOSAL PLANS FOR BEAR CREEK BASIN

Mr. Lynd opened the discussion on this subject by presenting a staff memorandum dated August 23, 1968, a copy of which has been made a part of the Authority's permanent files. He described the existing sewerage facilities and needs of Talent, South Talent Sanitary District, Phoenix, South Bear Creek Sanitary District, Central Point, Medford, and White City Sanitary District. He also referred to the formation and program of the Bear Creek Valley Sanitary Authority.

Mr. Bob Kyle, manager of the Bear Creek Valley Sanitary Authority, then discussed briefly the program of that agency for providing sewerage facilities for the basin. He said negotiations are under way with the cities and districts in the basin for construction of a master system. Informal agreements have been made with Medford, Central Point and Phoenix and work is currently under way on the development of formal contracts. Ashland and Eagle Point are not expected to be included, at least in the initial project.

Bond elections have been tentatively scheduled for February 24, 1969, for both the Bear Creek Valley Sanitary Authority and the city of Medford.

Mr. Gilbert Gutjahr, city manager, then reported on the plans of the city of Medford for constructing the required treatment works. He said that the city on May 2, 1968, contracted with the engineering firm of Brown & Caldwell for the design of the plant, that the engineering plans are scheduled to be completed by May 1969 and that construction of the project should be completed by June 1971. He said it would be impossible to meet the deadline of July 1, 1970 for completion of the project required by the current waste discharge permit which was issued to the city by the Authority on March 29, 1968. He claimed that the time required for design, bond election, bidding, bond sale and construction makes the 1970 deadline impossible to meet. The city's present waste discharge permit expires September 30, 1968.

Chairman Mosser asked Mr. Gutjahr if the city had complied with condition No. 10 of the permit regarding new connections or addition of new sources of wastes to the sewer system. He replied that they had met the requirements of condition No.10 as interpreted in the April 19, 1968 letter from the Secretary of the Authority. The interpretation was that there could be no extensions to the existing sewer system and no industries or other major pollution loads could be connected to existing sewers until the required improvements or modifications of the city's sewage treatment works had been completed.

At least two fairly large new motel developments had since been connected to existing sewers and there was discussion as to whether or not these constituted major pollution loads. It was the opinion of the members that this provision should probably be tightened up and that no new connections or additional loads of any kind should be permitted. As a result the Chairman instructed the Authority's staff to confer with the city officials and to determine if any more new connections should be allowed.

In concluding the discussion on this subject, the Chairman said he was encouraged by the cooperation now taking place between the city of Medford and the Bear Creek Valley Sanitary Authority even though it was late in developing. He then mentioned the possibility of a statewide bond issue as a possible means of providing state aid in financing construction of sewage treatment works by local communities. He said that such a bond issue will be considered by the Citizens Committee previously announced by the Chairman.

SEWAGE TREATMENT WORKS CONSTRUCTION GRANTS

Mr. Milliken reviewed a staff memorandum dated August 19, 1968, regarding federal and state grants for assistance in financing construction of sewage treatment works. He said that Oregon's allotment of federal funds for FY '69 under this program would be $2,510,920 ($2,419,600 from the $214,000,000- 1969 appropriation and $91,320 reallotment from the 1967 appropriation). He said that as directed at the June 28 meeting, the staff had conferred with city officials of Hillsboro and Troutdale and had worked out with them a plan for

reduced grants. As a result, Oregon's present allotment of federal funds will be adequate to include a grant to the city of Oakland, the next eligible applicant.

Mr. Milliken also pointed out that in order to match all of the available federal money it will be necessary for the State Emergency Board to approve an additional $132,743 in state funds, plus the $976,346 remaining in the account established by the 1967 Legislature for this purpose. Both the Chairman and Secretary stated they thought the Emergency Board would approve such a request at the next board meeting on September 20, 1968.

It was MOVED by Mr. Mosser, seconded by Mr. Meierjurgen and carried that grants to Troutdale, Hillsboro and Oakland be approved provided sufficient state funds are made available by the Emergency Board to match all three grants;and that if such funds do not become available, further negotiations be made with Hillsboro and Troutdale so that both of these two projects can proceed if at all possible.

WIGWAM WASTE WOOD BURNER PROBLEMS

Mr. McKenzie summarized a staff report dated August 15, 1968, which had been submitted to the members in advance of the meeting. He stated that some 22 wigwam burners are located in the Medford area and are the principal source of air pollution, contributing an estimated 78% of the suspended particulate in the atmosphere. He briefly reviewed the efforts of the Authority staff to abate the pollution caused by the wigwam burners.

Mr. Martin Craine of the Southern Oregon Timber Industries Association (SOTIA) discussed the activities and objectives of that organization. He said that SOTIA is fully committed to the improvement of wigwam burner operation and to waste wood utilization. It is his belief that the only real solution to the air pollution problem caused by wigwam burners is full utilization of all wood waste. He implied that lumber mills should not be shut down just to prevent pollution because he thinks the people would rather have some air pollution than be without a job. He pleaded for better recognition of the improvements that the industry is making in the control or alleviation of air pollution.

He said that SOTIA was the first such organization in Oregon to give attention to this problem and that it is also the first to recognize that the problem is not yet solved.

(1) Steve Wilson Lumber Co. - Phoenix

Mr. McKenzie presented a status report dated August 23, 1968, for this mill. For the past three months or more this mill's operation has been in compliance with the fallout standards of the Sanitary Authority, or less than 22 tons/square mile/month. (The standard is 15 tons plus 7 tons background per square mile per month for residential and commercial areas.)

Because of this compliance no action by the Authority in this matter was considered necessary at this time. There were no questions or comments regarding this mill from anyone in the audience.

(2) Cheney Forest Products - Central Point

A status report for this mill dated August 23, 1968, was presented by Mr. McKenzie. He said that in spite of past efforts by the owner of this mill, its fallout has consistently been above the Sanitary Authority standards. It was reported that at the suggestion of Mr. McKenzie the owner plans to modify the existing burner as a demonstration project. This will be done as soon as the fuel load can be adequately measured.

Mr. Patterson stated that in 1967 the median value for the fallout from this mill was 165 tons/square mile/month.

In response to a question by Mr. Meierjurgen, it was stated that the fallout consists of fine sawdust and some partially burned material.

Mr. Francis Cheney who was present stated that they have re-saws with dust collectors but some dust does come from the cyclone and storage bins. No solution has been worked out for that problem. The burner has been modified per recommendations except for the underfire air which will be corrected after the study of fuel quantity has been completed.

No questions or comments regarding this mill were submitted by anyone in the audience. No action by the Authority members was considered necessary at this meeting.

(3) Mt.Pitt Lumber Co. - Central Point

Mr. McKenzie presented a status report, dated August 23, 1968, for this mill. He said fallout from this mill has also been in excess of Sanitary Authority standards. Complaints have recently been received from adjacent residential areas. The quantity of fuel being delivered to the burner is, in the opinion of Mr. McKenzie, considerably less than the amount needed for efficient combustion. The Company is considering the installation of a hog to reduce the waste to a marketable consistency so that it can be used as hog fuel.

Mr. Edward Collins, representative of the Company, said he was hopeful that a customer would be found for the wastes. He explained that the operation is a re-manufacturing plant, not a sawmill, that the wastes are not uniform, that they vary greatly from day to day, and that in the past it has not been able to obtain a high enough temperature in the wigwam burner to produce efficient combustion.

In reply to a question from Mr. Meierjurgen he said that it would be very costly to install storage facilities so as to burn at a uniform rate. He said the hog had not been set up yet. Mr. Meierjurgen commented that they would need storage for either selling or efficient burning.

Mr. Waterman inquired regarding the relative cost of a multiple chamber incinerator and storage with uniform burning. No answer was given.

Chairman Mosser asked if the contract for sale of the wastes would be on a continuous and permanent basis and Mr. Collins said it would.

It was then learned from the representative of another company that a firm offer for purchase of the wastes had been sent just shortly before the start of the meeting.

(4) Boise Cascade Corporation - Central Point

Mr. McKenzie presented a staff report dated August 23, 1968, regarding this Company's mill operations at Central Point. A copy of the report has been made a part of the Authority's permanent files in this matter. No satisfactory progress toward abatement of this mill's air pollution was reported.

Mr. George C. Flanagan had planned to represent the Company at this meeting but was unable to attend. Another representative, Mr. Dick Parish, said they should know in another two or three months whether the Company will spend an estimated $500,000 to install a barker and chipper which would eliminate the need for using the wigwam burner.

At this point in the meeting Mr. Martin Craine stated that utilization of wood wastes is changing so rapidly that it is difficult for the mill owners to determine which is the best and most economical way to solve their air pollution problems. He was arguing that more time should be given the industry by the Sanitary Authority.

Chairman Mosser pointed out that industry must make plans for proper waste disposal before and not after a new pollution source is created.

(5) Timber Products Co. - Medford

A staff report, dated August 23, 1968, was presented by Mr. McKenzie for this mill. He said the major sources of air pollution have been smoke and fallout from the wigwam burner and wind-blown particulate matter from the open chip storage area, and that it was not until recently that open burning was discontinued.

Mr. Glen Nelson, Plant Superintendent, claimed that the Company had not been able to get necessary engineering data for establishing a schedule and a proposed solution.

The Chairman asked when they would get such information. There was no answer to this question.

Mr. A.E. "Ben" Graham and Mr. Lloyd B. Monte, residents of the area, both testified that the atmospheric emissions from this mill were seriously damaging their property. Mr. Graham presented a sample of charred wood particles which he claimed had settled on his pickup truck in a two-hour period. He said this pollution had been going on for 10 years and he thought the time had come to stop studying the problem and to take action to prevent the pollution. He demanded that the Sanitary Authority take immediate action to enforce compliance with the state laws and regulations. He said he had not been able to use his swimming pool for the last five years because of the fallout from this mill located about 1,000 to 1,500 feet away.

Chairman Mosser then commented that of the five mills reported on by Mr. McKenzie the first three appeared to be cooperating with the Authority staff in attempts to abate and control air pollution and that in the very near future should be accomplishing something constructive. The other two mills, however, have not made any definite and satisfactory progress toward solving their problems. He said that although the local plant management apparently recognizes the problems, either because their engineers are not working hard enough or top corporate management does not assign a high enough priority to the matter, no progress is being made.

After further discussion it was MOVED by Mr. Mosser, seconded by Mr. Meierjurgen and carried that the staff be instructed to issue to the Boise Cascade Corporation and Timber Products Company notices of a show cause hearing to be held in Medford on October 24, 1968, requiring that said companies show cause, if any exists, why they should not be required either to abate the air pollution caused by their operations or to discontinue the operation of their mills. The Chairman indicated that if the companies get busy and submit definite plans and a satisfactory construction schedule for abating the pollution, the hearing may be as far as the Authority will go at this time, but otherwise the hearing will very likely result in an abatement order.

He cautioned the lumber industry as a whole that while at the present time if an abatement hearing is held he will be willing to accept concrete plans and construction schedules as reason for not requiring immediate abatement, the time is going to come when that will not be the case and if violations continue an order for abatement will be entered and industry then can worry about construction before it resumes operation.

TAX CREDIT APPLICATION

A staff report was presented by Mr. Sawyer covering the application made by the Sabroso Company of Medford for a tax credit for a device installed for the purpose of preventing pollution. Based on the staff's report, it was MOVED by Mr. Waterman, seconded by Mr. Meierjurgen and carried that a pollution control facility tax credit certificate bearing the actual cost figure of $5,043.65, be issued for the facilities claimed in application No. T-47 for the Sabroso Company of Medford.

RENEWAL OF WASTE DISCHARGE PERMITS

(1) Multnomah County - Fanno Creek Plant

Mr. Lynd presented a staff report dated August 20, 1968, regarding the present status of the operation of the Fanno Creek sewage treatment plant. A copy of his report has been made a part of the Authority's permanent files in this matter. As part of the report, recommended modifications to the waste discharge permit previously issued for this plant were submitted.

Recommended condition No. 4 stated that without first obtaining specific written permission from the Sanitary Authority, no additional connections shall be made to any sewers within the area served by the Fanno Creek sewage treatment plant, waste loads presently connected shall not be increased, and no new sewers or sewer extensions shall be constructed.

A discussion then followed regarding the meaning of "no additional connections shall be made." The Chairman said that the motion should state that the Authority will grant approval for the connection of any building that, (1) had a valid building permit prior to July 1 and construction was either under way or scheduled to commence after that date, or (2) that had a sewer connection permit prior to July 1, 1968.

Mr. Robert Nordlander, Director of Public Works for Multnomah County, discussed the changes and improvements that had been made in the Fanno Creek sewage treatment plant operation since the July meeting of the Authority. He said the operating efficiency is improving but the plant does have a severe loading problem. A study is under way to determine the reason for the high hydraulic loading which presently cannot be explained. He commended the city of Beaverton for its cooperation - particularly in regard to the elimination of the industrial waste that contained high concentrations of lead.

In response to a question from the Chairman, Mr. Marvin Runyan, consulting engineer, said the plant is 25 to 28% overloaded hydraulically and is close to design capacity from a solids basis. He said the plant efficiency had been running about 70-80% but no test results were available since the lead was removed and the efficiency may be higher now.

Mr. Clayton Nyberg, Washington County Commissioner, said they recognize that a serious sewage disposal problem exists in the Fanno Creek basin. He expressed hope that there would be better cooperation in the future.

The Chairman asked how many building permits with "no occupancy" restrictions had been issued by Washington County between July 1 and August 12, but Mr. Nyberg did not know. Chairman Mosser said under the proposed modification to the waste discharge permit the properties covered by those permits could not be connected to the sewer system until facilities can be provided for effecting adequate treatment. When that will be no one knows.

Mr. L.R. Sprecher, Beaverton City Manager, said his city is doing everything possible to take care of its own citizens realizing that the Fanno Creek plant has no capacity for additional connections. He thanked the staffs of the Authority and Multnomah County for their cooperation and said he was pleased to learn of the proposal for a state bond issue to help local communities finance construction of needed sewage treatment works. His final comment was that the law requires the Sanitary Authority to promote cooperation of local government and that by its recent actions it certainly was doing that.

Other representatives of Washington County who were present but made no statements included Dr. James Stewart, County Health Officer and Richard Milbrodt, County Administrator.

Mr. Homer Chandler, representative of CRAG (Columbia Region Association of Governments), said that his board of directors had decided to call a meeting of all interested cities and districts to see if enough cash can be raised to prepare final plans and specifications for construction of the required interceptor sewer rather than wait indefinitely for a 702 grant from the Federal Government. He said by doing this they might be able to speed up the project by some six or nine months.

After further discussion it was MOVED by Mr. Meierjurgen, seconded by Mr. Waterman and carried that the waste discharge permit for the Fanno Creek sewage treatment plant of Multnomah County be modified as per the recommendations of the staff and with the definition of allowable connections as previously stated by the Chairman. The expiration date of the modified permit is March 31, 1969.

(2) Wah Chang Corporation - Albany

Mr. Cox reviewed the staff's recommendations for extension and modification of the Wah Chang - Albany waste discharge permit.

Mr. Sam Worcester, Technical Director for the Company, said that some of the construction had been delayed due to the slow delivery of certain pieces of equipment. He promised to give the Authority staff an up-to-date construction schedule.

Mr. Ralph W. Martin, of CH_2M Engineers, said the distillation process should be in operation within two or three weeks. The Chairman asked if the results would be sufficient and Mr. Cox answered that he thought they would be.

It was MOVED by Mr. Waterman, seconded by Mr. Meierjurgen and carried that the Wah Chang waste discharge permit be extended to 12/31/69 and be modified as recommended by the staff.

WASTE DISCHARGE PERMITS - Industrial

Mr. Cox reviewed the staff recommendations for waste discharge permits for the following nine industrial operations: (1) Carolina Pacific Plywood, White City; (2) Fir Ply Company, White City; (3) Medford Veneer & Plywood, White City; (4) Olson-Lawyer Lumber Company, Medford; (5) Reichhold Chemicals, White City; (6) Rogue Valley Plywood, White City; (7) White City Plywood, White City; (8) Lawyer Veneer Company, Medford; (9) U.S. Plywood-Champion Papers, Roseburg Division. Copies of these recommendations have been made a part of the Authority's permanent files.

Mr. Bob Coakley was present to represent the U.S. Plywood Corporation. He asked for a definition of "secondary treatment or equivalent control" as mentioned in condition No. 2 of their recommended permit. He claimed that based on a single grab sample test they are already getting the equivalent of secondary treatment by discharging the glue wastes into the log pond. He reported test results of 367 ppm BOD for the glue wastes and 37 ppm for the log pond overflow. He estimated the quantity of flow at only two gallons per minute. The Chairman said the staff would work with the Company to determine the necessary treatment criteria.

It was MOVED by Mr. Waterman, seconded by Mr. Meierjurgen and carried that the waste discharge permits for the nine industries listed above be issued as recommended by the staff.

WASTE DISCHARGE PERMITS - Domestic

The staff's recommendations for waste discharge permits for the following five sewage treatment plants were reviewed briefly by Mr. Lynd: (1) White City Sanitary District; (2) Eagle Point; (3) Grants Pass; (4) Glendale; (5) Green Sanitary District, Roseburg.

Mr. Waterman suggested that in condition 2(b) of the Grants Pass permit after the word "receives" the words "disinfection equivalent to" be inserted.

It was MOVED by Mr. Meierjurgen, seconded by Mr. Waterman and carried that the waste discharge permits for the five sewage treatment plants listed above be issued as recommended by the staff with the exception that condition No. 2(b) of the Grants Pass permit be amended as suggested by Mr. Waterman.

AUTO BODIES IN STREAMS

Numerous complaints having been received about the practice of using old car bodies for erosion control along stream banks, the Chairman instructed Mr. Silver to prepare a complaint form for a test case and to submit it for review at the September 27 meeting of the Authority.

It was decided that the October meeting would be held in Bend on Friday the 25th.

There being no further business the meeting adjourned at 4:30 p.m.

Respectfully submitted,

Kenneth H. Spies

Kenneth H. Spies
Secretary

SOUTHERN OREGON
TIMBER INDUSTRIES ASSOCIATION
2680 N. PACIFIC HWY. MEDFORD, OREGON 97501 TELEPHONE 773-5329

THE 3/7 WIGWAM BURNER IMPROVEMENT PLAN

August 8, 1968

PREAMBLE

In recognition of the acute awareness of Jackson County citizens to the problem of air quality in our valley, and in acknowledgement of the major contribution to the quality of the air occasioned by the necessity to dispose of wood waste by burning, the forest products industry of Jackson County through the Southern Oregon Timber Industries Association has devised the following general plan for improvement.

This is a two-stage plan referred to as the "3/7 Plan", indicating the two stages. Stage "A" (the "3" in "3/7") summarizes all the improvements in the total wigwam type wood waste burners which realistically can be contemplated in the coming three-year period. These plans include work programs and engineering currently in progress in the attempt to bring all burners under compliance with the State Sanitary Authority standards as well as modifications for improved efficiency. Much of the work under way and projected improvements will be in accordance with engineering either supplied by or approved by the State Sanitary Authority.

It is emphasized that current efforts and the plans considered in the initial phase of this plan have the common, major objective of meeting air quality standards as expressed in existing laws and regulations. The forest industry, however, believes a more desireable long-range objective is to continue promotion and adoption of wood utilization advancements so that the need to dispose of waste can be reduced to the very minimum.

In stage "B" (the "7" portion of this "3/7 Plan") we extend the intent of Jackson County's forest products industry for an additional four years, seven years beyond the current date. It should be clearly understood that we do not suggest it will be seven years before burners are made to comply with existing standards. The intent is to imply that the forest products industry looks for more complete utilization and the elimination of the need to burn, and by eliminating wigwam burners, actually effect a much more significant contribution to the improvement of ambient air quality.

There now are 20 wigwam burners being used by the forest products industry in Jackson County. In many instances wood utilization advances will make it possible to "phase out" the wigwam burner for regular use. It should be noted, however, that as burners are "phased out" of use mills will find it necessary to maintain the burners on standby in order to handle material at such times as when chip cars are not available for loading, or when there are mechanical breakdowns in chippers, handling equipment or related facility. The unacceptable alternative is to cease production and lay-off workers.

In addition to modifications to increase wood utilization, this plan contemplates considerable other alterations to the burners themselves - some necessitated by utilization changes, but many others in attempting to develop the most efficient combustion in the burner, and there-by minimize offensive emissions.

Planning for wigwam burner improvements at this time also takes into consideration research and development studies of the burners themselves. For the first time in Oregon, organized research on burners and alternative means for destructive disposal of wood waste is in progress at the OSU Laboratory. The research program is under directive and financing from the 1967 Legislature. In pursuing their responsibilities the State Sanitary Authority staff has found a modest amount of research to be necessary, with development of improvements resulting. This development can be expected to continue. Industry also, on an individual basis, is conducting some research and development which will continue to produce improvements over the next few years.

STAGE "A"

Known advances in wood utilization make it possible to plan modifications during the next three years which will divert considerable wood fiber from the waste category to useful products. Also, in the next three years it is reasonable to plan for adoption of engineering information which will improve wigwam burner efficiency.

Phase I. A total of eight burners are concerned in Phase 1 of this plan. Improvements in this phase are either now in process or are planned for completion during calendar year 1968. This phase includes complete elimination of one burner. Other modifications include significant increases in utilization which has the overall effect of reducing quantity of material disposed of by burning, and thus, the amount of combustion residue emitted in the air.

Phase II. Eight more burners are involved in Phase II. These plans are for plant revisions during 1969, with resultant changes in wood waste type and quantity requiring subsequent burner modification or elimination. Significant to the air quality picture is the planned "phase out" of five burners in Phase II plans.

Phase III. This phase will involve the remaining four burners, with projected improvements planned for completion by the end of 1970. One more burner will be retired from regular use and the other three will be modified to continue compliance with standards under the reduced waste fuel loads contemplated.

STAGE "B"

Three years is about as far ahead as we can realistically plan for practical purposes, but with some indication of the rapid advancement of wood technology and continued building of economic margins, it is not an entirely impractical crystal ball with which we can gaze at advancements within the realm of possibility by 1975.

The principle wood conversion residues with which industry now must contend are bark, sawdust, sander dust and veneer and plywood trim. Sawdust is being used more and more in both paper making processes and in the manufacture of certain particle board grades. The same is true for other fine material from both lumber and plywood production. Also, a consideration is that as the more desirable clear wood is withdrawn for paper and particle board, boiler plants will be converted to utilize the remaining material.

