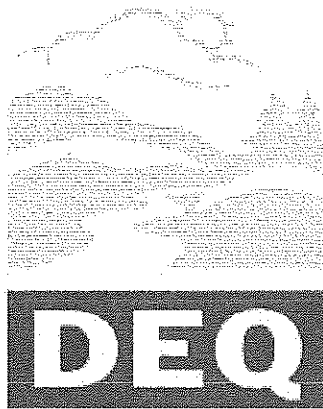


8/26/1965

OREGON STATE SANITARY  
AUTHORITY MEETING  
MATERIALS



State of Oregon  
Department of  
Environmental  
Quality

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

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

AGENDA

STATE SANITARY AUTHORITY MEETING

10:00 a.m. August 26, 1965

Room 36, State Office Building

- A. Minutes of June 24, 1965 meeting
- B. Project plans for June and July 1965
- C. Willamette River pollution
- D. Crown Zellerbach Corp. mill at Lebanon
- E. Tillamook Air Base sewage disposal
- F. Designation of conferee for Sept. 8, 1965 conference on pollution in lower Columbia River
- G. Chipman Chemical Company water and air pollution
- H. Petition re: air pollution near Winchester, Douglas County
- I. Frontier Leather Co., Sherwood
- J. Ideal Cement Co., Gold Hill

MINUTES OF THE 107th MEETING  
of the  
State Sanitary Authority  
August 26, 1965

The 107th meeting of the Oregon State Sanitary Authority was called to order by Harold F. Wendel, Chairman, at 10:00 a.m., August 26, 1965, in Room 36, State Office Building, Portland, Oregon. The members and staff present were: Harold F. Wendel, Chairman; B.A. McPhillips, Chris L. Wheeler, Richard H. Wilcox, M.D., and Herman P. Meierjurgan, Members; Kenneth H. Spies, Secretary; John Denman and Don Morrison, Legal Advisors; E.J. Weathersbee, Deputy State Sanitary Engineer; Warren C. Westgarth, Director of Laboratories; H.M. Patterson, Assistant Chief Engineer; H.W. Merryman, Leo L. Baton and Joseph A. Jensen, District Engineers; Bryan M. Johnson, Fred G. Katzel, Robert F. Wood, Pat D. Curran and A.D. Smythe, Associate Sanitary Engineers; Howard G. Smith, Assistant Chief, Air Quality Control; Harold L. Sawyer and Ernie A. Schmidt, Assistant Sanitary Engineers, and Glen D. Carter and Ed L. Quan, Aquatic Biologists.

Mr. Edward C. Harms was unable to attend because of a prior commitment and Mr. John Amacher was in Switzerland on vacation.

Mr. Wendel stated that State Treasurer Robert Straub was present and because he wanted to get back to his Treasurer's job had asked to be heard at this time. Mr. Straub said he was well aware of the difficulties and the obstacles that had been thrown in the way of the Authority in attempting to reach the goal of cleaning up Oregon's waters and air. He said he knew the Sanitary Authority had operated in the past with very inadequate laws and there had been efforts on the part of certain industries to interfere

with achieving the goal of an acceptable level of purity and cleanliness. Also, the Authority had operated during many periods of indifference on the part of the public.

Mr. Straub told Mr. Wendel that many people, he thought, owed a real debt to him for his long years of service on the Commission and for his dedication and efforts. The main message presented by Mr. Straub was of his strong feeling that the Authority now has the united backing of the people in Oregon for effective action in closing the gap in completing the job of cleaning up the rivers and the air. He said the time is here for the Authority to act against those who continue to violate the laws and those who continue to violate the regulations that have been issued by the Authority.

He recommended and urged that one of the measures that should be adopted in Oregon, or at least be recommended to the next legislature, is to empower the Sanitary Commission to issue revenue bonds in those cases where a municipality fails to act, or will not act, to install the necessary sewerage facilities, the revenue bonds then becoming an obligation of the property being benefitted.