Bark remains the largest enigma, and will no doubt, be the last on the wood utilization scale. Bark is dirty, heterogeneous in fiber and character, and varies considerably by tree species. A plus factor is that as commercial forest areas -both public and private lands - become converted from over mature, old growth stands to fast-growing second growth, the bark residue will be altered considerably and the bark volume per given unit of finished wood product will be reduced. It is reasonable for a seven-year projection to speculate that bark utilization will increase several times over.

This plan predicts in Stage "A" that in three years the number of operating burners in Jackson County will be reduced to thirteen, a reduction of roughly two per year. In the four years prior to 1968 the County saw seven other burners "decommissioned". This also indicates a demise of about two per year. Knowing that bark remains the principle obstacle to total utilization, prudence dictates that we cannot predict the complete elimination of all burners, but it seems reasonable to contemplate a continuation of the two-per-year "phase out".

By the end of 1975, we believe there will be no more than five active burners remaining in Jackson County. These five, we predict, will burn with virtually no particulate fallout. There will be occasional days of noticeable smoke when mills process excessively wet pine species, and some smoke when the mills begin operations during morning hours, especially following weekend shut downs.

CONCLUSION

With the adoption and release of this wigwam burner improvement plan, the forest products industry in Jackson County collectively commits itself to the continued direction of attention to air quality problems and its demonstrated position of leadership in the State.

During the more firm period of planning, Stage "A", the industry expects to retire from regular service, seven wigwam burners, a 35 percent reduction in total number. By the conclusion of Stage "B", seven years from this date, the industry believes it is reasonable to expect eight more burners will be "phased out". In other words, in seven years Jackson County residents may contemplate a 75% decrease in number of operating burners.

Finally, and just as important as the more dramatic closing down of burners, is the industry's determination that as utilization pulls more and more former waste from the burners, the burners themselves will be modified to achieve the most effective combustion. This plan anticipates production of meaningful and useful results from wigwam burner research and development programs now in progress, and the rapid adotption of the expected innovations. In all cases, the objective will be to meet the State Sanitary Authority standards and to cooperate with the agency in development of more satisfactory standards and means to meet those standards as they are developed.

STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 15, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: PRINCIPAL AIR POLLUTION SOURCES, MEDFORD AREA

1.0 INTRODUCTION

This report has been prepared for distribution to the Members of the Authority in advance of their August 23rd survey and meeting in Medford, to provide background information concerning the principal air pollution sources in that area.

2.0 SUMMARY

Wigwam burners are the principal source of air pollution in the Medford area, which comprises a basin surrounded by mountains with poor conditions for atmospheric dispersion of smoke. Typically, complaints received are of fallout from wigwam burners, although the citizenry is quite aware of a visibility problem.

This area has been chosen by the staff for a concentrated effort in four phases: 1) Education, by means of technical presentation in a classroom situation; 2) Survey, to acquire data on each burner and evaluate its amenability to improvement; 3) Technical Assistance, by individual conference with mill managers; and 4) Enforcement action where cooperative effort fails. The program has been facilitated by the cooperation of the Southern Oregon Timber Industries Association, a very effective organization somewhat unique to this area.

Phase 1 has been completed for Jackson, Josephine and Klamath Counties; phase 2 has been completed for Jackson and Josephine Counties; phase 3 is in process in Jackson County only; phase 4 begins with the appearance of two mills on the August 23rd Sanitary Authority meeting agenda.

3.0 BACKGROUND

The specific airshed which we have referred to as the "Medford Area" comprises a topographic basin of approximately 144 square miles ringed by mountains rising two to three thousand feet above the valley floor which effectively shield the valley from the purging effects of upper air flow. It is as though Medford were located in a closed box, the sides of which are the mountains, the invisible top of which is the inversion.

Aside from seasonal, short-term orchard heating, the timber industries are the major source of air pollution in the basin. Twenty-two wigwam burners contribute 78% of the suspended particulate in the atmosphere. Smoke from boiler stacks and from the open burning of wood residues also contribute, and wind-blown wood particles from open storage facilities are a recent source of complaint.

As the major contributor to the economic health of the area, the Medford timber industries are uniquely conscious not only of their power, but also of their responsibility and vulnerability to criticism. A strong provincial and fraternal atmosphere prevails, readily evident in the machinations of the Southern Oregon Timber Industries Association (SOTIA), which not only counts most of the mills as its members, but now offers associate membership to contractors, vendors, and other timber industry associated concerns. A current membership drive anticipates a roster of approximately 100.

The presence of such an organization has much to commend it from the standpoint of an air quality control program. SOTIA points with pride to its avowed position of leadership in the field of wigwam burner improvement, it's members having financed much of the initial studies conducted by Dr. Boubel of Oregon State University, which evolved into the formulation of the initial wigwam burner regulation. Recently, it has endeavored to induce its member mills to subscribe to a consulting engineering service and has succeeded in a similar effort to set up a central emission sampling service for wigwam waste burners. Our current program of concentrated staff effort in the Medford area has been facilitated by the association's help in promotion and arrangements for the workshop meetings, and in engendering a cooperative spirit among its members through the columns of its monthly organ "The Whistle Punk", edited by SOTIA's genial director, Martin Craine.

There is another side to the coin which must not be overlooked, however. SOTIA also provides a public relations service for the timber industries and in the performance of this function has recently admonished its members to avoid burning sugar pine during the week of August 18th, while simultaneously releasing stories to the news media which laud industry for its air quality progress. A current press release presents an industry program for wigwam burner phase-out which by our analysis amounts only to normal attrition. (It shows one burner phased out in the next year, whereas our goal is eleven.)

4.0 THE STAFF PROGRAM

In brief, the staff program currently underway in the Medford area consists of a concentrated effort in education followed by field assistance, and enforcement action where necessitated by a lack of constructive effort.

The program began early in March with duplicate technical sessions on two successive days. A total of 63 were in attendance from Jackson, Josephine and Klamath Counties, 46 of which were mill personnel. The sessions covered federal and state air quality control programs, the applicable regulations and the tax incentive program, followed by technical presentations of wigwam waste burner combustion concepts and their application. A reference manual which had been prepared for educational use was distributed to the attendees at the end of each session. (A copy is enclosed for your permanent reference).

Since the March training session, the staff has conducted a comprehensive survey of all of the wigwam waste burners in Jackson and Josephine Counties. All open burning sources and smoking boiler stacks have also been recorded. Concurrently with the burner survey and evaluation phase, many of the mills in the Medford area have been provided with individual technical assistance, and one mill (Cheney Timber Products) has agreed to modify its burner completely in accordance with staff recommendations so that it might serve as a demonstration installation. To date the individual mill assistance phase has been concentrated in the Medford area, although all burners in the Grants Pass area have now been surveyed and evaluated in readiness for a follow-on program there.

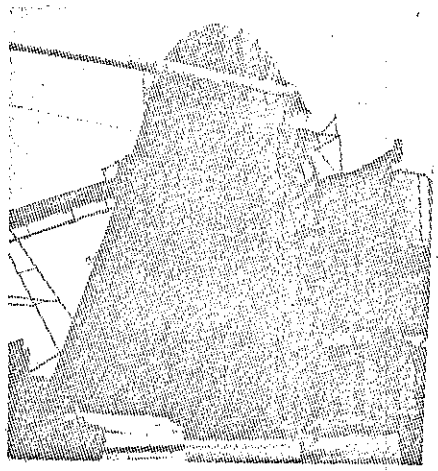
Approximately one-half of the burners in the Medford area have been found to have insufficient fuel with which to attain efficient combustion, even by use of the best currently available technology. Several of the mills in this group have been induced to plan retiring their burners from service. Staff policy has been to recommend phase-out through utilization or alternative methods of disposal wherever feasible, and burner modification only in those cases where there is adequate fuel with which to achieve significant improvement.

Through the cooperation of the Air Quality Committee of the Southern Oregon Timber Industries Association, we have endeavored to induce the organization of a cooperative, central collection and incineration service for the efficient disposal of all of the residues from those mills in the "insufficient fuel" category. On July 9, SOTIA called a meeting of a selected list of mill representatives so that we might present this concept for consideration. The project was assigned to their Air Quality Committee for further development.

The eight basic requirements for efficient combustion in a wigwam burner are presented on page 1.4 of the wigwam burner manual. Every burner in Jackson and Josephine Counties has now been evaluated as to its capability in each of these 8 requirements, using a grading system of 1 to 5. Number 1 indicates a 20% capability, and number 5 indicates 100% capability. The 8 points are then summarized in an "overall evaluation" using the same grade point system. Attached is a sample form covering the evaluation of a single burner, followed by a listing of all of the burners showing the overall evaluation for each. The black dot that appears before the individual mill name on the summary report indicates that the burner is considered capable of phase out within the next year.

Also attached are maps covering both the Grants Pass and the Medford areas on which the individual burners are located. These are provided for your reference during the survey trip planned for Authority Members preceeding the August 23rd formal Authority meeting in Medford.

WIGWAM WASTE BURNER
PROGRESS EVALUATION



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FUEL QUANTITY												
FUEL CHARACTERISTIC												
UNDERFIRE AIR SYSTEM												
OVERFIRE AIR SYSTEM												
BURNER SHELL												
FUEL INTRODUCTION												
CORRECT ADJUSTMENT												
ADEQUATE MAINTENANCE												
OVERALL EVALUATION												
OPACITY (RINGELMANN)												

REMARKS:

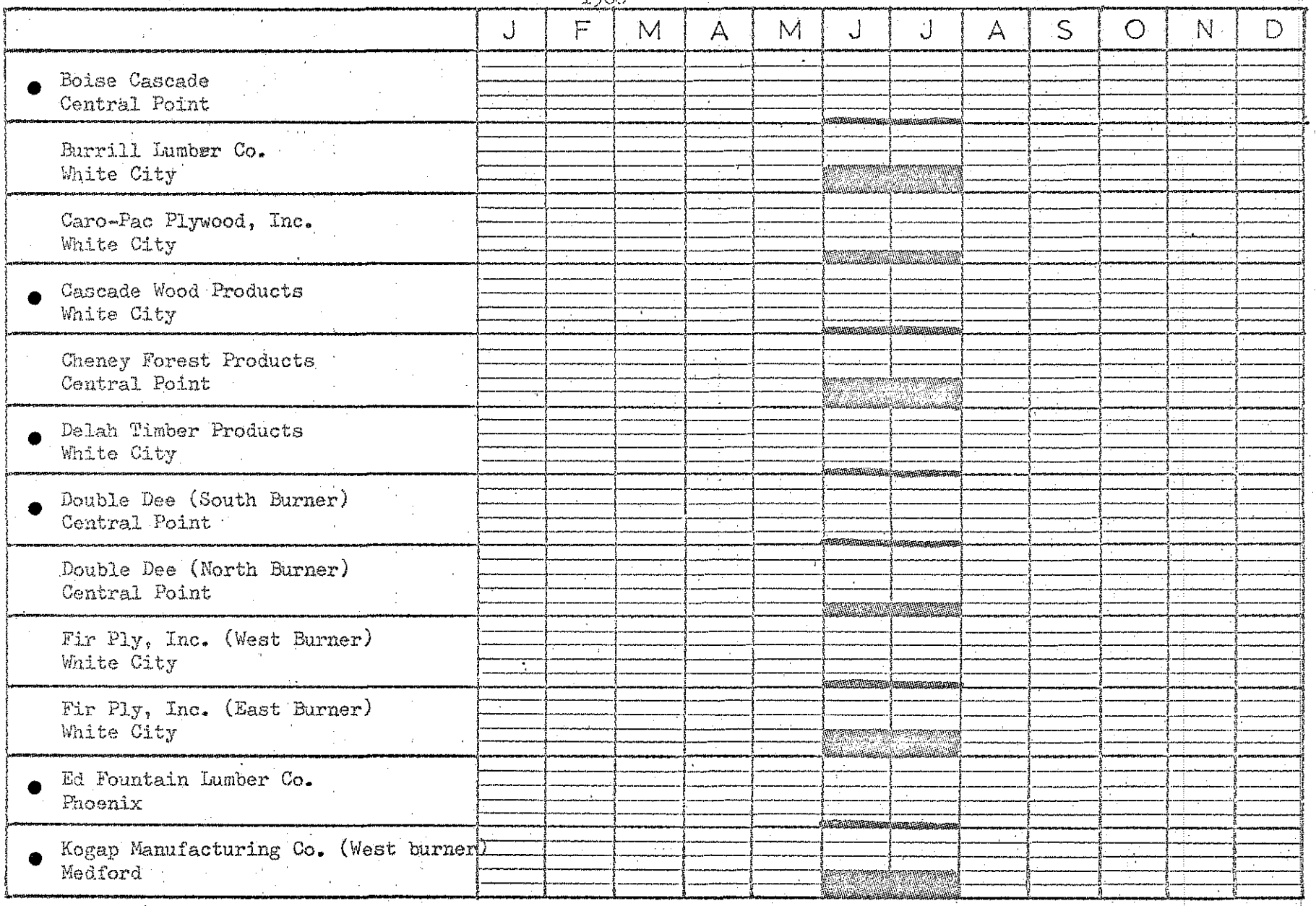
continued phase out
to early 1969
letter 8-12-68

FIRM NAME DELAH TIMBER PRODUCTS
LOCATION White City

WIGWAM WASTE BURNER PROGRESS EVALUATION

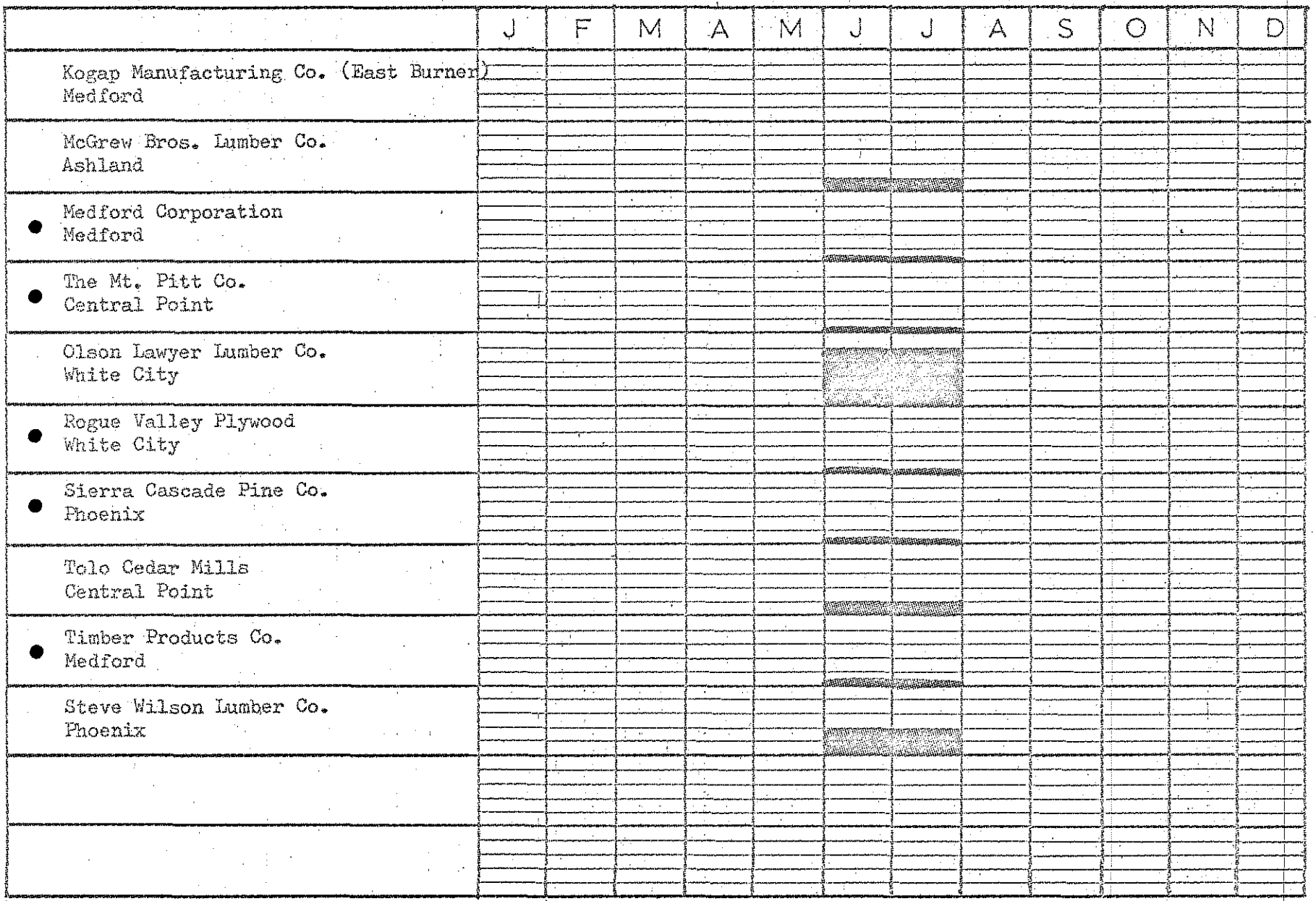
JACKSON COUNTY

1968



WIGWAM WASTE BURNER PROGRESS EVALUATION

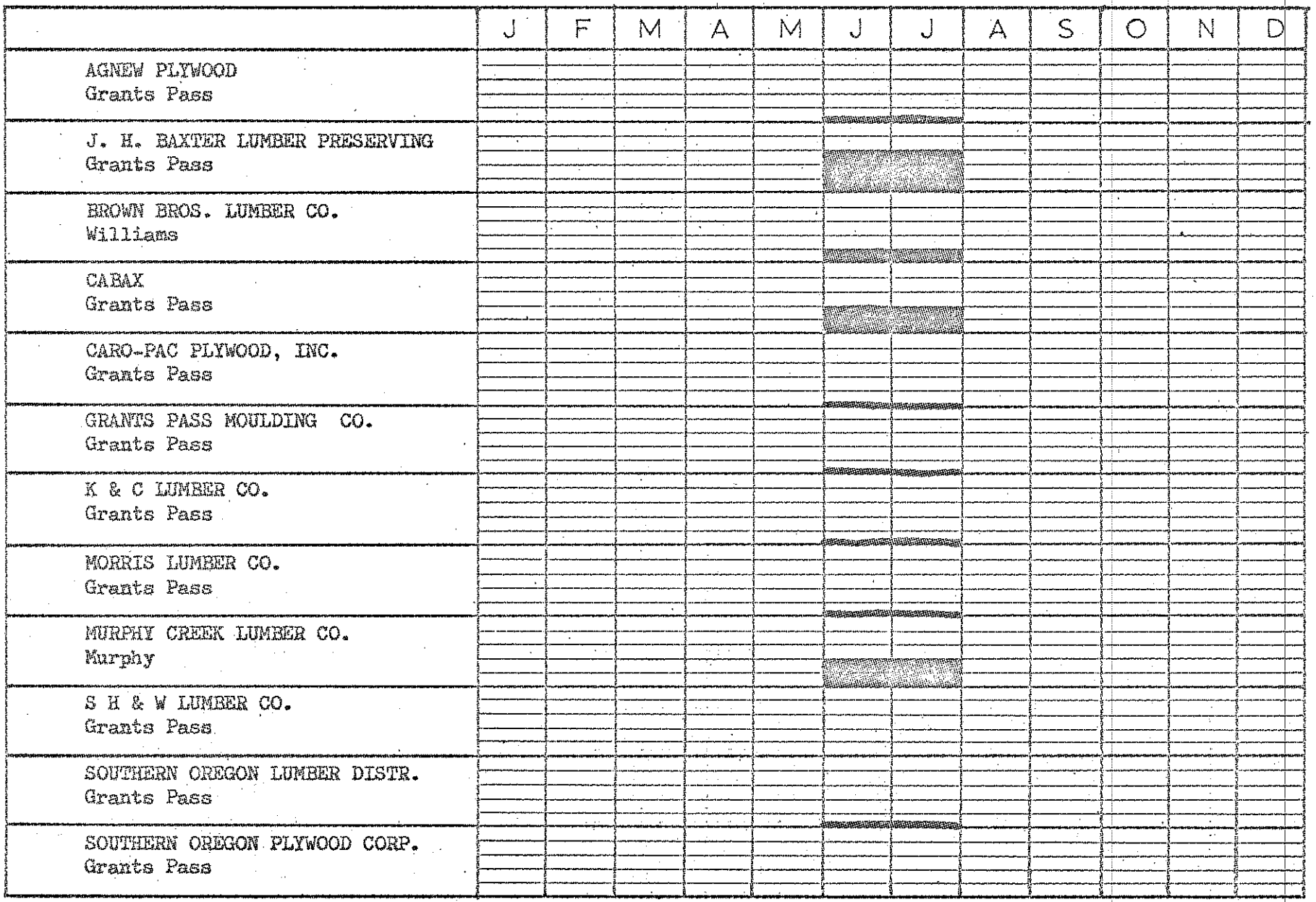
JACKSON COUNTY
1968



WIGWAM WASTE BURNER PROGRESS EVALUATION

JOSEPHINE COUNTY

1968



WIGWAM WASTE BURNER PROGRESS EVALUATION

JOSEPHINE COUNTY

1968

	J	F	M	A	M	J	J	A	S	O	N	D
SPAULDING & SON Grants Pass												
VANCOUVER PLYWOOD CORP. Grants Pass												

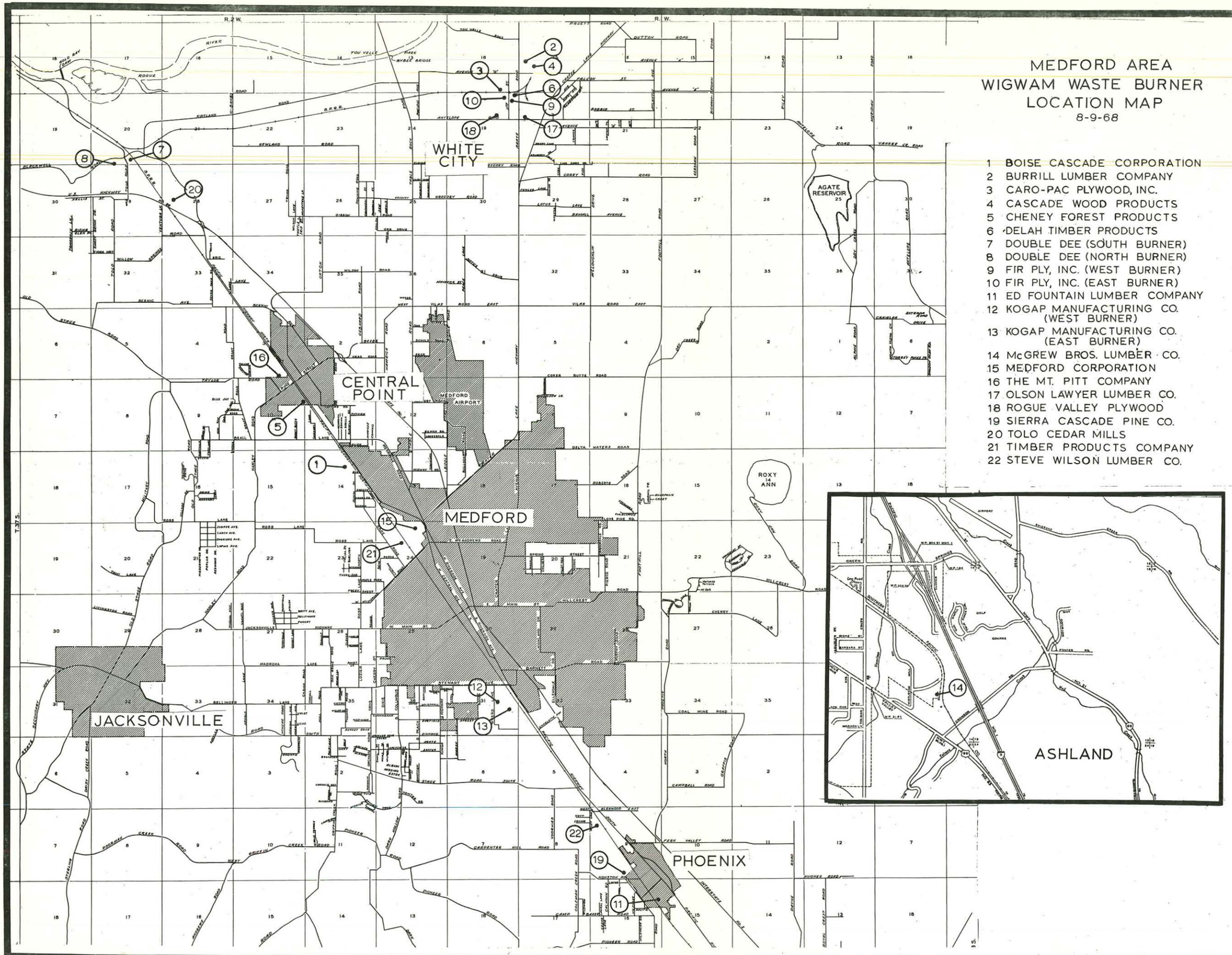
1 AGNEW PLYWOOD
2 J. H. BAXTER LUMBER PRESERVING
3 BROWN BROS. LUMBER CO. +
4 CABAX MILLS
5 CARO-PAC PLYWOOD, INC.
6 GRANTS PASS MOULDING CO.
7 K and C LUMBER CO.
8 MORRIS LUMBER CO.
9 MURPHY CREEK LUMBER CO. +
10 S H & W LUMBER CO.
11 SOUTHERN OREGON LUMBER DIST.
12 SOUTHERN OREGON PLYWOOD CORP.
13 SPAULDING AND SON, INC.
14 VANCOUVER PLYWOOD, INC.

+NOT IN AREA SHOWN

GRANTS PASS AREA
WIGWAM BURNER
LOCATION MAP
8-13-68

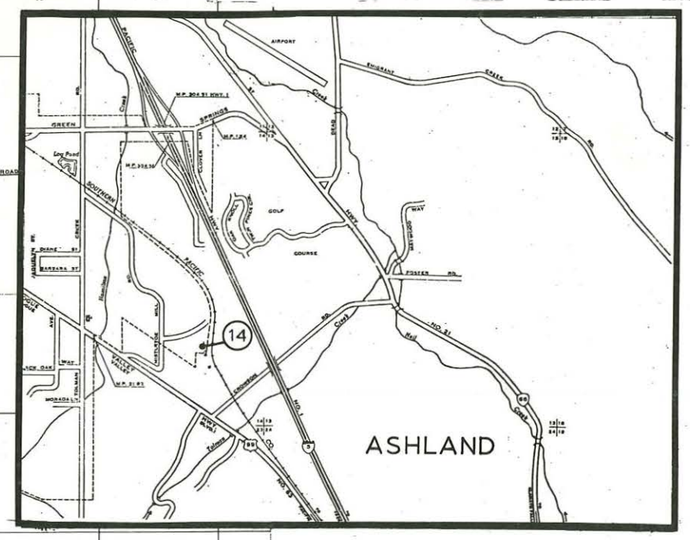
MEDFORD AREA
WIGWAM WASTE BURNER
LOCATION MAP
8-9-68

1 BOISE CASCADE CORPORATION
2 BURRILL LUMBER COMPANY
3 CARO-PAC PLYWOOD, INC.
4 CASCADE WOOD PRODUCTS
5 CHENEY FOREST PRODUCTS
6 DELAH TIMBER PRODUCTS
7 DOUBLE DEE (SOUTH BURNER)
8 DOUBLE DEE (NORTH BURNER)
9 FIR PLY, INC. (WEST BURNER)
10 FIR PLY, INC. (EAST BURNER)
11 ED FOUNTAIN LUMBER COMPANY
12 KOGAP MANUFACTURING CO. (WEST BURNER)
13 KOGAP MANUFACTURING CO. (EAST BURNER)
14 McGREW BROS. LUMBER CO.
15 MEDFORD CORPORATION
16 THE MT. PITT COMPANY
17 OLSON LAWYER LUMBER CO.
18 ROGUE VALLEY PLYWOOD
19 SIERRA CASCADE PINE CO.
20 TOLO CEDAR MILLS
21 TIMBER PRODUCTS COMPANY
22 STEVE WILSON LUMBER CO.



MEDFORD AREA
WIGWAM WASTE BURNER
LOCATION MAP
8-9-68

1 BOISE CASCADE CORPORATION
2 BURRILL LUMBER COMPANY
3 CARO-PAC PLYWOOD, INC.
4 CASCADE WOOD PRODUCTS
5 CHENEY FOREST PRODUCTS
6 DELAH TIMBER PRODUCTS
7 DOUBLE DEE (SOUTH BURNER)
8 DOUBLE DEE (NORTH BURNER)
9 FIR PLY, INC. (WEST BURNER)
10 FIR PLY, INC. (EAST BURNER)
11 ED FOUNTAIN LUMBER COMPANY
12 KOGAP MANUFACTURING CO. (WEST BURNER)
13 KOGAP MANUFACTURING CO. (EAST BURNER)
14 McGREW BROS. LUMBER CO.
15 MEDFORD CORPORATION
16 THE MT. PITT COMPANY
17 OLSON LAWYER LUMBER CO.
18 ROGUE VALLEY PLYWOOD
19 SIERRA CASCADE PINE CO.
20 TOLO CEDAR MILLS
21 TIMBER PRODUCTS COMPANY
22 STEVE WILSON LUMBER CO.



STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 23, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: STAFF REPORT, STEVE WILSON LUMBER CO., MEDFORD

Steve Wilson Lumber Co. operates two sawmills, one at Trail and one at Phoenix. The wigwam burner at the Phoenix mill has been the subject of fallout complaints since July of 1958, primarily from the owners of mobile home parks located on adjacent properties. The problem has persisted despite the implementation in 1965 of the corrective measures recommended in Oregon State University Experiment Station Circular No. 34 and the recommendations of Austin Evanson of Cornell, Howland, Hayes and Merrifield. In a staff survey on April 8, 1966, it was found that the burner was in compliance with the then effective wigwam burner regulation and was consequently subject to a variance from regulations pertaining to particle fallout, suspended particulate matter and smoke discharge.

No complaints were received from August 23, 1965 until September 1966. A fallout station located approximately one-eighth mile southeast of the burner indicated decreasing values during this period from a maximum of 60 tons per square mile per month in November 1965 to 13 tons per square mile per month the following August.

Complaints were resumed in November 1966, however, and a value of 340 tons per square mile was recorded in December 1966. At this time, the staff again visited the mill, found the burner in excellent condition and conscientiously operated, but plagued by difficult fuel characteristics. Experiments with supplementary overfire air blowers were recommended. Subsequent fallout data indicated a progressive reduction until a value of 23 tons was reached in June and July of 1967.

For unknown reasons, episodes of high fallout occurred in August and November of 1967, and it may be concluded that these episodes caused the adjacent property owners to file a petition with the Jackson County Court.

On November 14th, the burner was again surveyed by the staff and a five point program recommended as essential to improved combustion efficiency. The essence of the recommendations was:

1. Reduce refuse lengths to 2 feet or less.
2. Close all leaks in burner shell.
3. Replace all overfire air inlets with high efficiency nozzles.
4. Rebuild the underfire air system to provide better dispersion.
5. Install a recording pyrometer.

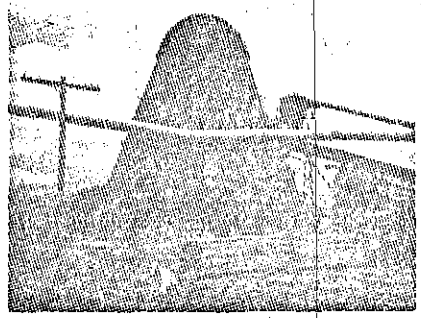
It was pointed out that the burner was apparently too large for the rate of fuel delivery, but that the above recommendations should be accomplished first and performance then re-evaluated to determine whether further modification would be advisable. Detailed drawings were subsequently provided by the staff, together with the added recommendation that a chute be installed at the end of the material conveyor.

On March 15, a Court hearing was held in the matter, at which the staff testified that the five point program had been completed, but that it was too early to determine its effectiveness and that time would be required for burner operators to gain experience in adjustment. The Court continued the hearing until June 12th.

Following the March hearing, Steve Wilson Lumber Co. installed the material chute and a blowpipe system to collect fine sawdust from the resaws. On April 4, Mr. Turton, the principal complainant, informed the staff that he had noted a very considerable improvement, that he hoped that they would be able to continue to perform as well, and that fallout, not smoke, had been the only problem. The complainants did not appear at the June 12th hearing, and the Jackson County Court ordered the petition dismissed.

Despite a continuing decrease in fallout rate as indicated by a sampling station near Mr. Turton's residence (see attached chart), a number of complaints have been received during the past two months. The staff has not yet had an opportunity to ascertain the reasons for this discrepancy between fallout sampling results and complaints received, or to re-evaluate the burner operating practices currently in use.

WIGWAM WASTE BURNER
PROGRESS EVALUATION



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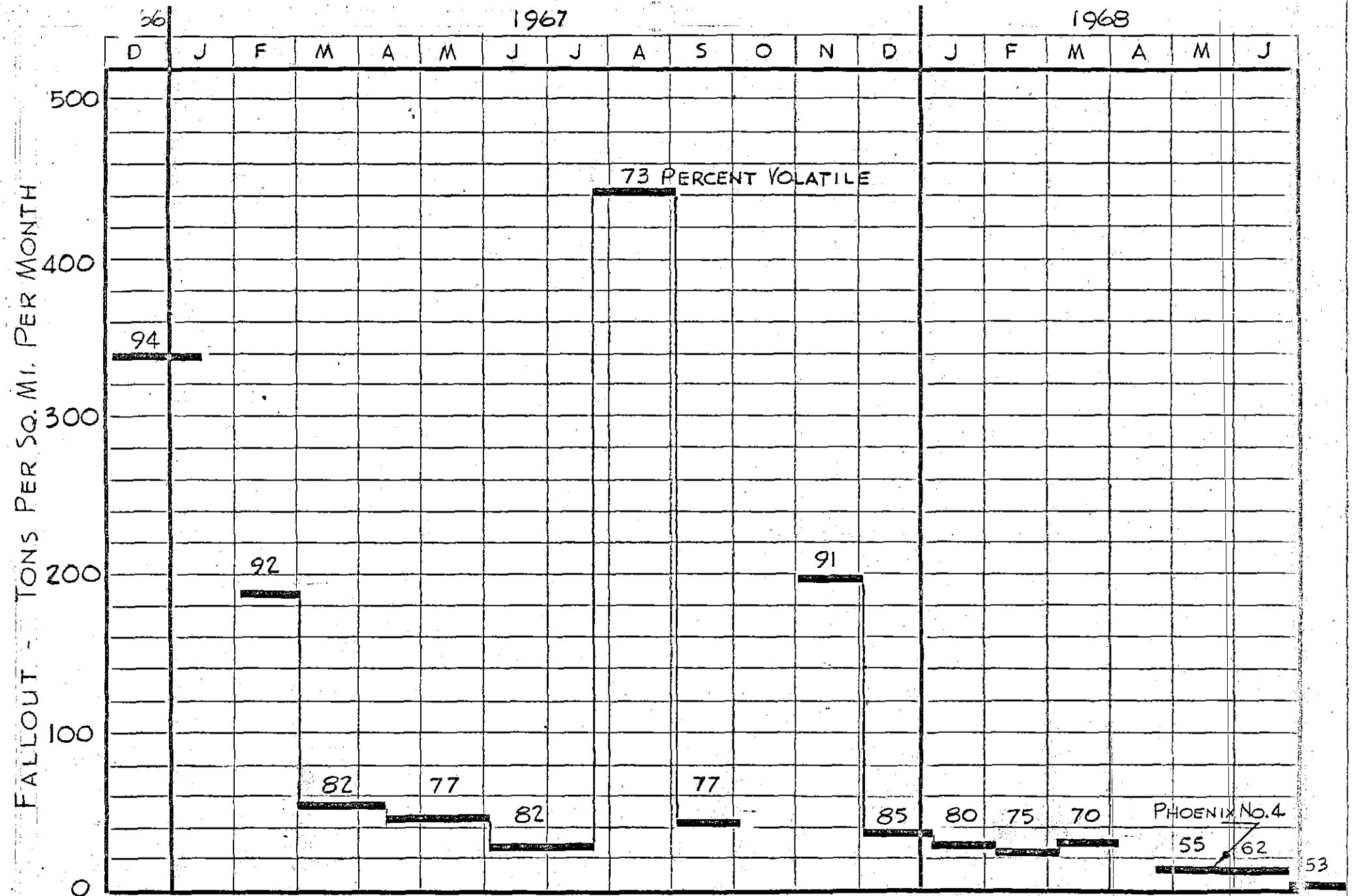
FUEL CHARACTERISTIC												
UNDERFIRE AIR SYSTEM												
OVERFIRE AIR SYSTEM												
BURNER SHELL												
FUEL INTRODUCTION												
CORRECT ADJUSTMENT												
ADEQUATE MAINTENANCE												
OVERALL EVALUATION												
OPACITY (RINGELMANN)												

REMARKS:

FIRM NAME STEVE WILSON LUMBER CO.

LOCATION Phoenix, Oregon



FALLOUT SUMMARY
PHOENIX STATION NO. 2

STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 23, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: STATUS REPORT, CHENEY FOREST PRODUCTS, MEDFORD

1.0 BACKGROUND

Cheney Forest Products operates a sawmill located within the city limits of Central Point, immediately adjacent to Highway 99.

The wigwam burner at Cheney Forest Products has been the subject of fallout complaints since June 1956. The earlier complaints expressed considerable concern about the danger of fire, as expressed in a July 1956 letter received from the City of Central Point.

The subject was discussed at the July 4, 1963 meeting of the Authority, and again on August 15, 1963, at which time the company was requested to submit a proposal for corrective methods within 30 days. On September 11, Mr. Cheney addressed a letter to the Authority advising that Cornell, Howland, Hayes and Merrifield (CH_2M), had been retained as consultants on the problem, and presenting several proposals toward a reduction in fallout.

In December of 1963 a petition bearing 260 signatures was received which requested a Sanitary Authority hearing on the subject of fallout from the Cheney Forest Products burner. The Authority considered the matter at its next regular meeting (January 30, 1964) and requested submittal of a copy of the CH_2M report together with specific additional information as to fuel quantity and operating procedures.

In a letter dated June 15, 1964, the staff advised Mr. Cheney that the requested information had not yet been received. A full report was then requested. In a subsequent reply, Mr. Cheney stated that they were taking bids for the installation of a barker and chipper to reduce the quantity of residues and that they had joined with other mills in the area to sponsor additional engineering studies.

On June 18, 1965, the staff advised Cheney Forest Products that fallout sampling reflected values in excess of regulations. The previous month's value was 276 tons per square mile per month. A report was requested by July 1, 1965 regarding a program for control. In a reply dated July 1, Mr. Cheney advised of a program in process for the sale of shavings and sawdust which would reduce the quantities of refuse burned by approximately 60 per cent. By January 14, 1966, however, it was found that the expected decrease in fallout had not been indicated by our sampling stations, and Mr. Cheney was so advised. Apparently the expected contract for sale of the residues had not materialized.

A survey of the burner was conducted on February 16, 1966, and detailed staff recommendations were subsequently forwarded to Mr. Cheney. Primarily, these had to do with adjustments for higher exit temperature and revisions to the underfire air system.

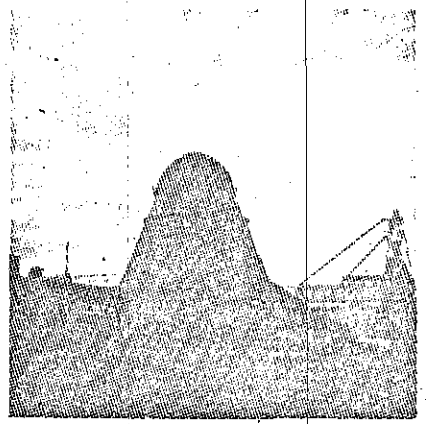
Efforts to find sale for their marketable residues were partially realized in August of 1967 and shavings storage binds were installed. In September, a barker and chipper installation was completed so that all residues were then marketable except for sawdust and bark.

Throughout the entire period, repeated complaints have been received of excessive fallout in the adjacent residential and commercial areas, and fallout sampling has consistently indicated levels in excess of regulations.

2.0 CURRENT ACTIVITY

In the implementation of the current concentrated program in the Medford area, the staff has proposed to Cheney Timber Products that they modify their burner completely in accordance with staff recommendations for use as a demonstration facility. Mr. Cheney has been quite receptive to such a project and the renovation program is under way. Construction has been temporarily halted, however, as a market has been found for their sawdust and a redesign will be necessary when the revised fuel delivery rate can be measured. By the end of this week, installation of the sawdust bins will be complete, and the measurement of the remaining bark residues will be possible next week.

WIGWAM WASTE BURNER
PROGRESS EVALUATION



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FUEL CHARACTERISTIC												
UNDERFIRE AIR SYSTEM												
OVERFIRE AIR SYSTEM												
BURNER SHELL												
FUEL INTRODUCTION												
CORRECT ADJUSTMENT												
ADEQUATE MAINTENANCE												
OVERALL EVALUATION												
OPACITY (RINGELMANN)												

REMARKS:

FIRM NAME CHENEY FOREST PRODUCTS
LOCATION Central Point, Oregon

STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 23, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: STATUS REPORT, MT. PITT LUMBER CO., CENTRAL POINT

1.0 BACKGROUND

Mt. Pitt Lumber Co. operates a timber products plant adjacent to the residential and commercial areas of Central Point. The subject of their refuse disposal first came to the attention of the Authority on March 30, 1955, when we were contacted by the Central Point City Recorder for advice concerning a construction permit for a 20' x 20' wood waste burner at the Mt. Pitt plant. On April 5, 1955, the Authority staff forwarded a letter to the Mt. Pitt Co. advising that the 20' x 20' wigwam type burner proposed would cause nuisance conditions to the residences in the vicinity, the closest of which would be within 50 feet of the proposed burner location. It was recommended that a multiple chamber incinerator be used in lieu of a wigwam burner. Contrary to these recommendations, a wigwam burner was installed.

On November 3, 1958, a letter was received from Karl Clinkinbeard, attorney for the Rogue River Valley Creamery in Central Point, stating that his clients operation had been repeatedly contaminated by fallout from Mr. Pitt's wigwam waste burner and requesting an inspection of the problem. Following a staff investigation on December 23, Mt. Pitt Lumber Co. was forwarded a copy of Oregon State College Engineering Experiment Station Bulletin, "Wood Waste Disposal and Utilization", and requested to operate their burner in accordance with the recommendations presented therein. Mr. Clinkinbeard was advised of this action.

On September 8, 1959, Rogue River Valley Creamery petitioned the Authority for a hearing alleging that Mt. Pitt Lumber Co. was the source of "partially burned sawdust and other lumber manufacturing waste products" deposited upon their premises. A survey of the area was then conducted during the week of September 21. Short term sampling revealed a particle fallout rate of 111 tons per square mile per month of fine cinders and light sawdust. Mt. Pitt Lumber Co. was advised of the findings and provided with a list of eight recommendations to reduce the fallout deposition. In the subsequent period, long term sampling showed a fallout rate of 35 to 66 tons per square mile per month.

On April 6, 1960, a letter was received from Karl Clinkinbeard, attorney for Rogue River Valley Creamery, stating that no satisfactory solution to the problem had yet resulted, that the Mt. Pitt Co. activity constituted a nuisance and trespass, and stating that the Mt. Pitt Co. should be enjoined and restrained from maintaining the nuisance and trespass. The subject was considered at the April 7, 1960 meeting of the Sanitary Authority, following

which Mt. Pitt Lumber Co. was advised that they must take appropriate action by May 15, or that the Authority would proceed with formal enforcement action.

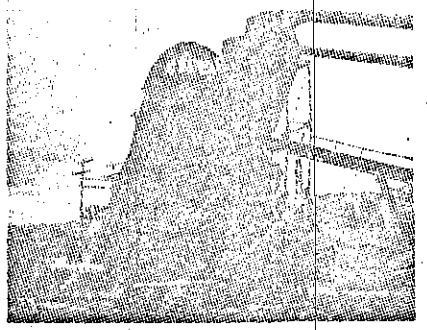
Subsequent fallout data reflected a downward trend and the files contain no further correspondence from the attorneys for Rogue River Valley Creamery.

2.0 RECENT ACTIVITY

In February of 1966, the staff contacted Mt. Pitt Lumber Co. concerning compliance with the original wigwam burner regulation. The following month, it was reported that the required modifications had been completed. Fallout values in the area have continued to indicate excessive levels, however, and more recently complaints have been received from the adjacent residential areas.