It was also recommended by Mr. Straub that the Sanitary Authority hold regional meetings in each river basin to determine the incidents of violation. River basin hearings, he thought, would be very desirable, not only to pinpoint instances of violation, but to allow the public an opportunity to come to the hearings and express support for what the Authority is trying to do. We need to develop multiple-use benefits of water in Oregon, Mr. Straub said.

Mr. McPhillips said he had recently talked to Mr. Straub in his office and was concerned with his criticisms of the Sanitary Authority which he thought were unjust. Several newspaper articles wherein Mr. Straub was

critical of the Sanitary Authority were referred to by Mr. McPhillips. One of them in the Oregonian published Saturday, August 21, 1965, quoted Mr. Straub as having told the press on a boat tour that the Governor and the Sanitary Authority have the money as well as the power to combat the problem, but they move too slow and have done too little. Mr. McPhillips stated further that Mr. Straub and other Democrats have charged Governor Hatfield, a Republican, and the State Sanitary Authority with failure to press for a speedy end to contamination in streams such as the McKenzie. He stated that in another press release Mr. Straub had said that more industry would come to Oregon if anti-pollution laws were strongly enforced. Mr. McPhillips said that, of course, comes back to the Authority, and he was surprised that Mr. Straub would make the statement that the Authority has the money and the power to end this pollution because it does not have either, and the staff is not adequate to take care of all the complaints which are received. Mr. McPhillips said he was proud of the work the Sanitary Authority had done and he resented being in the middle of a political fight.

Mr. Straub said he believed attention and effort should now be concentrated on closing the gap and it was true that the rivers would be in much worse shape if the Commission had not done what it has, but it was his judgment the action should have been stronger and the public concern demands a higher priority and a higher level of action than it has had. He stated further that in his judgment the majority of industry in Oregon is very dedicated in being good neighbors in not polluting the river and not polluting the air, but there was a certain element of industry in legislative hearings in 1961, that attempted to weaken, to emasculate our water and air pollution laws so enforcement could be used only when it was economically feasible to industry. Mr. Straub said it should be remembered that the

Legislature very strongly backed the Authority in not weakening the law. If the laws are not right, he said, they should be changed at the next Legislature.

Mr. McPhillips pointed out that the Authority has gone to the Legislature every session and has been cut down. These laws are now being enforced to the limit as set out by the Board of Health attorneys and it is intended to continue to do so.

Mr. Wendel then informed Mr. Straub that all of his suggestions were appreciated and would be given consideration.

He pointed out that the Authority in the past has held regional meetings, and that whenever regional hearings have been held they were most beneficial. Mr. Wendel added that aside from the fact of perhaps not getting the entire budget requested, the director of Finance, by the very nature of his work and the spirit of the Legislature, has had to cut here and there for every commission and every department in the state government, but aside from that, the Authority has had the full cooperation of the administration of this State from Governor Hatfield.

Mr. Wendel thanked Mr. Straub for coming and giving his suggestions and assured him they would be taken seriously.

MINUTES:

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler, and carried that the minutes of the June 24 meeting be approved as prepared.

PROJECT PLANS:

It was MOVED by Mr. McPhillips, seconded by Mr. Meierjurgan, and carried that the action taken on the following 41 project plans and engineering reports for water pollution control and 6 project plans for air quality control for the months of June and July, 1965, be approved.

Water Pollution Control

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
6-1-65	West Linn	Lateral in Linn Addition	Prov. app.
6-1-65	Corvallis	Lateral Project #102	Prov. app.
6-1-65	Roseburg	Laterals - Chadwick & Lane Sts.	Prov. app.
6-1-65	Salem	Sewers - Arcadia Subd.	Prov. app.
6-1-65	Tualatin	Sewage treatment plant - Peerless Truck and Trailer Co.	Prov. app.
6-1-65	Roseburg	Sewer - N.W. Keasey	Prov. app.
6-2-65	Forest Grove	Laterals - Sheelar Manor #3	Prov. app.
6-4-65	King City	Sewerage system	Prov. app.
6-7-65	Portland	Tryon Pump Station	Prov. app.
6-8-65	Aloha San. Dist.	Interceptor "D"	Prov. app.
6-10-65	Mult. County	Panavista Subd.	Prov. app.
6-10-65	Hubbard	Sewerage-Engineering Report	Prov. app.
6-11-65	Beaverton	Sanitary sewers, gravity coll.	Prov. app.
6-11-65	Roseburg	Sewers - Lesco Subd.	Prov. app.
6-11-65	Hillsboro	Sewer extensions	Prov. app.
6-14-65	Springfield	Sewers, SP-14-65, SP-15-65	Prov. app.
6-14-65	Klamath Falls	Sewers - Blocks 12 and 13	Prov. app.
6-14-65	Oak Lodge #2	Lateral 2C-1-9	Prov. app.
6-14-65	Lake Oswego	Sewers LID-86 - Lake Haven	Prov. app.
6-16-65	Whitford McKay	Temporary pump station	Prov. app.
6-17-65	Springfield	Ken-Ray Park Subd. S-61-65	Prov. app.
6-25-65	Gresham	Richard & Mary Addn. sewers	Prov. app.
6-30-65	Eugene	Add to sewage treat. plant	Prov. app.
6-30-65	State Park	Flow Measuring-Bullards Beach	Approved

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
7-2-65	Gervais	Sewage collection and treatment	Prov. app.
7-6-65	Beaverton	Trunk "D" and Pumps 4 & 7	Prov. app.
7-7-65	Portland	S.W. Columbia-Wilcox interceptor	Prov. app.
7-8-65	Linn County	Diamond Hill sewerage system	Prov. app.
7-12-65	Eugene	Panorama View, Miles Vista	Prov. app.
7-12-65	Eugene	Clayton Hills Addn., Watkins Lane	Prov. app.
7-12-65	Eugene	Womack Subd. sewers	Prov. app.
7-12-65	Eugene	Wilson & Conger (3rd addn.)	Prov. app.
7-12-65	Eugene	Birchwood Park sewers	Prov. app.
7-12-65	Eugene	Sixth Addn. to Bar M. Ranch	Prov. app.
7-12-65	Eugene	WS-65-1	Prov. app.
7-12-65	Green San. Dist.	Laterals A,B,D. Main 1	Prov. app.
7-12-65	St. Helens	IW treatment-Shell Oil Co.	Prov. app.
7-22-65	Green San. Dist.	McCurdy's Meadowbrook Subd.	Prov. app.
7-29-65	Multnomah County	Sylvan Interceptor	Prov. app.
7-29-65	Huntington	Sewage treatment plant	Prov. app.
7-30-65	Wauna	Settling ponds for Crown-Zell.	Prov. app.

Air Pollution Control

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
June 1	Salem	School for the Deaf incinerator	Cond. app.
June 4	The Dalles	Wah-tonka High School incinerator	Cond. app.
June 23	Newberg	Nap's Market, incinerator	Cond. app.
June 29	Lane Co.	Danebo Elementary School incinerator	More information req.
July 1	Corvallis	OSU Circular #34 (Wood Residue Incineration in Teepee Burners)	Review
July 26	Sherwood	Frontier Leather Co. Engineering Report on Proposed Control Facilities for Air and Water Pollution	Review



WILLAMETTE RIVER POLLUTION:

The Secretary then reported that on August 16 a special meeting of the Sanitary Authority was held to consider the conditions which have existed in recent weeks in the lower Willamette River. In July due to a combination of unfortunate circumstances, namely, fairly high water temperatures, unusually low stream flows and an abnormally high discharge of wastes from one pulp mill, the latter necessitated by the fact that the company was undertaking construction of enlargement of its waste handling facilities, the dissolved oxygen in the lower Willamette dropped to less than 2 ppm. This occurred only on four different days and only for portions of those four days. The remainder of the time the DO was 2 ppm or greater. Because of the knowledge that the low flow in the river would continue, a communication had earlier been directed to the district engineer of the U.S. Corps of Army Engineers asking for augmentation to the greatest extent possible of the low flows for the remainder of the season. The staff had previously been advised that because of drought conditions which had prevailed in Oregon since the heavy rains of last winter, the storage in the upstream reservoirs would not be adequate to maintain the flows which had been set as a policy of the Engineers. This policy calls for the maintenance of a flow of 5,000 second feet at Albany or 6,000 second feet at Salem. Present plans, however, called for maintenance of only 4,300 second feet at Albany which it was hoped would result in 5,500 feet at Salem, but actually the minimum flow at Salem had proven to be less than 5,000 cfs.