In the conduct of the current concentrated program in the Medford area, the staff has been in frequent contact with Mr. Edward Collins, President, Mt. Pitt Lumber Co. Mr. Collins has been advised that smoke and fallout are in excess of regulations, and that the practice of batch loading also constitutes a violation. The staff considers that the quantity of materials delivered to the burner is considerably less than that needed for efficient combustion. It has therefore been our recommendation, confirmed by letter of May 13, 1968, that a hog which the mill has at hand be used to reduce the materials to a marketable consistency, and that the residues then be stored in a bin suitable for either truck loading or for delivery to the wigwam burner at its optimum incineration rate on a reduced number of calendar days. Mr. Collins is currently endeavoring to find a customer and is investigation purchase of a storage bin. As of August 20, it appeared that his efforts might soon meet with success.

WIGWAM WASTE BURNER
PROGRESS EVALUATION



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FUEL CHARACTERISTIC												
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FUEL INTRODUCTION												
CORRECT ADJUSTMENT												
ADEQUATE MAINTENANCE												
OVERALL EVALUATION												
OPACITY (RINGELMANN)												

REMARKS:

FIRM NAME MT. PITT CO.
LOCATION Central Point, Oregon

STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 23, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: TIMBER PRODUCTS COMPANY, MEDFORD, OREGON

1.0 BACKGROUND

Timber Products Co. is located on McAndrews Road at the northwest perimeter of the downtown Medford residential and commercial area. The plant has undergone a major operational change since August of 1967, which was the approximate time of a change in ownership. Previously owned by Cyprus Mines Corporation, the plant was reportedly sold to Wilford H. Gonyea of Springfield, and Jay Pritzker of Chicago. Under the new ownership, the plant now operates primarily in the production of particleboard and veneer. The sawmill has been dismantled and sold, but the plywood lay-up plant is intact but not in operation. Currently, a major expansion is evident in the particleboard phase of the operation.

The major sources of air pollution from this plant have been (1) smoke and fallout from the wigwam waste burner, (2) wind-blown particulate from the open chip storage area, and (3) open burning of plant residues in an area immediately northwest of the log pond. In response to staff requests, the practice of open burning has recently been terminated.

2.0 HISTORY

In chronological order, the following is a brief of our records concerning air pollution generated by Timber Products Co.

April 6, 1965. Letter, Leo Baton to Timber Products Co. regarding complaints of open burning and of smoke emissions from the wigwam burner.

April 19, 1965. Reply from R. K. Hood, Resident Manager, Timber Products Co. advising that the open burning of accumulated wood residues had been completed, and requesting forbearance on the wigwam burner problem pending completion of construction of a multi-million dollar particleboard plant, which together with their wood waste boilers were expected to eventually eliminate need for the wigwam burner.

February 14, 1966. Staff wigwam burner survey. Report included, "very small fire in very large burner. Normal operation approximately 390°, much smoke. Difficult fuel introduced with excessive conveying air."

March 22, 1966. Letter, staff to Robert Hood, Resident Manager, pointed out difficulty in attaining acceptable discharge levels, even though burner constructed in accordance with regulations, due to small quantity of refuse and its introduction by air conveying methods. Use of an alternate method of disposal was requested, such as incineration in a refractory lined incinerator equipped with an afterburner. It was stated that devices which have a potential for creating an air pollution problem should be submitted to the staff for approval before installation.

April 25, 1966. Staff survey. Heavy smoke from wigwam burner observed. Open storage of fine wood waste material observed as undoubtedly the source of complaints received from the neighborhood.

April 25, 1966. Reply to staff letter of March 22nd from R. K. Hood, Resident Manager, agreed with conclusions regarding difficulty of burning air conveyed fines. Advised of plans to use sander dust as fuel in particleboard dryer currently fired by natural gas, of contracts to sell all excess bark not needed for boiler fuel, of installation of a new chipper for utilization of waste wood in particleboard process, and of hope for converting the wigwam burner to a fuel storage vault.

December 5, 1966. Staff memo from Leo Baton advised of numerous complaints of sander dust fallout in the adjacent commercial and residential area. It appeared to be coming both from the wigwam burner and from the open storage area.

July 25, 1967. Staff memo (Leo Baton) advised of heavy smoke from the wigwam burner and of complaints of fallout, including an auto body paint shop located across McAndrews Road from the plant.

August 5, 1967. Letter, Mrs. R. E. Gray to Governor Tom McCall, complained of soot and ashes from the wigwam burner, stating it was "the worst summer ever".

August 9, 1967. Letter, staff to R. K. Hood, advised of continued complaints from Medford residents regarding emissions from the wigwam burner and requested comment regarding the analysis and suggestions included in the staff letter of March 22, 1966. It was noted that plans for utilization had not ended the problem as assured in Timber Products letter of April 25, 1966.

August 10, 1967. Letter, Governor McCall to Mrs. R. E. Gray, advising of Sanitary Authority concurrence that little or no improvement had been made despite assurances from the mill and that a concerted effort was underway to induce the mill to develop an alternative method of incineration or disposal.

August 11, 1967. Letter from Timber Products Co., advised of efforts to improve burner efficiency by use of a natural gas burner to ignite sander dust introduced into the wigwam burner, but agreeing that a wigwam burner is not an efficient disposal method. It was suggested that the staff meet with them to discuss alternative disposal methods, and to explain "the Cyclo-Tube" burner manufactured in Portland. Hope was expressed that the heat generated in an incinerator could be used for drying fibers for the particleboard plant.

August 31, 1967. The plant was shut down at midnight after having been sold to Wilford H. Gonyea and J. A. Pritzker.

September 7, 1967. Plant operations were resumed on a limited basis, with Mr. William Smith of Eugene as its new interim manager.

April 4, 1968. Staff memo, regarding conference with Glenn Nelson, Superintendent. Mr. Nelson reported the mill then functioning only as a particleboard plant, the burner receiving only a minor quantity of sander dust and occasional yard clean-up material, that there was a swampy sight nearby which could be used for the disposal of the yard and pond clean-up materials, and that CH_2M was currently developing plans for using the sander dust in the particleboard dryers. Mr. Nelson also reported that they had been unable to secure a definite date from CH_2M pending an evaluation of a pilot installation in some other plant. Mr. Nelson was advised of a violation of regulations governing smoke discharge and that he might expect a letter requesting a definite date for termination of the use of the wigwam burner.

April 9, 1968. Letter to Timber Products Co. confirming the April 4th conversations, suggesting that the land fill would offer an alternative solution to both the clean-up and sander dust problems, and requesting a reply by April 15th advising of a schedule for early as possible termination of the use of the wigwam burner.

April 15, 1968. Letter from Timber Products Co. stating that they would be able to give a definite date for termination of the burner only after installation of the sander dust burners in the particleboard dryers, and that disposal of the sander dust in the land fill was considered impractical due to the possibility of its being carried away by water or by the wind.

April 25, 1968. Letter to Timber Products Co. in reply to their's of April 15th, expressing disappointment that nothing definite had been offered regarding a solution to the wigwam burner problem, pointing out that this was a problem of long standing, and enclosing a copy of PHS Publication No. 1012 which delineates the correct methods for constructing a land fill to preclude the material from becoming air-borne or water-borne. It was also pointed out that under Oregon Statutes, it is the responsibility of the person responsible for complying with Standards to develop the method and means for meeting the state Standards, and that the choice of method remains with the violator. It was again urged that Timber Products respond to our request for a definite plan and schedule for accomplishing compliance.

June 13, 1968. Letter to Timber Products Co. from Leo L. Baton, confirming conversations with Mr. William Smith on June 11th, relative to complaints of smoke and sawdust from the wigwam burner and the open storage area, pointing out the problem of fine materials being wind-blown to the adjacent properties from the truck unloading facility, and requesting cooperation in providing effective control to alleviate these problems.

May 9, 1968. Letter to Timber Products Co. advising that considerable open burning had been observed in a refuse dump to the northwest of their log pond within one mile of the Medford city limits, enclosing a copy of the Oregon Administrative Rules pertaining, and requesting that the fires be extinguished and that suitable precautions be taken to preclude a repetition.

June 27, 1968. Staff memo, reporting continued open burning with a smoke reading of Ringelmann #5 continuous.

July 3, 1968. Letter to Glenn F. Nelson, Plant Superintendent (registered mail) stating that we had not yet received a reply to our letter of April 25 regarding the wigwam waste burner problem, advising of continuing observations of excessive smoke discharge, and requesting an acknowledgment and reply by July 15.

July 3, 1968. Letter to Glenn F. Nelson, Plant Superintendent (registered mail) advising of continuing observations of open burning, again requesting that the practice be terminated, and requesting an acknowledgment by July 15 advising of the steps being taken to assure termination of open burning and of the alternative method of refuse disposal being utilized.

July 3, 1968. Letter to Mr. William Smith, General Manager, Timber Products Co. advising that fallout from the particleboard material storage facility has been the subject to continuing complaints, re-emphasizing the need for correction of the wigwam burner and open burning problems, and advising that each of the three problems constitutes a violation of OAR pertaining to air pollution. Copies of the applicable statutes and administrative rules were enclosed.

July 15, 1968. Letter from Mr. Thomas E. Brownhill of Riddlesbarger, Pederson, Brownhill and Young, Attorneys at Law, Eugene, stating that as attorney for Timber Products Co., he had been requested to answer our letter of July 3rd addressed to Mr. William Smith. Mr. Brownhill stated that Timber Products plans to install a mechanical shield or deflector at the storage facility and to plant trees in the immediate vicinity of the storage facility and also along the road, and that a definite date for completion of the mechanical shield would be possible upon completion of its design.

Regarding the wigwam burner, Mr. Brownhill advised that Timber Products had retained Wyatt and Kipper Engineering of Seattle, and Peabody Engineering of New York to prepare plans and methods for burning the sander dust in the particleboard dryer, and that upon completion of the plans and the necessary mechanical changes, the use of the wigwam burner for burning sander dust would be discontinued.

The open burning, it was stated, had been terminated.

July 31, 1968. Letter to Mr. Thomas E. Brownhill, Attorney, requesting the following information:

1. By August 10: A proposed alternative to incineration of sander dust in the wigwam burner as an interim measure pending completion of an installation for its use in the particleboard dryer, together with a schedule for activation of the interim method and termination of the use of the wigwam burner.

2. By August 15: A schedule for the design, purchasing, construction, start-up and check-out of the facilities necessary for burning sander dust in the particleboard dryer; this schedule to show the estimated completion date for each stage of the program, subject to adjustment as progress of the work would allow determination of more definite dates.

3. By August 15: A detailed description of the methods (such as mechanical shield or deflector) proposed as means of correcting the problem of fallout from the storage facility, and a schedule covering their design, purchasing, construction, activation and check-out.

Copies of previous correspondence were enclosed, and copies of Oregon Statutes and Administrative Rules pertaining.

As of August 16, we had received no reply to the above letter.

August 7, 1968. Letter to Mr. William Smith, General Manager, advising him of new complaints received by the Medford District Office, alleging air pollution from the deposition of particles of sawdust from Timber Products Co., and a letter dated August 3 complaining of very fine sawdust allegedly from a new sawdust loader.

3.0 SUMMARY

There are currently two sources of complaint attributed to Timber Products Company: Smoke and fallout from the wigwam waste burner and fallout from the open wood residue storage area.

3.1 THE WIGWAM BURNER PROBLEM

The wigwam burner has been a source of complaint since 1965. During this period there has been little change in the burner, its method of operation, or the quantity or type of residues delivered to it. Both the Authority staff and mill management have consistently agreed that the basic problem has always been one of a small quantity of fuel in a large burner, the fuel consisting primarily of air-conveyed fines.

Plant management has, since 1965, contended that the problem could and would be solved by use of the sander dust in particleboard driers. During that time, disposition of most coarse residues has been taken care of by chipping, and by the sale and utilization of bark as boiler fuel. Currently, it appears that the only coarse residues reaching the burner are plant and yard clean-up materials, and the fine residues consisting almost entirely of sander dust. The industry's current proposal is to dispose of the coarse residues by landfill on their own property and to utilize the sander dust in particleboard driers. They state that engineering firms have been retained to prepare plans for the sander dust fueled driers.

Because only an alternative method for the disposition of sander dust is now needed to terminate use of the wigwam burner, the staff has suggested that the landfill be used for the disposal of both the fine and coarse residues, pending the design and installation of sander dust fueled particleboard driers. Other possibilities are a refractory incinerator correctly designed for the suspension burning of wood fines, as suggested in our March 1966 letter to Timber Products, or the adaptation of a "Cyclo-Tube" type of primary burner to the wigwam burner as suggested in Timber Products Company's letter of August 1967.

Staff activity since April 4, 1968 on the wigwam burner problem has consisted of one conference and six letters, the last of which requested a proposed schedule for the design, construction and activation of the particleboard driers, and a proposed method and schedule for interim disposal of sander dust and phase-out of the waste burner. This information was requested by August 15th. It has not been received.

3.1.1 Recommendation

The staff proposes the following schedules for adoption.

	Design	Purchase	Deliver	Install
Particleboard driers, by	10/15/68	11/1/68	3/1/69	4/1/69
Wigwam burner alternative, by	9/6/68	9/10/68	9/27/68	10/7/68

3.1 THE OPEN STORAGE FACILITY

Staff investigations of complaints of fallout attributed to the open storage facility date from April 1966. Recent complaints indicate that the problem has become more intense within the past few weeks.

On June 11, 1968, District Engineer Leo Baton discussed the problem with Mr. William Smith, plant manager, requesting cooperation in providing effective control. Since that time, Mr. Smith has been advised of continuing complaints.

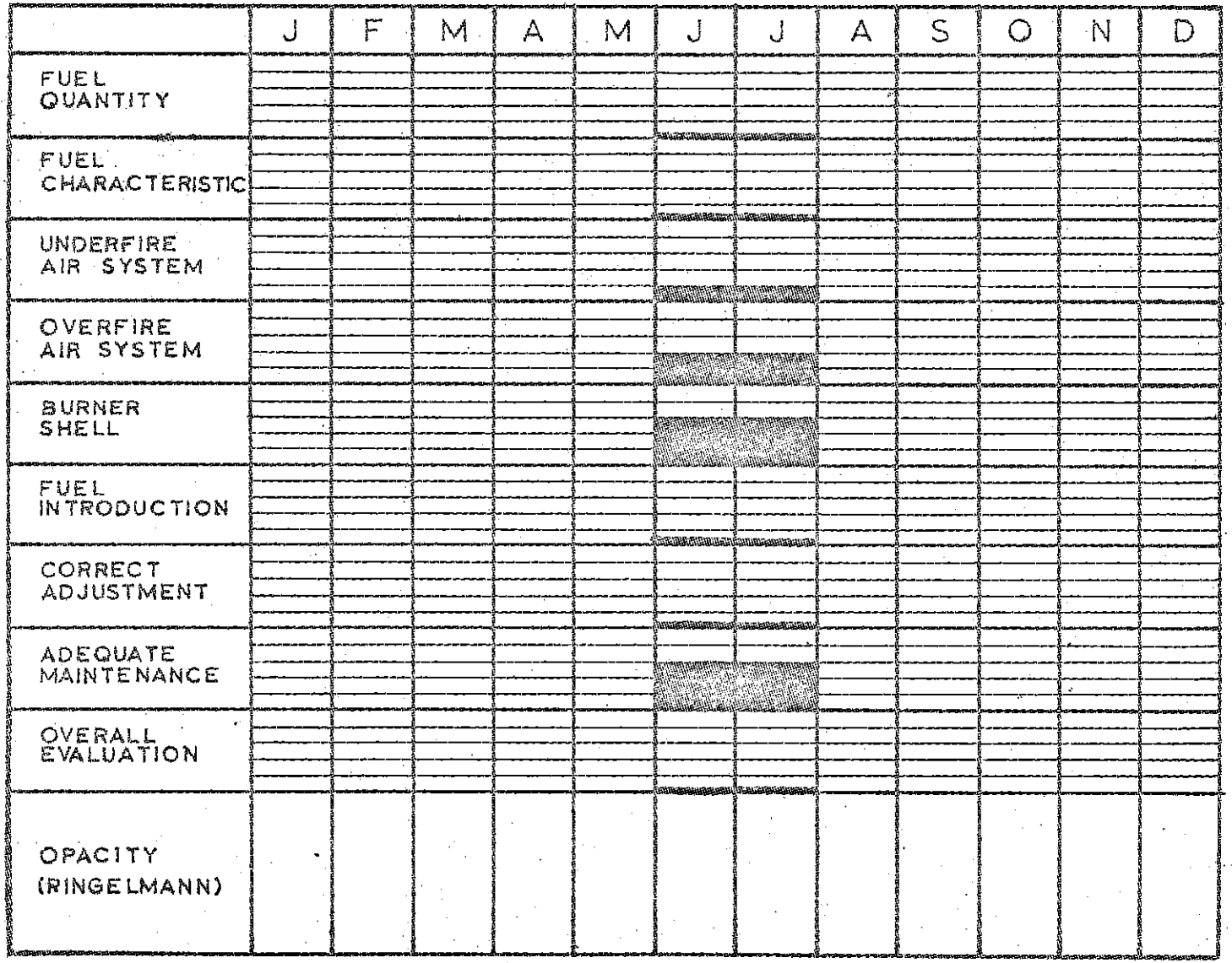
In reply, we have received a letter from Mr. Thomas Brownhill, attorney, stating that Timber Products plans to install a "mechanical shield or deflector" at the storage facility and to plant trees in the immediate vicinity and along the road. No details or schedules were provided.

On July 31, we wrote to Mr. Brownhill requesting that we be provided with a detailed description of the proposed methods and a schedule for their design, purchasing, construction, activation and check-out. This information was requested by August 15. No reply has been received.

3.2.1 Recommendation

The staff proposes that by September 13, Timber Products be required to submit a preliminary description and sketches of the proposed corrective measures to the Authority for review, together with a tentative schedule for their detailed design, construction and activation, and that the subject be continued for consideration at the September meeting of the Authority.

WIGWAM WASTE BURNER
PROGRESS EVALUATION



FIRM NAME TIMBER PRODUCTS CO.

LOCATION Medford, Oregon

continued

TO : MEMBERS OF THE STATE SANITARY AUTHORITY

John D. Mosser, Chairman
B. A. McPhillips, Member
Storrs Waterman, Member
E. C. Harms, Member
Herman Meierjurgen, Member

FROM : Air Quality Control Staff

DATE : October 24, 1968

SUBJECT: BOISE-CASCADE CORPORATION (Elk Lumber) CENTRAL POINT

1.0 INTRODUCTION

At the August 23rd meeting of the Authority at the Jackson County Courthouse in Medford, a staff report was presented in which it was reported that the wigwam burner at Boise Cascade Corporation's plant was being operated in violation of Oregon Administrative Rules, Chapter 334, Section 21-011 "Smoke Discharge", and Section 24-020 "Wigwam Waste Burner Use Restricted". A copy of that staff report is attached. (EXHIBIT A)

Mr. Dick Parrish, Assistant Region Manager, Boise-Cascade Corporation, stated that in another two or three months they should know whether the company would spend an estimated $500,000 to install a barker and chipper which would eliminate the need for using the wigwam burner.

Following consideration of staff reports covering violations by Boise-Cascade Corporation and by Timber Products Co., a motion was introduced and carried that the staff be instructed to issue to Boise-Cascade Corporation and Timber Products Co. notices of a Show Cause Hearing to be held in Medford on October 24, 1968. The chairman indicated that if the companies were to submit definite plans and satisfactory construction schedules for abating the pollution, the hearing might be as far as the Authority would go at this time, but that otherwise the hearing would likely result in an abatement order. A notice of public hearing was mailed to Boise-Cascade Corporation on September 9, 1968 (EXHIBIT B Attached).

2.0 THE BOISE-CASCADE PROPOSAL

At the invitation of Mr. George C. Flanagan, West Oregon Region Manager, Harold McKenzie of the Authority staff met with Mr. Flanagan and his staff at his Medford office on September 25 and 26 for the purpose of discussing the Company's proposed method for air pollution abatement. Mr. Flanagan reported that due to limitations imposed by plant lay-out, the method which had been proposed for phasing out the wigwam burner by the installation of a barker and chipper had proven to be impractical. The following alternative plan was then presented as a means of accomplishing a similar end result:

a) Repair and modify the waste burner completely in accordance with staff recommendations for a 50 foot burner charged with hogged fuel at the recommended rate.

b) Provide a concrete pad near the waste burner for the open storage of both hogged fuel and chips. This would serve as a storage facility for all hogged fuel in excess of boiler requirements and for chips in the event of a shortage of rail cars.

c) Charge the waste burner with hogged fuel from the open storage facility at a consistent rate which is found to result in best performance (approximately 30,000 pounds per hour). The burner would then be operated the appropriate number of calendar days necessary to dispose of those residues in excess of boiler requirements.

d) Hog all residues for delivery to either the boiler fuel storage or open storage facility as required.

On September 26th, a second conference was held in which the staff was advised that the company would need to do some additional work to more accurately define the residue quantities, and that this could result in some realignment of the above proposal.

With further study, the company has devised a method which they state may make reactivation of the wigwam burner unnecessary. Funds have been authorized and construction has been in progress since October 17 on a conveying and storage facilities construction program which will terminate use of the wigwam burner by no later than April 1, 1969. Attached are the following documents pertaining to this program, which were received from Boise-Cascade Corporation on October 17, 1968.

EXHIBIT C - SCOPE OF THE PROJECT: An itemized listing of the construction elements required to complete the project.

EXHIBIT D - COST ESTIMATE: An itemized cost estimate for the project.

EXHIBIT E - CONSTRUCTION SCHEDULE: A detailed schedule showing the dates for beginning and completion of each major element in the project.

The April 1, 1969 start-up date for the new facilities will also be the date on which use of the wigwam burner will be terminated. The company has expressed the hope that burner reactivation will not prove necessary. Such necessity would normally be expected to develop only through lack of capability of the boilers to consume all hogged residues in the quantities generated, or in the event of a protracted interruption in chip sale or transport. It is anticipated by Boise-Cascade Corporation that if either of these contingencies necessitates reactivation of the wigwam burner, sufficient lead time will be provided by the new storage facility to allow modification of the burner in accordance with staff recommendations.