Prior to the emergency special meeting of the Authority on August 16, a conference was held with officials of the pulp mills to advise them of the situation and to request their fullest cooperation in reducing the load being discharged to the river. A request had also been directed to the

Corps of Engineers and Bonneville Power Administration asking that, if possible, more water be released. The authorized functions of the Willamette basin reservoirs, unfortunately, do not include water pollution control. They include only navigation, irrigation, flood control and power. There is, therefore, a serious conflict of interest. Any waters which are released for navigation can also be used for water quality control because they remain in the stream, but waters released for irrigation remain on land and therefore do not benefit water quality, and water demanded by power interests is kept in the reservoir during the period of critical stream flow and released later when power demands require it. It was pointed out that Bonneville Power Administration had calculated that the release of 500 second feet additional water for a month during the summer might result in as much as \$13,000 to \$60,000 loss in revenue at a later date and because water quality control is not an authorized function of the projects, and power is, the agency was not authorized to make this sacrifice. It was agreed, however, that if the Sanitary Authority and Public Health Service could find compensation for any loss that actually occurred, the agency would cooperate. At the August 16 meeting of the Authority the pulp mills were requested and had agreed to compensate the federal government for any extra water which the Sanitary Authority found necessary to maintain acceptable conditions in the Willamette.

The Secretary reported that the mills had recently effected sizeable reductions in their loads being discharged to the river, that from August 12 to 15, at the request of the Public Health Service and Sanitary Authority, there was an additional release of water in the Clackamas River of 400 second feet from the facilities of Portland General Electric and from August 12 to August 17 an additional 600 second feet released from the Army Engineers

projects in the upper Willamette Basin. These releases were discontinued on the dates indicated because water quality conditions had improved. Then on August 20 a further request was made to the Corps of Engineers to release an additional 500 second feet for the time being. Beginning about September 7 it is expected that Bonneville Power Administration will ask that water be released for power generating purposes and that should add considerably to the flow in the Willamette and should be of real benefit to maintaining acceptable water quality conditions during the remainder of the season.

As a result of the efforts of the mills in reducing their pollution loads and of the slight increase in stream flow due to the release of the additional waters, the quality of the water in the lower river had improved materially since July.

Because at the last meeting of the Sanitary Authority the mills had been asked to revise and speed up their schedules to provide adequate facilities for the treatment or disposal of their wastes, representatives of the industry were present at this meeting to give information regarding installation or completion of these facilities in the future.

Mr. Wendel then stated he had taken it upon himself to write Mr. Reed Hunt, President of Crown-Zellerbach Corporation, and had told him that due to the fact that after about four years of wet, cold weather we are now apparently entering into a dry, hot cycle, and inasmuch as Crown-Zellerbach at West Linn was contributing about 20% of the entire load of oxygen demand on the river, the company's proposal to meet the treatment requirements by 1967 was no longer acceptable. Because of the low stream flows of this past summer he had requested Mr. Hunt to have these installations completed by June 1966. A reply from Mr. Hunt stated, "In accordance with your request

we will exert our best efforts to complete the work outlined above by June 1, 1966, subject, of course, to any delays caused by events beyond our control."

Mr. Richard Carlson, Assistant Resident Manager of the West Linn mill, was present and said the company had, during this year, been working on an inplant program to determine how to approach the basic problem of providing primary sedimentation. He stated that it had been shown that it would be feasible by using existing facilities in their mill to put in primary clarification and disposal by June 1, 1966. One of the pulp driers can be used for dewatering the sludge which is different from the usual practice but according to tests is feasible. It is planned to have it operating by next year.