3.0 REQUIREMENTS FOR BURNER REACTIVATION

In the September 25th conferences with Mr. Flanagan and staff, Harold McKenzie of the Authority staff advised that staff recommendations for burner modification could be expected to include the following:

a) Installation of a new underfire air system of a design approved by the Authority staff.

b) Installation of a new overfire air system of a design approved by the Authority staff.

c) Installation of a new conveying system from the open storage facility to the wigwam burner of an approved design to provide uniform flow of hogged fuel or chips at a constant rate of approximately 30,000 pounds per hour.

d) Repair of the burner access doors and shell to provide reasonably air-tight construction.

e) Use of the burner only for the incineration of hogged fuel or chips, except that other refuse such as demolition materials could be used for kindling at start-up.

f) Operation of the burner only at the constant rate of fuel delivery as designed, and within the limitations of smoke discharge, particle fallout rate and suspended particulate matter stipulated in Oregon Administrative Rules, Chapter 334, Division 2, Sub-division 1, "Discharge Standards".

Essence of the September 25th and 26th conferences was confirmed in a letter from the staff to Dick Parrish, Assistant Region Manager, Boise-Cascade Corporation, dated October 7, 1968.

Simultaneously, Mr. George Flanagan, General Manager, West Oregon Region, Boise Cascade Corporation, forwarded a letter to H. M. Patterson, Chief, Air Quality Control (EXHIBIT F) in which he outlined the concept of the program. The letter included the following proposals for reactivation of the burner if found necessary:

a) That surplus fuel will be reconveyed to the burner in a continuous regulated flow.

b) That they would rebuild the burner grates and make other changes to the burner as suggested in the September 25th and 26th conferences.

c) That paper and demolition lumber could be used for kindling or disposed of in some other way, and that old records which require incineration could be burned in the boilers at the Donna dry kilns.

d) That upon completion of the fuel and chip storage facilities by March 31, they would discontinue use of the burner until such time as it had been brought into full conformity with state regulations, and thereafter it would be operated by continuous flow methods, and that the incineration of other than waste mill products would only be done with the approval of the Authority.

Mr. Flanagan requested that he be advised, in advance of the Hearing, if the proposed arrangement was not satisfactory.

4.0 CONCLUSIONS

The staff has evaluated the program and schedule submitted by Boise-Cascade Corporation with the following conclusions:

1. In essence, the first phase of the program may accomplish the utilization of all residues now burned in the wigwam burner as boiler fuel. Residue incineration would thus be accomplished by a more efficient method and a consequent reduction in the discharge of contaminants should be expected.

2. The first phase construction schedule has been analyzed by the critical path method (EXHIBIT G). It appears reasonable, although approximately two weeks improvement should be possible by the concurrent fabrication of conveyors and their support structures.

3. That the Company is proceeding on the first phase of the program in good faith is evidenced by expenditures of $98,900 having been authorized for the project on September 25, and construction begun on October 17.

4. Reactivation of the burner only after its modification in accordance with staff recommendations, and with hogged fuel only reconveyed to the burner in a continuous regulated flow, would provide for its construction and operation in accordance with best known current technology.

EXHIBIT A

STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 23, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: BOISE CASCADE CORPORATION (Elk Lumber Co.) CENTRAL POINT

1.0 BACKGROUND

Late in 1965 the Elk Lumber Co. plant, located to the west of Hwy 99 between Central Point and Medford, was purchased by Boise Cascade Corporation. With George C. Flanagan as Vice President and General Manager, Elk Lumber Company had in 1956 completed the installation of a steam-electric generating plant designed by Austin Evanson of CH$_2$M which was considered to be one of the most modern in the Pacific Northwest lumber industry. The plant had an output of up to 60,000 lbs. per hour and plans were that with further minor modifications, the boiler plant would, at all times, be able to consume the entire amount of waste produced by the mill to not only furnish a smokeless system of waste disposal but also make a substantial contribution to the electric power capability of the Medford Utilities System. Its success as a refuse disposal device was confirmed in a statement from Mr. Flanagan on November 21, 1961 to the effect that the wigwam burner had not been operating since June of that year.

Late in 1961, however, the additional residues produced by a new plywood veneer plant required periodic use of the wigwam burner; and early in 1962 the addition of a third shift necessitated resumption of its operation. At that time, Mr. Flanagan stated that he would install an additional boiler unit rather than invest in a redesigned waste burner. Apparently a reduction in waste residues was accomplished by some method. Staff observations early in 1966 indicated that the burner was then used only for yard clean-up and office refuse materials.

2.0 HISTORY

The following is a chronological brief of our file records since 1966.

February 16, 1966, STAFF SURVEY and conference with Mr. Hayden Dorsey, Production Manager. The waste burner was observed to be in a very poor state of repair, and operated periodically for the disposal of yard clean-up and office refuse materials in a manner similar to open burning. Mr. Dorsey agreed that use of the burner could be discontinued entirely except for use as standby in case of a hog breakdown and that they would proceed to rebuild the burner, installing the required modifications.

March 24, 1966. LETTER TO Elk Lumber Co. confirming the February 16 discussions.

March 30, 1966. LETTER FROM Elk Lumber Co. stating that burner modification was scheduled for completion approximately May 15, and stating that the burner was not then in use except on a stand-by basis for one or two days per month.

April 16, 1968. STAFF SURVEY and conference with Mr. Hayden Dorsey. The burner was found to be in a very poor state of repair and almost continually operated for the disposal of miscellaneous plant clean-up materials and office refuse. Mr. Dorsey stated that it was also occasionally used for surplus clean residues when required by a breakdown in the hog or chipper or a shortage of rail cars.

April 23, 1968. LETTER TO Elk Lumber Co. (Hayden H. Dorsey) confirming the April 16 conversations and advising of: a) smoke in excess of allowable limits, and b) refuse delivered to the burner at non-uniform rates, some charged in batches through the door; both practices violating the word and intend of Oregon Administrative Rules. It was recommended that an alternative method of disposal be found at the earliest possible moment and that the use of the wigwam waste burner be terminated. Reply was requested by May 6, with a proposal and schedule for compliance.

May 9, 1968. LETTER FROM Boise Cascade Corporation (George C. Flanagan, Western Region Manager) acknowledged our letter of April 23, and stated that they were working on the problem, and that we would be advised as soon as they found a feasible solution.

May 16, 1968. LETTER TO Boise Cascase Corporation (George C. Flanagan) acknowledged their letter of May 9, advising that under ORS, the Sanitary Authority may require, upon request, the submission of plans and specifications for any air cleaning device, but that the person responsible for the violation remains responsible for determining the means, methods, process, or equipment to comply with standards. It was suggested that Mr. Flanagan might consider appearing before the Sanitary Authority at its Medford meeting to state his views.

June 27, 1968. STAFF REPORT. Smoke observations for a period of 20 minutes indicated waste burner smoke discharge in excess of Ringelmann #4 continuously.

July 1, 1968. LETTER TO Boise Cascade Corporation (George C. Flanagan) expressed disappointment that their letter of May 9 offered no concrete proposal for correction of the wigwam burner problem and suggested that if the answer could not be found through utilization, the logical alternative is a more efficient method of incineration. It was suggested that they install a multiple chamber incinerator, and reduce the residues to hog fuel consistence for storage in a surge bin from which they could be conveyed to the incinerator at a uniform rate. It was suggested that the boiler fuel storage facility could be used for storage of those residues in excess of those required for boiler operation.

The following schedule was proposed:

1. Feasibility studies and engineering by August 2.
2. Procurement and installation by October 4.
3. Start-up and adjustment by October 18, 1968.

It was again pointed out that Oregon statutes stipulate that it shall be the responsibility of the person in violation to develop the methods and means for obtaining compliance and that we would welcome alternative proposals as to method or schedule.

July 2, 1968. LETTER FROM Boise Cascade Corporation (George C. Flanagan) advising of his wish to attend the Medford meeting of the Authority, and expressing the hope that their air pollution problem can be reduced by the installation of barker and chipper facilities "at some future time", and that the pay-back is rather poor on a $500,000 installation based on the present price of chips.

July 3, 1968. LETTER TO Boise Cascade Corporation (George C. Flanagan) advising of the provisions for tax relief and of the procedures for making application.

3.0 SUMMARY

The wigwam burner at Boise Cascade Corporation is in a poor state of repair and has never been modified in accordance with the original wigwam burner regulation or staff recommendations for improved combustion. It is currently operated in violation of the present (revised) regulation governing construction and operation of wigwam waste burners (OAR Chapter 334, Division 2, Subdivision 4), specifically paragraph 24-020 which prohibits use other than for the incineration of production process wood wastes and in effect prohibits batch loading. In addition, smoke emissions have been observed to be in violation of Discharge Standards (OAR Chapter 334, Division 2, Subdivision 1).

From discussions with plant personnel, we are informed that by the installation of a barker and chipper so that all clean residues can be sold as chips, and all bark used as boiler fuel, the use of the burner can be eliminated, except for its rare use in case of an emergency breakdown of the hog. The installation will apparently not only be self liquidating but will show a fair return on the investment cost.

Other than a hog breakdown, the only other emergency situation which would normally arise would be due to a shortage of chip cars, but this contingency can be almost eliminated by construction of an open storage slab for chip storage until cars become again available.

4.0 RECOMMENDATIONS

The staff recommends that Boise Cascade Corporation be required to submit a proposed method and schedule for termination of the use of the wigwam burner at the September meeting of the Authority.

EXHIBIT B

BEFORE THE SANITARY AUTHORITY OF THE STATE OF OREGON

IN THE MATTER OF:	)	
	)	
J. A. Pritzker, Trustee for W. H. Gonyea, and Rockwood & Co., a Delaware corporation, as its interest may appear, doing business as TIMBER PRODUCTS CO.	)	
	)	
and	)	NOTICE OF PUBLIC HEARING
	)	
BOISE CASCADE CORPORATION, a Delaware corporation,	)	
	)	
CONCERNING AIR POLLUTION IN JACKSON COUNTY, STATE OF OREGON	)	

To the above-named firms, your presidents, officer and agents including your plant managers and attorneys:

You and each of you are hereby notified that the Sanitary Authority of the State of Oregon, based upon surveys, investigations, reports and findings of its staff and complaint made to it, has directed that a public hearing be held to consider air pollution from plants, facilities, companies, and interests as they may appear maintained under your direction, control, operation or ownership in or near the City of Medford, County of Jackson, State of Oregon.

You and each of you are therefore notified and directed to appear at a public hearing on the matter of the aforesaid air pollution, said hearing to be held before the Sanitary Authority of the State of Oregon in the auditorium of the Jackson County Courthouse, Medford, Oregon, commencing at the hour of 9:30 a.m. on the 24th day of October, 1968, and to then and there show cause, if any you have, why an order should not be entered and directed against you requiring you to abate the air pollution and infractions hereinafter described which are not in conformity with and which are in violation thereof of the statutes, standards, rules and regulations of the state, or such other and further directive or order as may be adduced from evidence and testimony submitted.

The specific charges alleged against Timber Products Co. are as

follows:

1. That air contaminants in the form of dust, ash, fumes, smoke, cinders, soot, carbon or particulate matter of a combination thereof are emitted and have been emitted into the air and atmosphere from facilities operated by you in or near the City of Medford, County of Jackson, State of Oregon, in quantitites and characteristics and of a duration sufficient to:

(a) Pollute and contaminate the air and atmosphere for several hours per day and on occasion for several days each month.

(b) Unreasonably interfere with the enjoyment of life and property in the area in or near the City of Medford, County of Jackson, State of Oregon, from facilities operated by you.

That the aforesaid air contaminants are emitted and have been emitted from plants, facilities, companies and interests as they may appear, maintained under your direction, control, and operation or ownership.

2. That the air contaminants referred to herein are and have been a public nuisance contrary to the provisions and public policy as set out in Oregon Revised Statutes 449.760 and 449.830 and Oregon Administrative Rules 21-006 to 24-020, Chapter 334.

That the aforesaid acts are and have been a public nuisance and are contrary to and in violation of the statutes of the State of Oregon and more particularly as hereinafter set out.

(a) ORS 449.760(2):

> "'Air contaminant' means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof."

(b) ORS 449.760(3):

> "'Air pollution' means the presence in the outdoor atmosphere of one or more air contaminants in quantitites, of characteristics and of a duration which are injurious to human, plant or animal life

or to property or which unreasonably interfere with enjoyment of life and property throughout such area of the state as shall be affected thereby."

(c) ORS 449.760(4):

"'Air contamination' means the presence in the outdoor atmosphere of one or more air contaminants which contribute to a condition of air pollution."

(d) ORS 449.760(5):

"'Air contamination source' means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at or on which such source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes."

(e) ORS 449.765(1):

"In the interest of the public health and welfare of the people, it is declared to be the public policy of the State of Oregon:

(a) To maintain such a reasonable degree of purity of the air resources of the state to the end that the least possible injury should be done to human, plant or animal life or to property and to maintain public enjoyment of the state's natural resources and consistent with the economic and industrial well-being of the state."

(f) ORS 449.770:

"It is the purpose of ORS 449.760 to 449.830 and 449.850 to 449.920 to safeguard the air resources of the state by controlling or abating air pollution which exists on August 9, 1961; and preventing new air pollution, under a program which shall be consistent with the declaration of policy above stated and with ORS 449.760 to 449.830 and 449.850 to 449.920."

That, in addition, the aforesaid acts are and have been a public nuisance and are contrary to and in violation of the standards, rules and regulations of the Sanitary Authority and more particular as hereinafter set out:

1. Oregon Administrative Rules, Chapter 334, section 21-006:

"(2) 'Air contaminant' means a dust, fume, gas, mist odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter or any combination thereof.

(3) 'Air Pollution' means the presence in the outdoor atmosphere of one or more air contaminants in quantities, of characteristics and of a duration which are injurious to

to human, plant or animal life or to property or which unreasonably interfere with enjoyment of life and property throughout the state or throughout such area of the state as shall be affected thereby.

(4) 'Air contamination' means the presence in the outdoor atmosphere of one or more air contaminants which contribute to a condition of air pollution.

(5) 'Air contamination source' means any source at, from, or by reason of which there is emitted into the atmosphere any air contaminant, regardless of who the person may be who owns or operates the building, premises or other property in, at, or on which source is located, or the facility, equipment or other property by which the emission is caused or from which the emission comes.

* * *

(8) 'Ash' means the residue from the burning of any combustible material or the residue from incomplete combustion.

* * *

(21) 'Particulate matter' means discrete particles of a liquid, other than water, or a solid as distinguished from gas and vapor.

* * *

(24) 'Ringelmann Smoke Chart' means the Ringelmann Smoke Chart with instructions for use as published in August, 1955, by the U.S. Bureau of Mines.

* * *

(27) "Smoke' means small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon and other combustible material and present in sufficient quantitity to be observable independently of the presence of other solids."

2. Oregon Administrative Rules, Chapter 334, section 21-011:

"A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any hour which is:

(1) As dark or darker in shade as that designated as number 2 on the Ringelmann Chart as published by the U. S. Bureau of Mines, Aug., 1955, or,

(2) Of such opacity as to obscure an observers' view to a degree equal to or greater than does smoke described in sub-section (1) of this section."

That respondent Boise Cascade Corporation has acted and is acting contrary to and in violation of the standards, rules and regulations of the Sanitary Authority, and more particularly, OAR Rules Chapter 334, section 21-011, set out in No. 2 above, and 24-020 which provides:

"No person shall use a wigwam waste burner for the incineration of other than production process wood wastes. Such wood wastes shall be transported to the burner by continuous-flow conveying methods."

(a) Respondent Boise Cascade Corporation has been and is utilizing a wigwam waste burner for the incineration of other than production process wood wastes.

(b) Respondent Boise Cascade Corporation has been and is utilizing a method other than continuous flow conveying methods to transport production wood wastes to its burner.

You are further notified that the Sanitary Authority, following the hearing above stated, and after consideration of its findings and conclusions and the evidence and testimony submitted, will consider adoption of an order within the following purview:

1. Requiring you to cease, desist and abate the air pollution or improper control practices heretofore alleged and described under terms and conditions as adduced from the testimony and evidence herein.
2. Requiring you to install and use air cleaning devices or controls which removes, reduces or renders less noxious and objectionable air contaminants discharged into the atmosphere.
3. Requiring you to conform to such other further directives, orders and determinations as may be adduced from the evidence and testimony.

The hearing will be conducted in accordance with the rules of procedure duly adopted by the State Sanitary Authority as contained in OAR Chapter 334, sections 31-005 to and including section 31-115, a copy of which is enclosed.

Dated this 9 day of September, 1968.

/s/ John D. Mosser
John D. Mosser, Chairman, Sanitary Authority
of the State of Oregon

ATTEST:

/s/ Kenneth H. Spies
Kenneth H. Spies, Secretary,
Sanitary Authority of the State of Oregon

EXHIBIT C

SCOPE OF PROJECT

SITE PREPARATION

Grade to contour which will insure proper drainage of storage slabs.

STORAGE SLABS

Pour approximately 45,000 square feet of mesh reinforced concrete slab six inches in thickness.

HOG FUEL CONVEYORS

1. Fabricate and install three sections of elevated conveyor with total length of three hundred feet.

2. Fabricate and install one section of elevating conveyor with length of seventy five feet and lift of fifty feet.

3. Pour ten foundations for support structures.

4. Fabricate and install ten support structures averaging about forty feet in height.

5. Purchase and install four gearhead motors with combined H.P. rating of 27.5 H.P. and speed rating of 37 RPM.

6. Furnish electricity and necessary controls for drive motors.

PULP CHIP DIVERSION AND LOADING

1. Purchase and install "Y" and gate in the existing high pressure line delivering pulp chip to the car loader.

2. Purchase and install blowpipe from the diversion point to chip storage slab.

3. Convert unused lumber piling machine to portable conveyor for use in loading chip cars.

HANDLING OF STOCKPILED MATERIAL

Lease a small, rubber tired front end loader. This machine to be used to feed chip car loading conveyor and also to feed the elevating conveyor returning hog fuel to the fuel vault.

EXHIBIT D

COST ESTIMATE

Hog Fuel and Pulp Chip Diversion, Storage and Return Facilities

Storage Slabs -	
45,000 square feet concrete slabs (including concrete, mesh, granite, and labor)	$ 27,000
Site preparation	500
Tractor to handle fuel and chips (Lease)	5,000
Hog Fuel Conveyors -	
Footings	1,200
Support towers	7,500
Conveyor structures	19,000
Conveyor chain and flights, installed	14,700
Bearings	2,600
Drive sprockets and roller chain	2,000
Conveyor chain sprockets	1,500
Shafting and machine shop work	900
Drive motor supports	2,000
Motors	4,500
Magnetic switches, conduit, wire and labor	1,500
Pulp Chip Diversion and Loading	
"Y" and gate in high pressure system	1,000
Blowpipe, supports, and installation	2,000
Portable conveyor for car loading	2,500
Labor not included in above	2,500
Engineering	1,000
TOTAL For Project	$ 98,900

EXHIBIT E

CONSTRUCTION SCHEDULE

Hog Fuel and Pulp Chip Diversion, Storage and Return Facilities

I. Storage Slabs (40,000 square feet). To be poured at the rate of 1000 square feet per working day -- 40 working days required. 5000 square feet of cleanup slab poured prior to preparation of this schedule.

A Site preparation for remaining area.
1. Begin - October 17, 1968
2. Complete - October 21, 1968

B Pouring storage slabs.
1. Begin - October 23, 1968
2. Complete - December 20, 1968

C Pouring foundations for conveyor support structures.
1. Begin - January 6, 1969
2. End - January 10, 1969

II. Conveying systems (375 linear feet) and blowpipe (250 feet). To be modeled after existing conveyors on the plantsite. Preliminary design work will not be required.

A Engineering
1. Detailed drawings for first Section ready by November 4, 1968.
2. Drawings of remaining sections will be made concurrently with fabrication work. Complete January 15, 1969.

B. Fabrication of conveyors
1. Begin - November 5, 1968
2. Complete - February 14, 1969

C Fabrication of conveyor support structures
1. Begin - February 17, 1969
2. Complete - March 1, 1969

D Installation of supports, conveyors and blowpipe
1. Begin - March 3, 1969
2. Complete - March 21, 1969

E. Electrical installation.
1. Begin - March 10, 1969
2. Complete - March 31, 1969

F. Startup - April 1, 1969

EXHIBIT F

BOISE CASCADE TIMBER PRODUCTS
WEST OREGON REGION
P. O. Box 100 • Medford, Oregon 97501
Telephone (503) 772-7146

October 8, 1968

H. M. Patterson, Chief
Air Quality Control
Oregon State Sanitary Authority
1400 S. W. 5th Avenue
Portland, Oregon 97201

Dear Mr. Patterson:

This is to advise you that we have received approval from our corporate office to go ahead with the plan for construction of pulp chip storage and reloading facilities, together with hogged fuel storage and reconveying facilities. This will make it possible for us to divert the pulp chips to a storage pile when chip cars are not available, together with an elevator system for loading such chips into chip cars later, when cars are available. These facilities will eliminate the necessity to burn pulp chips everytime we run short of chip cars. This has been happening quite frequently of late, and has added to our burner problem.

The hogged fuel storage facility will make it possible to store surplus hogged fuel whenever there is more fuel than the boilers can use. The stored hogged fuel can later be reconveyed to the boiler fuel system during weekends and holidays, or at any time when the fuel coming directly from the plant is insufficient to keep the boilers running at full capacity. We have adequate steam turbine generation facilities for transforming the steam into electricity, which is delivered into the PP&L transmission system. We can deliver up to 3,000 KW to PP&L through the present transformer facilities.

The fuel storage facility will make it possible for us to load out and use the stored hogged fuel for firing the Donna kiln boilers, which have been using bark from the veneer plant. This will permit us to deliver all of the bark, either directly to the orchard for mulch, or into a stockpile back of the crane shed for reloading and hauling to the orchard during dry weather when the ground condition permits.

If we find that there is still surplus fuel, it can be reconveyed to the burner in a continuous regulated flow, which will conform to your requirements and permit proper combustion with minimized air pollution. If this is done, we would of course rebuild the burner grates and make other changes in the burner, as suggested by you at the time of your recent visit.

The paper and demolition lumber can either be used as kindling in the burner, as you suggested, or disposed of in some other way. Old records which require incineration could be burned without creating any problem in the dutch ovens at the Donna kilns.

In our long-range planning, we believe that at some point in the future, we will want to install some kind of a small log conversion facility which will make lumber and chips more economically than can be done with our present plants. When this is done, we will create additional bark and other waste products, which will add to our problem. It is hoped that a major portion of this added left-over material could be sold in some form for useful products, however, for the foreseeable future, we see no chance to eliminate the present wigwam burner operation completely. You can rest assured, however, that once the fuel and chip storage facilities are completed early next year, and surely before March 31, 1969, we will discontinue the use of our burner until such a time as it has been brought into full conformity with your regulations, and thereafter it will be operated by continuous flow method as required, and incineration of other than waste mill products will only be done with the approval of the Sanitary Authority, as discussed.

We have been working on this problem in an attempt to eliminate the air pollution from this plant since 1949, and I think you will agree that we have made great progress, and most certainly are nearing a complete solution of the problem.

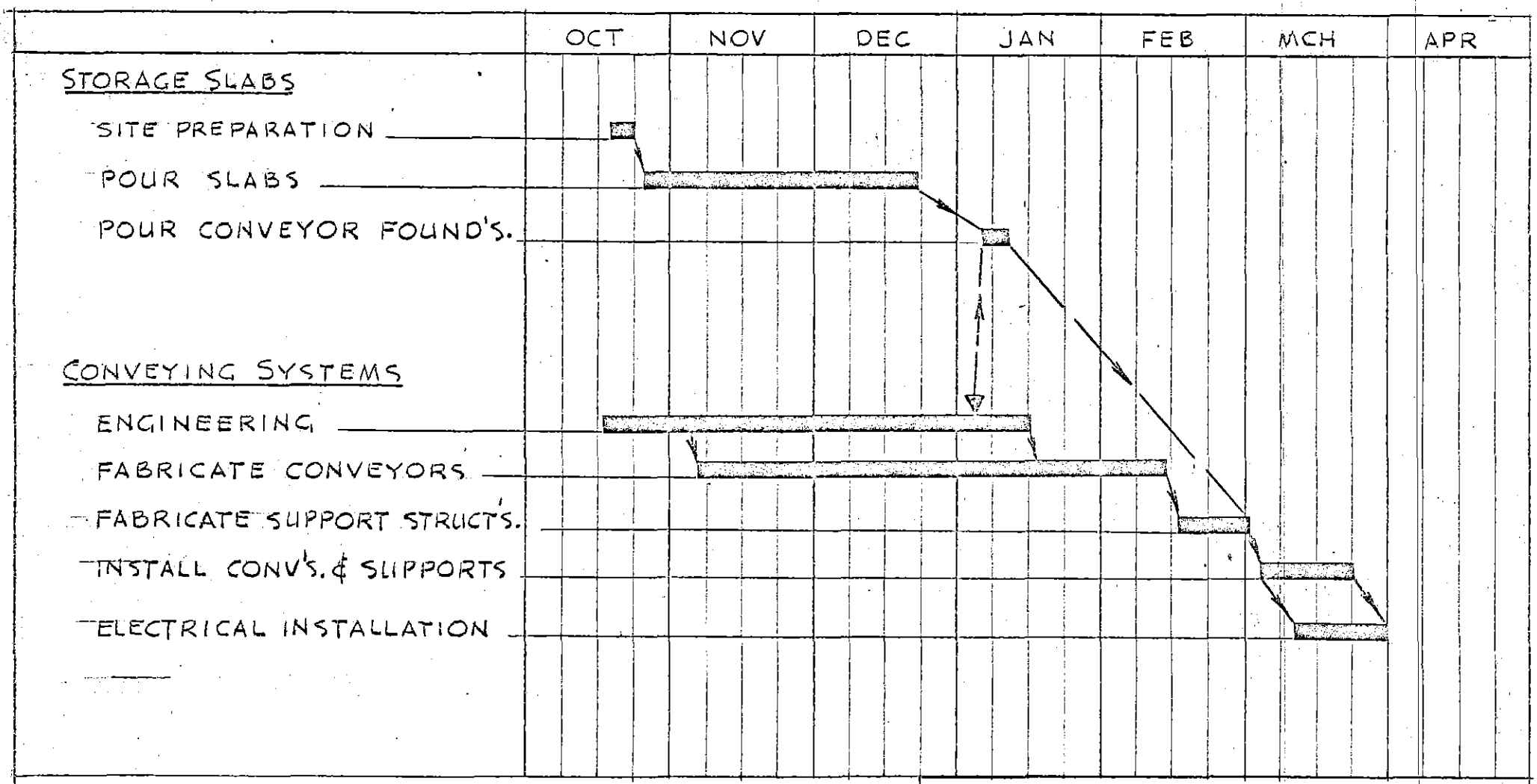
It will not be possible for me to attend the hearing on October 24, but we will be represented by Mr. Robert Vincent at that time, and in view of the fact that we are starting immediatzly with the chip and fuel storage facilities, I believe you will agree with me that the plant should not be shut down at this time. If this arrangement is not satisfactory, please let us know and we will be glad to discuss the matter with you in advance of the hearing.

Yours very truly,

WEST OREGON REGION
BOISE CASCADE CORPORATION

George C. Flanagan
General Manager

GCF/hf
cc: George Wilhelm
Leo L. Baton
R. W. Parrish



CRITICAL PATH SCHEDULE

PULP CHIP & HOG FUEL DIVERSION, STORAGE AND RETURN FACILITIES

BOISE CASCADE CORPORATION
MEDFORD · OREGON

PREPARED BY
OREGON STATE SANITARY AUTHORITY
10-21-68 HM

EXHIBIT G

STAFF REPORT

TO : MEMBERS OF THE STATE SANITARY AUTHORITY Dated: August 23, 1968

John D. Mosser, Chairman
E. C. Harms, Jr., Member
Storrs Waterman, Member
Herman Meierjurgen, Member
B. A. McPhillips, Member

FROM : AIR QUALITY CONTROL STAFF

SUBJECT: BOISE CASCADE CORPORATION (Elk Lumber Co.) ~~CENTRAL POINT~~ Medford

1.0 BACKGROUND

Late in 1965 the Elk Lumber Co. plant, located to the west of Hwy 99 between Central Point and Medford, was purchased by Boise Cascade Corporation. With George C. Flanagan as Vice President and General Manager, Elk Lumber Company had in 1956 completed the installation of a steam-electric generating plant designed by Austin Evanson of CH_2M which was considered to be one of the most modern in the Pacific Northwest lumber industry. The plant had an output of up to 60,000 lbs. per hour and plans were that with further minor modifications, the boiler plant would, at all times, be able to consume the entire amount of waste produced by the mill to not only furnish a smokeless system of waste disposal but also make a substantial contribution to the electric power capability of the Medford Utilities System. Its success as a refuse disposal device was confirmed in a statement from Mr. Flanagan on November 21, 1961 to the effect that the wigwam burner had not been operating since June of that year.

Late in 1961, however, the additional residues produced by a new plywood veneer plant required periodic use of the wigwam burner; and early in 1962 the addition of a third shift necessitated resumption of its operation. At that time, Mr. Flanagan stated that he would install an additional boiler unit rather than invest in a redesigned waste burner. Apparently a reduction in waste residues was accomplished by some method. Staff observations early in 1966 indicated that the burner was then used only for yard clean-up and office refuse materials.

2.0 HISTORY

The following is a chronological brief of our file records since 1966.

February 16, 1966, STAFF SURVEY and conference with Mr. Hayden Dorsey, Production Manager. The waste burner was observed to be in a very poor state of repair, and operated periodically for the disposal of yard clean-up and office refuse materials in a manner similar to open burning. Mr. Dorsey agreed that use of the burner could be discontinued entirely except for use as standby in case of a hog breakdown and that they would proceed to rebuild the burner, installing the required modifications.

March 24, 1966. LETTER TO Elk Lumber Co. confirming the February 16 discussions.

March 30, 1966. LETTER FROM Elk Lumber Co. stating that burner modification was scheduled for completion approximately May 15, and stating that the burner was not then in use except on a stand-by basis for one or two days per month.

April 16, 1968. STAFF SURVEY and conference with Mr. Hayden Dorsey. The burner was found to be in a very poor state of repair and almost continually operated for the disposal of miscellaneous plant clean-up materials and office refuse. Mr. Dorsey stated that it was also occasionally used for surplus clean residues when required by a breakdown in the hog or chipper or a shortage of rail cars.

April 23, 1968. LETTER TO Elk Lumber Co. (Hayden H. Dorsey) confirming the April 16 conversations and advising of: a) smoke in excess of allowable limits, and b) refuse delivered to the burner at non-uniform rates, some charged in batches through the door; both practices violating the word and intend of Oregon Administrative Rules. It was recommended that an alternative method of disposal be found at the earliest possible moment and that the use of the wigwam waste burner be terminated. Reply was requested by May 6, with a proposal and schedule for compliance.

May 9, 1968. LETTER FROM Boise Cascade Corporation (George C. Flanagan, Western Region Manager) acknowledged our letter of April 23, and stated that they were working on the problem, and that we would be advised as soon as they found a feasible solution.

May 16, 1968. LETTER TO Boise Cascase Corporation (George C. Flanagan) acknowledged their letter of May 9, advising that under ORS, the Sanitary Authority may require, upon request, the submission of plans and specifications for any air cleaning device, but that the person responsible for the violation remains responsible for determining the means, methods, process, or equipment to comply with standards. It was suggested that Mr. Flanagan might consider appearing before the Sanitary Authority at its Medford meeting to state his views.

June 27, 1968. STAFF REPORT. Smoke observations for a period of 20 minutes indicated waste burner smoke discharge in excess of Ringelmann #4 continuously.

July 1, 1968. LETTER TO Boise Cascade Corporation (George C. Flanagan) expressed disappointment that their letter of May 9 offered no concrete proposal for correction of the wigwam burner problem and suggested that if the answer could not be found through utilization, the logical alternative is a more efficient method of incineration. It was suggested that they install a multiple chamber incinerator, and reduce the residues to hog fuel consistence for storage in a surge bin from which they could be conveyed to the incinerator at a uniform rate. It was suggested that the boiler fuel storage facility could be used for storage of those residues in excess of those required for boiler operation.

The following schedule was proposed:

1. Feasibility studies and engineering by August 2.
2. Procurement and installation by October 4.
3. Start-up and adjustment by October 18, 1968.

It was again pointed out that Oregon statutes stipulate that it shall be the responsibility of the person in violation to develop the methods and means for obtaining compliance and that we would welcome alternative proposals as to method or schedule.

July 2, 1968. LETTER FROM Boise Cascade Corporation (George C. Flanagan) advising of his wish to attend the Medford meeting of the Authority, and expressing the hope that their air pollution problem can be reduced by the installation of barker and chipper facilities "at some future time", and that the pay-back is rather poor on a $500,000 installation based on the present price of chips.

July 3, 1968. LETTER TO Boise Cascade Corporation (George C. Flanagan) advising of the provisions for tax relief and of the procedures for making application.

3.0 SUMMARY

The wigwam burner at Boise Cascade Corporation is in a poor state of repair and has never been modified in accordance with the original wigwam burner regulation or staff recommendations for improved combustion. It is currently operated in violation of the present (revised) regulation governing construction and operation of wigwam waste burners (OAR Chapter 334, Division 2, Subdivision 4), specifically paragraph 24-020 which prohibits use other than for the incineration of production process wood wastes and in effect prohibits batch loading. In addition, smoke emissions have been observed to be in violation of Discharge Standards (OAR Chapter 334, Division 2, Subdivision 1).

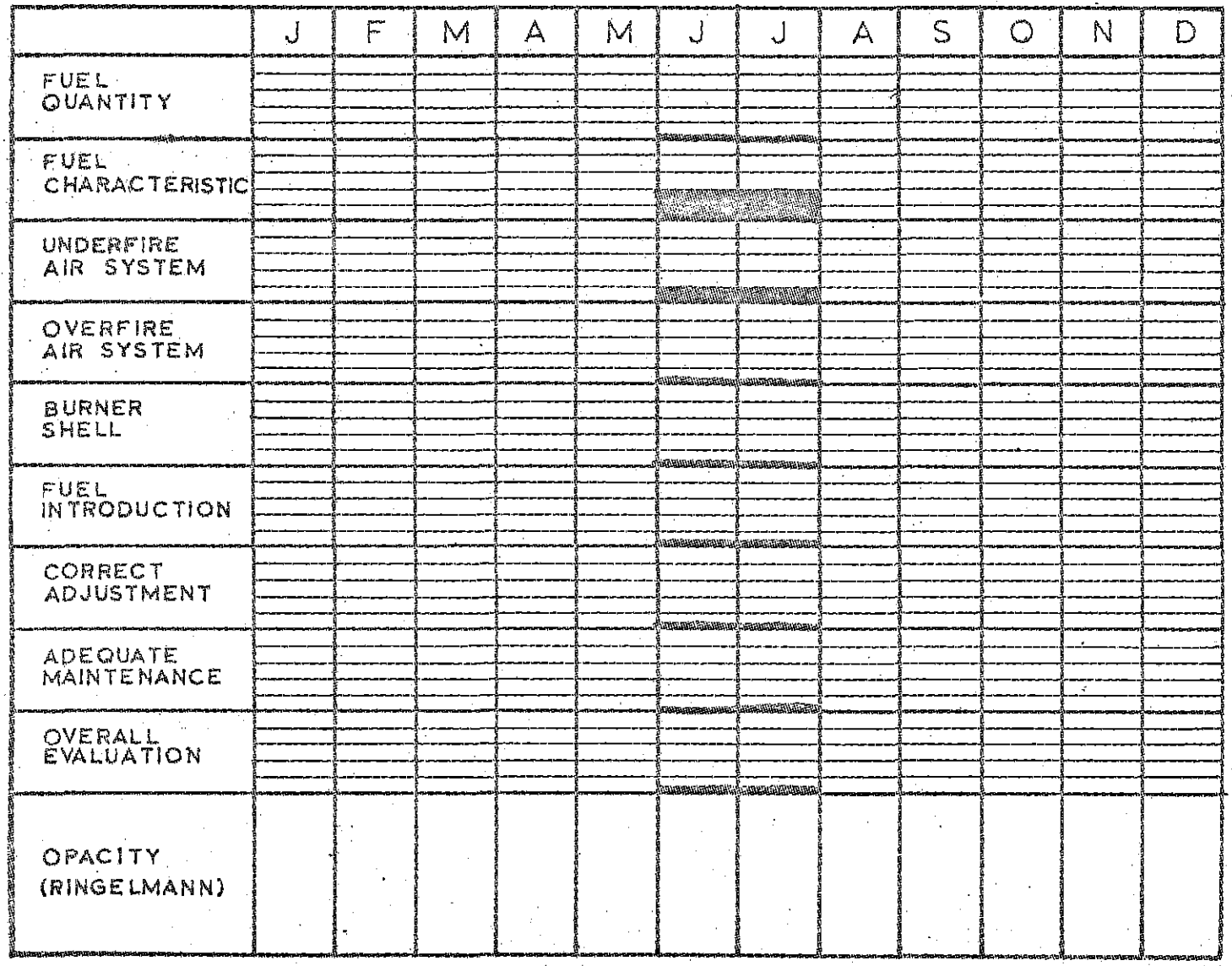
From discussions with plant personnel, we are informed that by the installation of a barker and chipper so that all clean residues can be sold as chips, and all bark used as boiler fuel, the use of the burner can be eliminated, except for its rare use in case of an emergency breakdown of the hog. The installation will apparently not only be self liquidating but will show a fair return on the investment cost.

Other than a hog breakdown, the only other emergency situation which would normally arise would be due to a shortage of chip cars, but this contingency can be almost eliminated by construction of an open storage slab for chip storage until cars become again available.

4.0 RECOMMENDATIONS

The staff recommends that Boise Cascade Corporation be required to submit a proposed method and schedule for termination of the use of the wigwam burner at the September meeting of the Authority.

WIGWAM WASTE BURNER
PROGRESS EVALUATION



FIRM NAME BOISE CASCADE CORPORATION
LOCATION Central Point, Oregon

TO : MEMBERS OF OREGON STATE SANITARY AUTHORITY

Mr. John D. Mosser, Chairman
Mr. Storrs S. Waterman
Mr. B. A. McPhillips
Mr. Herman P. Meierjurgen
Mr. Edward C. Harms, Jr.
Mr. Kenneth H. Spies
Mr. H. M. Patterson
Mr. E. J. Weathersbee

FROM : C. A. Ayer

DATE : August 21, 1968

SUBJECT: Rendering Plants, North Portland

This is a summary of activities from July 27 to August 20, 1968:

Complaints

There were five complaints in August, all of these prior to August 8. All were from the Chautauqua Boulevard area.

Progress of the plants is as follows:

Western States: Final assembly of the incinerator system at the plant site is progressing rapidly, with test-firing scheduled by August 24. The clean-up program has shown some improvement, but the company was notified by letter on August 9 (copy attached) that the staff felt that considerable work on the building and equipment was necessary. No response from the owner (Bissenger Co., of San Francisco) has been received by us, although the manager, Mr. Pace, has scheduled a conference with his superiors on the problem for August 21.

Pacific Meats: The incinerator installation is on the same schedule as that for Western States. Cleanliness is not generally a problem.

Kenton Packing: Fabrication of the incinerator system is complete and installation at the plant is scheduled to be complete during the week ending August 23. Cleanliness is no problem.

Brander Meats: There remains a test on one type of livestock for drawing up a contract with Portland Rendering. The company also has to finish delivering tallow previously contracted for. Walter Steele, plant manager, expects to be able to contract with Portland Rendering shortly.

Associated Meats: One more test remains as a basis for a contract with Portland Rendering. The company has already ordered material handling equipment in anticipation of a contract.

Portland Rendering: An investigation into scrubbers available for controlling room odors is still being made. In the meantime, room odors are being minimized by a rigid cleanliness program and keeping the building's doors closed tight.

Wilbur-Ellis: The exhaust gases were sampled on August 1, 1968, and tested on an "odor panel" of six persons to arrive at an estimate of the strength of odors. The plant was judged to be essentially controlled.

August 9, 1968

Carney Pace, Mgr.
Western States Rendering Co.
P. O. Box 17054, Kenton Station
Portland, Oregon 97217

Dear Mr. Pace:

On August 7, 1968, an inspection of the Western States Rendering Co.'s building and premises was conducted to determine whether the housekeeping program was in compliance with the Sanitary Authority's order of March 27, 1968. It was found that in spite of a beginning having been made, the program was inadequate. Specific observations were as follows:

A. Cooker Loading Area.

1. Floor deteriorated, water standing in pitted portions.
2. Debris and organic material on the floor, especially around cooker loading ports.
3. Floor slippery with grease.
4. Debris on pipes and switchboxes along south wall.
5. Grease and debris on sides of loading auger-conveyor.
6. Drain trough clogged, debris and standing water in trough.
7. Walls and ceilings greasy.

B. Loading Aprons, West side.

1. Screened material from vibratory screen falling to the side of the barrels, drainings from barrels carrying material out on to apron.
2. Pump at west side of apron leaking.

C. Cooker Areas.

1. Floor being hosed.
2. Debris on sides of augers, dropping onto floor.
3. Walls and ceilings greasy.

D. East Side of Building.

1. Manure screen leaking, pile of solid material underneath.

In view of the above, it is requested that the building interior (ceilings, walls, and floors) and the equipment within be given a thorough cleaning, if necessary by a firm specializing in that type of service.

It is further requested that, as a minimum, the following maintenance be done to facilitate cleaning so as to comply with the Sanitary Authority's order.

1. Resurface the floors, raising their level at least to that of the cooker loading ports and sloped in order to facilitate getting all spilled raw material into the cookers.

2. Provide drains and slopes in both the loading and cooker (downstairs) levels sufficient to prevent accumulation of standing water.

3. Provide drains for the loading aprons on the building's west side.

4. Institute a program of clean-ups frequent enough to prevent the accumulation of debris and water on the floors and aprons.

5. Repair or modify the screen on the loading aprons to prevent spillage of water and of screened-out solids.

6. Repair or modify the manure screen on the east side as may be necessary to prevent leakage and spilling of solid materials.

7. Institute a program of washdown, using an appropriate detergent solution, of the building interior (floors, walls and ceilings) and of piping, switchboxes, etc. fastened to the walls.

Inasmuch as the area odor nuisance has not been abated, if you do not comply fully with the provisions of the Sanitary Authority Order, we will have no alternative but to institute legal action as directed by the Sanitary Authority.

Your cooperation in this matter will be appreciated. If we can assist you in any way please let us know.

Very truly yours,

E. J. Weathersbee,
Deputy State Sanitary Engineer

EJW:CAA:h

cc: Columbia-Willamette APA
District Engineer
Arnold Silver

	August																												
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Complaints			1		1	1		2																						
Staff Surveys	8AM 4PM					3PM		10A 5PM 11PM	8AM 1PM	*	9PM			8AM					4PM	10PM										
Western States	X Chimney up					C		C		C		X Condensers in		C					X Final Assembly										
Pacific Meats	X Chimney Up											X Condensers in							X Final Assembly										
Kenton Packing																														
Brander Meat								Testing for contract with Portland Rendering																						
																			C											
Associated																			Conveying equipment ordered for sending mat'l to Portland Rendering										
Portland Rendering								C		C																				
Wilbur-Ellis	X Stack Sample for Odor																													

*August 10 - Area surveys and industrial contacts at 10am, 3pm, 9pm

MEMORANDUM

August 23, 1968

TO: Members of the Sanitary Authority

FROM: Water Pollution Control Staff

SUBJECT: "Application for Certification of Pollution Control Facility for Tax Relief Purposes," No. T-47, Parts I and II

This application was received on July 10, 1968. A summary of the contents and the results of the staff review are given below:

1. Applicant: Sabroso Company
660 South Grape Street
P. O. Box 129
Medford, Oregon 97501
Robert W. Root, President
Phone 772-5653

The applicant owns and operates the plant which produces pear concentrate.

2. The facility claimed in the application consists of a Link Belt Model 65 NRM 148 vibrator screen, including modifications to the waste collection sump and installation of a 7½-HP pump. Installation of the facility was completed on January 10, 1968, and operation commenced on January 11, 1968.

3. The total installed cost of the facility as claimed in the application is $5,043.65. The plant accountant's certification of this figure is attached.

4. Staff review:

This facility was installed to remove solids from the waste effluent prior to discharge to the City of Medford sewer system. This has the effect of reducing the waste load discharged to the Medford sewage treatment plant and, therefore, reduces the waste load discharge to the Rogue River. The Sanitary Authority, by permit condition, required the City of Medford to submit a program by July 1, 1968, for substantially reducing industrial waste loads to the sewage treatment plant beginning with the 1968 fruit processing season. The installation of this facility accomplishes that purpose.

5. Staff recommendation:

The staff recommends that a "Pollution Control Facility Certificate," bearing the actual cost figure of $5,043.65, be issued for the facilities claimed in application No. T-47.

Attachment

SABROSO COMPANY
P. O. Box 129
Medford, Oregon

APPLICATION FOR POLLUTION CONTROL FACILITY CREDIT

EXHIBIT IV - PAGE I:

Graff & James:	
Basic Pit Foundation 8' x 10' x 6' 8"	576.00
Basic Wiring for Motors	250.00
Basic Plumbing for Pit	200.00
Link Belt Co. #1149727	
Model 65 Vibrator Screen	1,695.58
Fran Rica #165	
PACA 4" 8C-NC West Pit Pump 7'	1,163.25
American Steel - Framing Steel	
52525 12/13/67	135.12
52957 12/27/67	45.05
Big Pines - Bulkhead	
4374 1/16/68'	8.08
4377 1/16/68	3.40
4316 1/17/68	3.50
3601 12/27/67	8.23
Electronic Service #2099 1/12/68	
Install Sump Pump	66.00
Concrete Steel - Collector & Weir	
A428442 12/1/67	19.60
A428451 12/4/67	19.60
E7588 12/19/67	67.00
Hubbard Bros. - Fitting, Cuts & Bolts	
15431 1/22/68	.96
15255 1/18/68	8.15
15066 1/13/68	3.25
15090 1/13/68	3.25
15008 1/13/68	7.53
15084 1/13/68	16.60
Trash Collector Screen	35.00
Myron Root & Co., - Installation, Fabrication & Materials	708.50
	5,043.65

A. J. Johnson
Accountant for Sabroso Company

STATE OF OREGON)
)
County of Jackson)

I, the undersigned, a Notary Public within and for said County and State, hereby certify that before me, on this 8th day of July 1968, personally appeared Mr. A. J. Johannson personally known and known by me to be the identical persons named in and who signed the foregoing statement; and he acknowledged to me that he executed the same freely and voluntarily.

In Testimony Whereof, I have hereunto set my hand and official seal the day and year first written in this certificate.

Kathryn E. Ashmole
Notary Public for Oregon
My Commission expires July 16 1971

MEMORANDUM

TO: Members of the Oregon State Sanitary Authority

FROM: Edgar R. Lynd

DATE: August 20, 1968

SUBJECT: Fanno Creek Sewage Treatment Plant

On June 28, 1968, the State Sanitary Authority issued a 60-day waste discharge permit to Multnomah County for operation of the Fanno Creek sewage treatment plant. Because of inadequate treatment the permit contained the following two conditions:

1. The permittee shall proceed immediately to initiate and follow through with a program to determine the nature of the treatment problems and correct them by whatever emergency and other measures may be required so as to provide an effluent which contains less than 20 mg/l Biochemical Oxygen Demand (BOD) and Suspended Solids.

2. No additional connections shall be made to this treatment facility in any area served by said system by any person or individual who has not received a building permit or sewer connection permit prior to July 1, 1968, and all waste loads presently connected shall not be increased.

Plant Operation

On July 18, 1968, Mr. Jim Burns, superintendent of the Tryon Creek sewage treatment plant, was employed by Stevens, Thompson, and Runyan Engineers to act as an operational consultant. During the week of July 22 a modified system of operating the plant was instituted involving the use of one of the aeration tanks for sludge re-aeration. A temporary pump of limited capacity was installed to return sludge from aerator No. 3. This modification looked promising and on August 16, 1968, a larger permanent pump was installed in the aerator building to be used for re-aeration.

An increase in operating personnel was authorized by the County and the staff is being built up to twelve operators and one chemist. The plant is now supervised 16 hours per day and will go to 24-hour/day supervision when fully staffed.

On June 17, 1968, the city of Beaverton diverted sewage from 485 homes and 8 industries to the Fanno Creek sewage treatment plant. At the request of Multnomah County, all of this except 2 industries was returned to the city of Beaverton on July 25, 1968. All of the industries connected to the plant were surveyed by the Portland District Engineers during the week of July 29. On August 12, a waste sample from the Western Battery Company was found by the Oregon State Board of Health Laboratory to contain 6 ppm of lead. The County was immediately notified of this with a recommendation to disconnect this source of toxic material. On August 15, the industrial waste was disconnected from the sanitary sewer.

Daily sewage flow at the plant has been running at about 3.0 mgd. This is about 130% of plant design and presented a problem when daily peaks reached 4.0 mgd and over. To alleviate this, the raw sewage pumps were set to operate at 2,000 gpm to cause the interceptor to act as a storage basin and even out the flow. Air was diffused into the interceptor which provided an increase in dissolved oxygen of the raw sewage. The line is permitted to be completely drawn down once each 24 hours and no significant problems have been encountered with deposition of solids to date.

The Sanitary Authority staff has been advised by Multnomah County that a concerted effort will be made to find and eliminate any source of excess water that is getting into the sewer.

Improved waste sampling indicates that the raw sewage strength at this plant as measured by the BOD test is about 250 mg/l or 0.21 lbs. BOD per capita per day (pcd). Ordinary domestic waste will run about 0.17 lbs. pcd.

A summary of plant effluent data with respect to BOD and Suspended Solids (S.S.) for the month of July and through August 12 is attached. A survey of the receiving stream was made on Friday, August 16, and this data is included. Although the required level of 20 mg/l for BOD and S.S. has not been met as yet, it is felt that the County has initiated and is following through with a program to determine and correct the treatment problems that have confronted this plant. We do not have data as yet on the performance of the plant following the new pump installation and separation of the toxic waste. Our data does indicate that the plant is loaded to near capacity and is actually operating over capacity on flow.

On Tuesday, August 13, 1968, a summary of major sewage plant loadings in the Fanno and Beaverton Creek drainage areas was presented to the Washington County Commissioners by the staff. At that time the County took action to prohibit the further issuance of building permits in the Fanno Creek sewage plant service area.

It is, therefore, recommended that a renewal permit containing the attached recommended conditions be issued to Multnomah County for the Fanno Creek plant.

FANNO CREEK SEWAGE TREATMENT PLANT EFFLUENT QUALITY

Date	Average Flow MGD	Final Effluent Average BOD mg/l	Final Effluent Average S.S. mg/l
June 1-16, 1968	3.10	70	35
June 17-26, 1968	3.19	91	25
July 1-21, 1968	2.94	84	49
July 25-31, 1968	2.76	49	--
August 1-12, 1968	2.85	65	85
August 13, 1968	3.41	--	--
August 14, 1968	4.21	--	--
August 15, 1968	4.24	--	--

FANNO CREEK STREAM SAMPLES

August 16, 1968

Station	D.O. mg/l	BOD mg/l	pH
Denny Road (Above Fanno Creek STP)	5.6	5.0	7.0
Hwy. 217 (Between Fanno Creek & Metzger STP)	1.8	72.0	6.8
Tiedeman Road (Below Fanno Creek & Metzger STP)	1.7	51.0	6.8

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	Multnomah County - Fanno Creek
Expiration Date:	3/31/69
Application No.:	294
Date Received:	12/5/67
County:	Washington
River Basin:	Willamette
Receiving Stream:	Fanno Creek
River Mile:	8.3

1. The operation of all waste collection, treatment, and disposal facilities shall be governed by the following:

    a. At all times, all facilities shall be operated at maximum efficiency and in a manner which will minimize waste discharges.
    b. The permittee shall take all steps necessary to assure that during the period from June 1 to November 1:
        1. The monthly average effluent 5-day 20° C. Biochemical Oxygen Demand (BOD) concentration in the effluent shall not exceed 20 milligrams per liter (mg/l).
        2. The monthly average effluent Suspended Solids concentration in the effluent shall not exceed 20 mg/l.
    c. At all times, the liquid effluent from the treatment facility shall receive adequate disinfection prior to discharge from the controlled confinement of the treatment facility. The effectiveness of disinfection shall be equivalent to that obtained by adequately mixing sufficient chlorine with the effluent to provide a minimum residual of 0.5 mg/l after 60 minutes of contact time at the average design flow.
    d. All screenings, grit, and sludge shall be disposed of in a manner approved by the Sanitary Authority such that it does not reach any of the waters of the state or create a health hazard or nuisance condition. A permanent record shall be maintained which indicates the quantity, method, and location of disposal of all sludge.

2. The permittee shall effectively monitor the operation and efficiency of the treatment plant and the quantity and quality of the effluent discharged. A permanent record of all such data shall be maintained at the plant. Data collected and recorded shall include, but not necessarily be limited to, the following parameters and minimum frequencies:

Parameter	Minimum Frequency
Total Flow	Daily
Pounds Chlorine Used	Daily
Chlorine Residual (effluent)	Daily
BOD (influent and effluent composite)	2 times per week
Suspended Solids (influent and effluent composite)	2 times per week
pH (influent and effluent)	3 times per week

3. Reports shall be submitted to the Sanitary Authority at the end of each calendar month on prescribed forms and shall contain the following:

    a. Routine monitoring data
    b. Sludge disposal information
    c. Bypassing information
    d. Maintenance shutdown information
    e. Breakdown information

4. Without first obtaining specific written permission from the Sanitary Authority, no additional connections shall be made to any sewers within the area served by the Fanno Creek sewage treatment plant, waste loads presently connected shall not be increased, and no new sewers or sewer extensions shall be constructed. Permission can be granted only if (a) the permittee has demonstrated to the Sanitary Authority that the additional connections will not cause the treatment plant to be overloaded or its efficiency impaired, and (b) plans and specifications are submitted to the Oregon State Board of Health and the Sanitary Authority for review and approval prior to construction, as required by ORS 449.245 and ORS 449.395.

5. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence. A permanent record shall be maintained of all such occurrences.

6. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

7. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

8. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

9. This permit is subject to termination if the Sanitary Authority 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 waste or type of waste disposal.

10. This permit, or a photocopy thereof, shall be displayed at the treatment facility where it can be readily referred to by operating personnel.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: Wah Chang Albany Corporation

Expiration Date: 12/31/69

Application No.: 303
Date Received: 11/30/67
County: Linn
River Basin: Willamette
Receiving Stream: Truax Creek
River Mile: 2.0

1. "Wastes," as used in this permit, refers to sanitary wastes, industrial process wastes, cooling waters, and other liquid waste discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. The permittee shall proceed to prepare detailed engineering plans and specifications for construction of waste treatment and control systems for various plant effluent streams to meet the following schedules:

   a. Startup of hydrolysis operations in Hafnium (Hf) separations process to reduce Thiocyanate (SCN^-) and Methyl Isobutyl Ketone (MIBK) levels by February 1, 1969.
   b. Reduction of ammonia (NH_3) level by direct firing and elimination of V-3, V-4 (Split #2) streams by June 1, 1969.
   c. Further reduction of NH_3 and MIBK levels by distillation of V-2 streams (Split #1) by July 1, 1969.
   d. Further reduction of NH_3 and reduction of sulfate ($SO_4^=$) through processing of V-1 stream (Split #3) for production of fertilizer by October 1, 1969.
   e. Approximately 95% reduction of SCN^- discharge by May 1, 1970.

3. Over-all plant waste water discharges shall not exceed the quantities and constituent concentrations listed below and as outlined in Mr. S. A. Worcester's letter of August 13, 1968.

	Discharge in lbs/day					
Chemical	7 - 68 to 2/1/69	2/1/69 to 6/1/69	6/1/69 to 7/1/69	7/1/69 to 10/1/69	10/1/69 to 5/1/70	5/1/70
Na	6,370	6,370	6,370	6,370	6,370	6,370
Cl^-	37,500	37,500	37,500	37,500	37,500	37,500
$SO_4^=$	21,400	21,400	21,400(1)	21,400(1)	5,500(2)	5,500(2)
SCN^-	2,250	1,740	1,740	1,740	1,740	55
NH_3	22,500	22,500	16,650	5,300	85	85
Ca	3,560	3,560	3,560	36,000	36,000	36,000
MIBK	1,350	1,000	1,000	100	100	100
Est. Flow (MGD)	1.5	1.5	1.5	5.3(3)	5.3(3)	5.3(3)

(1) 16,300 if $SO_4^=$ recovered or recycled
(2) 1,040 if $SO_4^=$ recovered or recycled
(3) Less if cooling tower is used

4. No expansion of production over January 1968 levels shall occur which will result in increased waste discharges or which will interfere with progress toward intended significant reductions in present waste discharges until satisfactory control over total plant wastes has been achieved.

5. All plant processes and equipment and all waste treatment and control facilities shall be operated and maintained at all times in a manner which will minimize waste discharges.

6. All contaminated waste streams including decanted liquid wastes from the sludge storage pond shall be collected and discharged, after appropriate treatment, at a single controlled waste discharge point where the flow and pH shall be continuously metered and recorded.

7. Analyses of the waste discharge stream shall be made daily, unless and until sampling results might indicate that less frequent analyses will suffice, for the following:

NH_4^+	$SO_4^=$
Na^+	SCN^-
Ca^{++}	F^-
Heavy metal ions	Cl^-
Suspended solids	
Methyl isobutyl ketone	
Temperature	

In addition, during the effective period of this permit, data shall be developed and reported concerning temperatures and quantities of the various cooling water streams that are discharged separately from the main waste discharge stream.

8. Bioassays of the waste discharge stream shall be conducted in sufficient number to represent on a continually current basis the dilution with river water required to render the wastes non-toxic as evidenced by 96-hour bio-assays using appropriate test fish.

9. The receiving stream shall be observed daily and physical and aesthetic qualities recorded which include:

Scum	Discoloration
Slime	Turbidity
Sludge deposits	Odor

10. Data gathered under items 7, 8 & 9 above shall be reported to the Sanitary Authority immediately at the end of each calendar month and any additional reports or data which may be required by the Sanitary Authority shall be promptly provided.

11. Sanitary wastes are to be disposed of in adequate and properly functioning septic tank and drainfield systems or other approved means.

12. Authorized representatives of the Sanitary Authority shall be permitted access to the plant premises at all reasonable times for purposes of making inspections or surveys and for collecting samples or obtaining data and carrying out other necessary functions related to this permit.

13. This permit does not allow the discharge of wastes other than those mentioned.

14. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

15. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

16. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

17. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

August 16, 1968

Mr. S. A. Worcester, Technical Director
Wah Chang Albany Corporation
P. O. Box 460
Albany, Oregon 97321

Dear Mr. Worcester:

Re: Waste Discharge Permit
Application No. 303

This is to follow-up our discussion on August 13, 1968, regarding the information contained in your letter of that same date outlining the steps Wah Chang Albany proposes to take to reduce the waste discharges from that plant.

The staff has reviewed the information submitted pertaining to proposed treatment and control methods, construction schedules, and anticipated residual effluent constituent concentration levels and finds them to be a reasonable approach to reduction of your waste discharges. You are again reminded that all available resources should be exercised to achieve a satisfactory solution in the shortest time possible.

The information you have submitted, along with knowledge gained in recent discussions with your staff, has been incorporated in preparing revised recommended Waste Discharge Permit conditions for the period August 23, 1968, to December 31, 1969. This information is enclosed for your review and comment.

The Authority will be requested to issue a permit containing the final recommended conditions at the meeting on August 23, 1968, to be held in the auditorium of the Jackson County Courthouse, located at Main and Oakdale, Medford, Oregon, beginning at 1:30 p.m. Any suggested revisions to the permit conditions should be made known to this office by 5:00 p.m. on August 20. It is our understanding that representatives of your company will be present at the Medford meeting to discuss this matter with the Authority.

Very truly yours,

Kenneth H. Spies
Secretary and Chief Engineer

LCC:an
Enclosure

cc: Mr. R. P. Blunk, Vice President
Eugene District Office

WAH CHANG ALBANY
P. O. BOX 460
ALBANY, OREGON 97321
(503) 926-4211

A TELEDYNE COMPANY

August 13, 1968

Mr. Lloyd Cox
Supervisor, Waste Quality
Oregon State Sanitary Authority
P. O. Box 231
Portland, Oregon 97207

Dear Mr. Cox;

Enclosed are the projected effluent discharges for Wah Chang Albany Corporation as you requested during our discussion of July 29, 1968.

These values represent estimated averages at the measuring discharge weir.

You will notice that the timing for the on-stream operation of the ammonium sulfate plant has been set back to October 1, 1969, because of anticipated problems in equipment delivery. However, we have decided to proceed immediately with the design and construction of a distillation plant for the recovery of ammonium hydroxide from the V-2 filtrate.

I hope this information will be satisfactory to you in considering a new discharge permit for Wah Chang Albany Corporation. Feel free to contact me if any questions arise.

Sincerely,

S. A. Worcester
Technical Director

SAW:eh

Enclosure

August 13, 1968

ESTIMATED EFFLUENT DISCHARGE

WAH CHANG ALBANY CORPORATION

Based on Current Measurements

Chemical	Discharge in lb/day					
	7-68	2-1-69 Startup $Hf(SO_4)$ SCN Hydrolysis	6-1-69 V_3-V_4 Elimination by Direct Firing	7-1-69 NH_3 Dist.	10-1-69 $(NH_4)_2SO_4$ Fertilizer	5-1-70 SCN Destr.
Na	6370	6370	6370	6370	6370	6370
Cl^-	37,500	37,500	37,500	37,500	37,500	37,500
$SO_4^=$	21,400	21,400	21,400(1)	21,400(1)	5500(2)	5500(2)
SCN^-	2250	1740	1740	1740	1740	55
NH_3	22,500	22,500	16,650	5300	85	85
Ca	3560	3560	3560	36,000	36,000	36,000
MIBK	1350	1000	1000	100	100	100
Est. Flow (MG/D)	1.5	1.5	1.5	5.3(3)	5.3(3)	5.3(3)

(1)16,300 if $SO_4^=$ recovered or recycled
(2)1,040 if SO_4 recovered or recycled
(3)less if cooling tower is used

S.A. Worcester

SAW/st

SUMMARY OF THE SIGNIFICANT RECOMMENDED PERMIT CONDITIONS

NAME	TYPE OF WASTE	TYPE OF TREATMENT	RECEIVING STREAM	RECOM. EXPIR. DATE	SUMMER LIMITATIONS			SPECIAL REQUIREMENTS	COMMENTS
					FLOW	BOD	SUSP.SOLIDS		
Carolina Pacific Plywood	Plywood glue	--	Ditch to Rogue River	3/31/69	--	--	--	Submit program by 12/1/68 for providing secondary treatment or equivalent control of glue waste by 6/1/69.	
Fir Ply Company	Log pond & plywood glue	--	Ditch to Rogue River	3/31/69	--	--	--	Submit program by 12/1/68 for providing secondary treatment or equivalent control of glue wastes by 6/1/69. No log pond overflow June 1 - Nov. 1.	
Medford Veneer & Plywood	Plywood glue	--	Ditch to Rogue River	3/31/69	--	--	--	Submit program by 12/1/68 for providing secondary treatment or equivalent control of glue waste by 6/1/69.	
Olson-Lawyer Lumber Co.	Log pond overflow - log deck drainage	--	Ditch to Rogue River	6/30/69	--	--	--	No direct discharge log deck sprinkling wastes after 6/1/69. No log pond overflow June 1 - Nov. 1.	
Reichhold Chem.	Chemical wastes - cooling waters		Ditch to Rogue River	3/31/69	--	--	--	No direct discharge June 1 - Nov. 1. Submit proposal by 12/1/68 for operating non-overflow system Nov. 1 - June 1.	
Rogue Valley Plywood	Plywood glue	--	Ditch to Rogue River	3/31/69	--	--	--	Submit program by 12/1/68 for providing secondary treatment or equivalent control of glue waste by 6/1/69.	
White City Plywood	Plywood glue	--	Ditch to Rogue River	3/31/69	--	--	--	Submit program by 12/1/68 for providing secondary treatment or equivalent control of glue waste by 6/1/69.	

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	Carolina Pacific Plywood, Inc. - White City
Expiration Date:	3/31/69
Application No.:	474
Date Received:	1/2/68
County:	Jackson
River Basin:	Rogue
Receiving Stream:	Roadside ditch to Rogue River
River Mile:	

1. "Wastes," as used in this permit, refers to plywood glue wastes, sanitary wastes, and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. A detailed program and time schedule shall be submitted by not later than December 1, 1968, for providing by not later than June 1, 1969, secondary treatment or equivalent control of plywood glue wastes.

3. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

4. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system.

5. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the sanitary authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

6. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

7. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

8. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

9. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	Fir Ply Company, A Division of Russeks, Inc.
Expiration Date:	3/31/69
Application No.:	484
Date Received:	1/3/68
County:	Jackson
River Basin:	Rogue
Receiving Stream:	Roadside ditch to Rogue River
River Mile:	

1. "Wastes," as used in this permit, refers to log pond overflow, plywood glue wastes, sanitary wastes, and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. A detailed program and time schedule shall be submitted by not later than December 1, 1968, for providing by not later than June 1, 1969, secondary treatment or equivalent control of plywood glue wastes.

3. No overflow from the log pond shall occur during the period from approximately June 1 to November 1. During overflow periods, facilities shall be provided for removing bark, oil, and other floating debris from the log pond effluent.

4. Permission must be obtained from the Sanitary Authority prior to the draining of the log pond for cleaning, dredging, or any other purpose. Care must be taken to prevent mud, sawdust, bark, and other debris from being discharged into the waterway.

5. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

6. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system.

7. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

8. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

9. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

10. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

11. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: Medford Veneer and Plywood Corporation

Expiration Date: 3/31/69

Application No.: 289
Date Received: 12/5/67
County: Jackson
River Basin: Rogue
Receiving Stream: Roadside ditch to Rogue River
River Mile:

1. "Wastes," as used in this permit, refers to plywood glue wastes, sanitary wastes, and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. A detailed program and time schedule shall be submitted by not later than December 1, 1968, for providing by not later than June 1, 1969, secondary treatment or equivalent control of plywood glue wastes.

3. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

4. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system.

5. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

6. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

7. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

8. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

9. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: Olson-Lawyer Lumber, Inc.

Expiration Date: 6/30/69

Application No.: 291
Date Received: 12/5/67
County: Jackson
River Basin: Rogue
Receiving Stream: Roadside ditch to Rogue River
River Mile:

1. "Wastes," as used in this permit, refers to log pond overflow, log deck sprinkling return waters, cooling water, sanitary wastes, and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. No direct discharge shall occur from the log deck sprinkling operation after June 1, 1969.

3. No overflow from the log pond shall occur during the period from approximately June 1 - November 1, except for periods when storm water draining into the pond makes an overflow necessary. During overflow periods, facilities shall be provided for removing bark, oil, and other floating debris from the log pond effluent.

4. Permission must be obtained from the Sanitary Authority prior to the draining of the log pond for cleaning, dredging, or any other purpose. Care must be taken to prevent mud, sawdust, bark, and other debris from being discharged into the waterway.

5. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

6. Uncontaminated cooling waters may be discharged directly to the roadside ditches.

7. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system or by other approved means.

8. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

9. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

10. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with

the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

11. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

12. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	Reichhold Chemicals, Inc.
Expiration Date:	3/31/69
Application No.:	200
Date Received:	11/30/67
County:	Jackson
River Basin:	Rogue
Receiving Stream:	Roadside ditch to Rogue River
River Mile:	

1. "Wastes," as used in this permit, refers to sanitary wastes, industrial process wastes, cooling water, and other liquid waste discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. No direct discharge to the roadside ditch shall occur during the period from approximately June 1 to November 1. From November 1 to June 1, the permittee's treatment system shall be operated and maintained at all times to minimize waste discharges.

3. A study shall be undertaken by the permittee outlining the feasibility of operating a non-overflow system during the period November 1 to June 1. This proposal shall be submitted by not later than December 1, 1968.

4. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

5. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system.

6. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

7. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

8. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

9. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

10. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: Rogue Valley Plywood, Inc.

Expiration Date: 3/31/69

Application No.: 468
Date Received: 12/29/67
County: Jackson
River Basin: Rogue
Receiving Stream: Roadside ditch to Rogue River
River Mile:

1. "Wastes," as used in this permit, refers to plywood glue wastes, sanitary wastes, and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. A detailed program and time schedule shall be submitted by not later than December 1, 1968, for providing by not later than June 1, 1969, secondary treatment or equivalent control of plywood glue wastes.

3. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

4. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system.

5. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

6. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

7. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

8. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

9. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: White City Plywood Company

Expiration Date: 3/31/69

Application No.: 331
Date Received: 12/11/67
County: Jackson
River Basin: Rogue
Receiving Stream: Roadside ditch to Rogue River
River Mile:

1. "Wastes," as used in this permit, refers to plywood glue wastes, sanitary wastes, and other liquid waste discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. A detailed program and time schedule shall be submitted by not later than December 1, 1968, for providing by not later than June 1, 1969, secondary treatment or equivalent control of plywood glue wastes.

3. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

4. All sanitary wastes shall be disposed of to the White City Sanitary District sewerage system.

5. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

6. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

7. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

8. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

9. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: Lawyer Veneer Company

Expiration Date: 6/30/71

Application No.: 302
Date Received: 12/6/67
County: Jackson
River Basin: Rogue
Receiving Stream: Roadside Ditch to Whetstone Creek & Rogue River
River Mile:

1. "Wastes," as used in this permit refers to cooling water, sanitary wastes, and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. Uncontaminated cooling waters may be discharged directly to the roadside ditch.

3. Sanitary wastes shall be disposed of to the White City Sanitary District sewerage system or by other approved means.

4. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

5. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

6. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

7. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

8. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant: U.S. Plywood - Champion Papers Inc. (Roseburg Div.)
Expiration Date: 9/30/69
Application No.: 573
Date Received: 2/15/68
County: Douglas
River Basin: Umpqua
Receiving Stream: Deer Creek
River Mile:

1. "Wastes," as used in this permit refers to log pond overflow, sanitary wastes and other liquid discharges cited in the permit application subject to the limitations and provisions imposed by the conditions of this permit.

2. A detailed program and time schedule shall be submitted by not later than June 1, 1969 for providing by not later than September 1, 1969 secondary treatment or equivalent control of plywood glue wastes.

3. All residue collected from the glue spreaders and settling tanks shall be collected for disposal on land.

4. No overflow from the log pond shall occur during the period approximately June 1 to November 1. During overflow periods facilities shall be provided for removing bark, oil and other floating debris from the log pond effluent.

5. Permission must be obtained from the Sanitary Authority prior to the draining of the log pond for cleaning, dredging or any other purpose. Care shall be taken to prevent mud, sawdust, bark and other floating debris from the log pond effluent.

6. All plant processes shall be operated and maintained at all times at maximum efficiency and in a manner which will minimize waste discharges.

7. All sanitary wastes shall be disposed of to the Roseburg sewerage system.

8. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence.

9. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

10. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

11. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

12. This permit is subject to termination if the Sanitary Authority 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 waste or method of waste disposal.

U. S. PLYWOOD - OREGON DIVISION

P. O. BOX 1328 • ROSEBURG, OREGON 97470 • PHONE 672-3331

August 6, 1968

State of Oregon,
Oregon State Sanitary Authority
State Office Building
1400 N. W. 5th Ave.
Portland, Oregon.

Re: Waste Discharge Permit
Application No. 573.

Gentlemen:

Reference is made to your letter of July 25, 1968. We appreciate the opportunity to appear at the meeting to be held in Medford, August 23, 1968, and either the undersigned or a representative will be there.

We have reviewed the preliminary permit and our only reservation is the secondary treatment of plywood glue wastes. At the present time, we are working with chemists from Borden Chemical Company, and at this time there seems to be some question as to the amount of contamination involved with the glue waste. This can be resolved however during the interim period.

We are most appreciative of the cooperation extended us by your personnel in solving a very complex problem.

Yours very truly,

R. J. Moore

R. J. Moore, Manager,
ROSEBURG OPERATIONS

RJM/bf

S-5A—5-49

Office Memorandum • OREGON STATE BOARD OF HEALTH

To : EJW, LOC, HLS

Date: August 7, 1968

From : RCS

Subject: IW 2-2 U. S. Plywood, Roseburg

On August 5, 1968, I received a call from Bob Coakley, plant engineer, U. S. Plywood, Roseburg, regarding provision #2 of their WDP namely, secondary treatment or equivalent control of plywood glue wastes by September 1969, with a plan and time schedule by June 1, 1969.

Mr. Coakley was concerned that we were not being fair and that their log pond was plenty good enough for equivalent control. I disagreed that this was not "the best and most practical degree" of treatment. Mr. Coakley had the Roseburg STP run 1 BOD on his pond effluent the results being 37 mg/1. I stated that I did not consider putting all drier wash water, plywood glue waste (interior and exterior) in their log pond an adequate disposal method. Mr. Coakley did not agree so I told him to so state to the Sanitary Authority at the Medford meeting. U. S. Ply discharges to Deer Creek in Roseburg. The flow in Deer Creek drops to 0 cfs in the summer months. At the time of my survey the pond effluent was very black and foamy with about 50 gpm flow. No samples were taken. U. S. Ply is sending us a letter on their objections.

SUMMARY OF THE SIGNIFICANT RECOMMENDED PERMIT CONDITIONS

NAME	TYPE OF WASTE	TYPE OF TREATMENT	RECEIVING STREAM	RECOM. EXPIR. DATE	SUMMER LIMITATIONS			SPECIAL REQUIREMENTS	COMMENTS
					FLOW	BOD	SUSP.SOLIDS		
Lawyer Veneer	Cooling water	--	Ditch to Whetstone Cr. & Rogue River	6/30/71	--	--	--	Cooling water may be discharged directly.	
U.S.Plywood - Champion Papers, Roseburg Div.	Glue waste, log pond	--	Deer Creek	9/30/69	--	--	--	Submit program by 6/1/69 for providing secondary treatment or equivalent control of glue waste by 9/1/69. No log pond overflow June 1 - Nov. 1.	

SUMMARY OF THE SIGNIFICANT RECOMMENDED PERMIT CONDITIONS

NAME	TYPE OF WASTE	TYPE OF TREATMENT	RECEIVING STREAM	RECOM. EXPIR. DATE	SUMMER LIMITATIONS			SPECIAL REQUIREMENTS	COMMENTS
					FLOW	BOD	SUSP.SOLIDS		
White City San. District	Domestic	Lagoon	Rogue River	6/30/69	1.0 MGD	30 mg/l (174 lbs/day)	--		
Eagle Point	Domestic	Lagoon	Little Butte Creek	6/30/69	0.225 MGD	30 mg/l (53 lbs/day)	--		
Grants Pass	Domestic	Trickling filter	Rogue River	12/31/68	3.25 MGD	(Maximum	efficiency)	Submit program by 11/1/68 for providing approved treatment facilities by 7/1/70.	
Glendale	Domestic	Trickling filter	Cow Creek	12/31/69	0.2 MGD	30 mg/l (50 lbs/day)	30 mg/l (50 lbs/day)	Provide 60 min. chlorine contact and flow meter by 9/30/68.	
Green Sanitary Dist. (Roseburg)	Domestic	Lagoon	S. Umpqua River	12/31/69	0.2 MGD	30 mg/l (50 lbs/day)	--	Provide 60 min. chlorine contact facilities by 5/1/69.	

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	White City Sanitary District
Expiration Date:	6/30/69
Application No.:	166
Date Received:	11/30/67
County:	Jackson
River Basin:	Rogue
Receiving Stream:	Rogue River
River Mile:	130.3

1. At all times, all existing waste treatment facilities and equipment shall be operated and maintained at maximum efficiency and in a manner which will minimize waste discharges.

2. The average daily flow of sewage through the existing treatment facilities during any dry weather month shall not exceed the design flow of 1.0 million gallons per day (MGD).

3. During the period from June 1 to November 1, the monthly average 5-day 20° C. Biochemical Oxygen Demand (BOD) concentration in the effluent discharged to the Rogue River shall not exceed 30 milligrams per liter (mg/l) (174 lbs/day).

4. At all times, the liquid effluent from the treatment facility shall receive adequate disinfection prior to discharge from the controlled confinement of the treatment facility. The effectiveness of disinfection shall be equivalent to that obtained by adequately mixing sufficient chlorine with the effluent to provide a minimum residual of 0.5 mg/l after 60 minutes of contact time at the average design flow.

5. The permittee shall effectively monitor the operation and efficiency of the treatment plant and the quantity and quality of the effluent discharged. A permanent record of all such data shall be maintained at the plant. Data collected and recorded shall include, but not necessarily be limited to, the following parameters and minimum frequencies:

Parameter	Minimum Frequency
Total Flow	Daily
Pounds Chlorine Used	Daily
Chlorine Residual (effluent)	Daily
pH (effluent before chlorination)	3 times per week

6. Reports shall be submitted to the Sanitary Authority at the end of each calendar month on prescribed forms and shall contain the following:

   a. Routine monitoring data
   b. Bypassing information
   c. Maintenance shutdown information
   d. Breakdown information

7. The sewerage system (pipelines, conduits, pumping stations, forcemains, and all other facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal) shall be operated and maintained in a manner which will minimize waste discharges.

8. This permit allows the construction of sewer extensions and connections thereto provided that plans and specifications are submitted to and approved by the Oregon State Board of Health and the Sanitary Authority as required by ORS 449.245 and ORS 449.395.

9. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence. A permanent record shall be maintained of all such occurrences.

10. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

11. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

12. This permit is subject to termination if the Sanitary Authority 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 waste or type of waste disposal.

13. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

14. This permit, or a photocopy thereof, shall be displayed at the treatment facility where it can be readily referred to by operating personnel.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	City of Eagle Point
Expiration Date:	6/30/69
Application No.:	347
Date Received:	12/12/67
County:	Jackson
River Basin:	Rogue
Receiving Stream:	Little Butte Creek
River Mile:	3.5

1. At all times, all existing waste treatment facilities and equipment shall be operated and maintained at maximum efficiency and in a manner which will minimize waste discharges.

2. The average daily flow of sewage through the existing treatment facilities during any dry weather month shall not exceed the design flow of 0.225 million gallons per day (MGD).

3. During the period from June 1 to November 1, the monthly average 5-day 20° C. Biochemical Oxygen Demand (BOD) concentration in the effluent discharged to Little Butte Creek shall not exceed 30 milligrams per liter (mg/l) (53 lbs/day).

4. At all times, the liquid effluent from the treatment facility shall receive adequate disinfection prior to discharge from the controlled confinement of the treatment facility. The effectiveness of disinfection shall be equivalent to that obtained by adequately mixing sufficient chlorine with the effluent to provide a minimum residual of 0.5 mg/l after 60 minutes of contact time at the average design flow.

5. The permittee shall effectively monitor the operation and efficiency of the treatment plant and the quantity and quality of the effluent discharged. A permanent record of all such data shall be maintained at the plant. Data collected and recorded shall include, but not necessarily be limited to, the following parameters and minimum frequencies:

Parameter	Minimum Frequency
Total Flow	Daily
Pounds Chlorine Used	Daily
Chlorine Residual (effluent)	Daily
pH (effluent before chlorination)	3 times per week

6. Reports shall be submitted to the Sanitary Authority at the end of each calendar month on prescribed forms and shall contain the following:

   a. Routine monitoring data
   b. Bypassing information
   c. Maintenance shutdown information
   d. Breakdown information

7. The sewerage system (pipelines, conduits, pumping stations, forcemains, and all other facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal) shall be operated and maintained in a manner which will minimize waste discharges.

8. This permit allows the construction of sewer extensions and connections thereto provided that plans and specifications are submitted to and approved by the Oregon State Board of Health and the Sanitary Authority as required by ORS 449.245 and ORS 449.395.

9. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence. A permanent record shall be maintained of all such occurrences.

10. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

11. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

12. This permit is subject to termination if the Sanitary Authority 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 waste or type of waste disposal.

13. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

14. This permit, or a photocopy thereof, shall be displayed at the treatment facility where it can be readily referred to by operating personnel.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	City of Grants Pass
Expiration Date:	12/31/68
Application No.:	566
Date Received:	2/13/68
County:	Josephine
River Basin:	Rogue
Receiving Stream:	Rogue River
River Mile:	101.0

1. At all times, all existing waste treatment facilities and equipment shall be operated and maintained at maximum efficiency and in a manner which will minimize waste discharges.

2. The permittee shall submit by November 1, 1968, a detailed program and time schedule for providing by July 1, 1970, approved waste treatment facilities adequate to insure that:

    a. The average monthly concentrations of Biochemical Oxygen Demand (BOD) and Suspended Solids in the effluent does not exceed 20 milligrams per liter (mg/l), respectively.
    b. The effluent receives a minimum of 60 minutes of chlorine contact time at the average design flow before being discharged from the controlled confinement of the treatment facility.

3. The average daily flow of sewage through the existing treatment facilities during any dry weather month shall not exceed the design flow of 3.25 million gallons per day (MGD).

4. At all times, the liquid effluent from the existing treatment facility shall receive the maximum disinfection possible with existing equipment prior to discharge from the controlled confinement of the treatment facility.

5. All screenings, grit, and sludge shall be disposed of in a manner approved by the Sanitary Authority such that it does not reach any of the waters of the state or create a health hazard or nuisance condition. A permanent record shall be maintained which indicates the quantity, method, and location of disposal of all sludge.

6. The permittee shall effectively monitor the operation and efficiency of the treatment plant and the quantity and quality of the effluent discharged. A permanent record of all such data shall be maintained at the plant. Data collected and recorded shall include, but not necessarily be limited to, the following parameters and minimum frequencies:

Parameter	Minimum Frequency
Total Flow	Daily
Pounds Chlorine Used	Daily
Chlorine Residual (effluent)	Daily
BOD (influent and effluent composite)	2 times per week
Suspended or Settleable Solids (influent and effluent composite)	2 times per week
pH (influent and effluent)	3 times per week

7. Reports shall be submitted to the Sanitary Authority at the end of each calendar month on prescribed forms and shall contain the following:

    a. Routine monitoring data
    b. Sludge disposal information
    c. Bypassing information
    d. Maintenance shutdown information
    e. Breakdown information

8. The sewerage system (pipelines, conduits, pumping stations, forcemains, and all other facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal) shall be operated and maintained in a manner which will minimize waste discharges.

9. This permit allows the construction of sewer extensions and connections thereto provided that plans and specifications are submitted to and approved by the Oregon State Board of Health and the Sanitary Authority as required by ORS 449.245 and ORS 449.395.

10. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence. A permanent record shall be maintained of all such occurrences.

11. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

12. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

13. This permit is subject to termination if the Sanitary Authority 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 waste or type of waste disposal.

14. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

15. This permit, or a photocopy thereof, shall be displayed at the treatment facility where it can be readily referred to by operating personnel.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	City of Glendale
Expiration Date:	12/31/69
Application No.:	363
Date Received:	12/14/67
County:	Douglas
River Basin:	Umpqua
Receiving Stream:	Cow Creek
River Mile:	41.0

1. The permittee shall proceed to construct and place into operation before September 30, 1968, approved waste treatment facilities adequate to insure that:

    a. The effluent receives a minimum of 60 minutes of chlorine contact time at the average design flow before being discharged from the controlled confinement of the treatment facility.
    b. The sewage flow is continuously measured and totalized.

2. At all times, all existing waste treatment facilities and equipment shall be operated and maintained at maximum efficiency and in a manner which will minimize waste discharges.

3. The average daily flow of sewage through the existing treatment facilities during any dry weather month shall not exceed the design flow of 0.20 million gallons per day (MGD).

4. During the period from June 1 to November 1, the quality of the sewage effluent discharged to the waters of Cow Creek shall be governed by the following:

    a. The monthly average effluent 5-day 20° C. Biochemical Oxygen Demand (BOD) concentration shall not exceed 30 milligrams per liter (mg/l) (50 lbs/day).
    b. The monthly average effluent Suspended Solids concentration shall not exceed 30 mg/l (50 lbs/day).

5. At all times, the liquid effluent from the existing treatment facility shall receive the maximum disinfection possible with existing equipment prior to discharge from the controlled confinement of the treatment facility.

6. All screenings, grit, and sludge shall be disposed of in a manner approved by the Sanitary Authority such that it does not reach any of the waters of the state or create a health hazard or nuisance condition. A permanent record shall be maintained which indicates the quantity, method, and location of disposal of all sludge.

7. The permittee shall effectively monitor the operation and efficiency of the treatment plant and the quantity and quality of the effluent discharged. A permanent record of all such data shall be maintained at the plant. Data collected and recorded shall include, but not necessarily be limited to, the following parameters and minimum frequencies:

Parameter	Minimum Frequency
Total Flow	Daily (after 9/30/68)
Settleable Solids (influent and effluent)	2 times per week
pH (influent and effluent)	3 times per week
Chlorine Residual (effluent)	Daily
Pounds Chlorine Used	Daily

8. Reports shall be submitted to the Sanitary Authority at the end of each calendar month on prescribed forms and shall contain the following:

   a. Routine monitoring data
   b. Sludge disposal information
   c. Bypassing information
   d. Maintenance shutdown information
   e. Breakdown information

9. The sewerage system (pipelines, conduits, pumping stations, forcemains, and all other facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal) shall be operated and maintained in a manner which will minimize waste discharges.

10. This permit allows the construction of sewer extensions and connections thereto provided that plans and specifications are submitted to and approved by the Oregon State Board of Health and the Sanitary Authority as required by ORS 449.245 and ORS 449.395.

11. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence. A permanent record shall be maintained of all such occurrences.

12. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

13. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

14. This permit is subject to termination if the Sanitary Authority 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 waste or type of waste disposal.

15. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

16. This permit, or a photocopy thereof, shall be displayed at the treatment facility where it can be readily referred to by operating personnel.

RECOMMENDED WASTE DISCHARGE PERMIT CONDITIONS

Applicant:	Green Sanitary District - Roseburg
Expiration Date:	12/31/69
Application No.:	168
Date Received:	11/30/67
County:	Douglas
River Basin:	Umpqua
Receiving Stream:	South Umpqua
River Mile:	17.0

1. The permittee shall proceed to construct and place into operation before May 1, 1969, approved waste treatment facilities adequate to insure that the effluent receives a minimum of 60 minutes of chlorine contact time at the average design flow before being discharged from the controlled confinement of the treatment facility.

2. At all times all existing waste treatment facilities and equipment shall be operated and maintained at maximum efficiency and in a manner which will minimize waste discharges.

3. The average daily flow of sewage through the existing treatment facilities during any dry weather month shall not exceed the design flow of 0.20 million gallons per day (MGD).

4. During the period from June 1 to November 1, the monthly average 5-day 20° C. Biochemical Oxygen Demand (BOD) concentration in the effluent discharged to the South Umpqua River shall not exceed 30 milligrams per liter (mg/l) (50 lbs/day).

5. At all times (after May 1, 1969), the liquid effluent from the treatment facility shall receive adequate disinfection prior to discharge from the controlled confinement of the treatment facility. The effectiveness of disinfection shall be equivalent to that obtained by adequately mixing sufficient chlorine with the effluent to provide a minimum residual of 0.5 mg/l after 60 minutes of contact time at the average design flow.

6. The permittee shall effectively monitor the operation and efficiency of the treatment plant and the quantity and quality of the effluent discharged. A permanent record of all such data shall be maintained at the plant. Data collected and recorded shall include, but not necessarily be limited to, the following parameters and minimum frequencies:

Parameter	Minimum Frequency
Total Flow	Daily
Pounds Chlorine Used	Daily (after May 1, 1969)
Chlorine Residual (effluent)	Daily (after May 1, 1969)
pH (effluent before chlorination	3 times per week

7. Reports shall be submitted to the Sanitary Authority at the end of each calendar month on prescribed forms and shall contain the following:

    a. Routine monitoring data
    b. Bypassing information
    c. Maintenance shutdown information
    d. Breakdown information

8. The sewerage system (pipelines, conduits, pumping stations, forcemains, and all other facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal) shall be operated and maintained in a manner which will minimize waste discharges.

9. This permit allows the construction of sewer extensions and connections thereto provided that plans and specifications are submitted to and approved by the Oregon State Board of Health and the Sanitary Authority as required by ORS 449.245 and ORS 449.395.

10. In the event the permittee is temporarily unable to comply with any of the conditions of this permit, due to breakdown of equipment or other cause, the permittee shall immediately notify the Sanitary Authority of the breakdown or cause, and the steps taken to correct the problem and prevent its recurrence. A permanent record shall be maintained of all such occurrences.

11. Whenever a significant change in the character of the waste is anticipated or whenever a change in the waste to be discharged in excess of the conditions of this permit is anticipated, a new application shall be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans are approved and a new permit issued.

12. Authorized representatives of the Sanitary Authority shall be permitted access to the premises of all facilities owned and operated by the permittee at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, and carrying out other necessary functions related to this permit.

13. This permit is subject to termination if the Sanitary Authority 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 waste or type of waste disposal.

14. In the event that a change in the conditions of the receiving waters results in a dangerous degree of pollution, the Sanitary Authority may specify additional conditions to this permit.

15. This permit, or a photocopy thereof, shall be displayed at the Sanitary District office.