Mr. Wendel said he had also written to Mr. Norman Chandler, President of the Times Mirror Company, who owns Publishers Paper Company, Oregon City, and Spaulding at Newberg and had informed him that Publishers contributed 22,000 lbs. and Spaulding 84,000 lbs., giving a total of 106,000 lbs. of oxygen demand to the river. He said Mr. Chandler had replied that the company was desirous of complying in every respect with the standards requested by the Authority.

Mr. James Wilson, who was present, reported that Publishers had taken over the Spaulding mill at Newberg on April 1, 1965. Since then the capacity of the holding pond had been nearly doubled and it is now felt that this still is not large enough, so an additional pond is scheduled for construction for next year and should be in operation before low water season. At Publishers in Oregon City it is planned to move the construction schedule up one year.

In response to an inquiry from Dr. Wilcox, the Secretary reported that the mill at West Linn operated by Crown-Zellerbach was presently effecting a reduction of 86%. It had reduced its load from over 40,000 lbs. in July to less than 28,000 lbs. at the present time. Boise Cascade at Salem, which had reported an efficiency of 93% with a load of slightly less than 5,000 lbs., now reported 96% efficiency and a load of less than 4,000 lbs. Publishers Paper at Oregon City was still in the neighborhood of 22,000 lbs. for an overall efficiency of about 76%. Publishers (Spaulding) at Newberg reported the previous load of 84,000 lbs. had been reduced to slightly in excess of 23,000 lbs. which gave an overall efficiency of about 84%. Western Kraft at Albany had about the same load as in July, around 10,000 lbs. The total pulp mill load on the stream was reported as being about 86,000 lbs. at the present time, compared to 164,000 lbs. in July.

Dr. Alfred Kreft asked what the industry was doing in regard to chemistry of this effluent, if any research had been done to use these effluents since putting the waste into a lagoon does not answer the whole problem as sooner or later it will go to the river anyhow.

Mr. Donald Benson, Executive Secretary of the Northwest Pulp and Paper Association, said his organization and the National Council for Stream Improvement, plus the manufacturers of sulfite pulp in Wisconsin, have had this subject under study since 1939 when the Wisconsin League was started. Many uses for these liquors have been found, but the greatest problem is getting markets for the type of materials which have been produced. He said the research is being continued.

Mr. Kenneth Gates, Portland Chapter, Northwest Steelheaders, read a copy of a resolution adopted by the Portland Chapter, which has around 300 members, and stated this resolution will be forwarded to the Tri-State

organization meeting in October at Lewiston, Idaho. A copy of the resolution was received and made a part of the permanent files.

Mr. Gates then gave a brief background of the Steelheaders organization and assured the Sanitary Authority of the support of this group in cleaning up the rivers.

Howard Morgan, representing himself, said that since Mr. Wendel's recent letter in the Oregonian had mentioned his name and invited anyone who had suggestions to make to come to the meeting and do so, he was here for that purpose. He said he was concerned with the things mentioned by Mr. Wendel in his letter regarding the great lengths of delay in litigation in these cases to come to court. When he was Utility Commissioner it was his recollection that utility cases, which are of great public interest, were given a certain degree of precedence in priority so litigation could be accomplished promptly and the public given relief, and it was his suggestion that the Authority ask the Legislature to give that classification to its court cases so that they could be concluded more rapidly.

Mr. Wendel, in reply to Mr. Morgan, said that in 1959 the Authority did take court action against the city of Portland; but after several years of legal delays and the case not coming to trial, an agreement was finally made with the city to drop the court action on the basis that they would proceed on a "pay-as-you-go" basis to complete the project.

Mr. Wendel said further that perhaps it was the Authority's fault for not realizing that the mills on the Willamette would have to put in additional treatment. At first it appeared that lagooning and barging would be sufficient to keep the river in a satisfactory condition as far as fish life was concerned, then it became apparent it was not. This was due partly to increased population and partly to industrial expansion which has almost doubled.

The Secretary pointed out that the mills were notified in 1958 that they were going to have to increase efficiency of their control facilities and they have been working on it ever since. Last year they were told specifically how much more reduction they would have to effect and as a result of those instructions came forth with the schedules referred to at this meeting.

Mr. Wendel assured Mr. Morgan there had been no thought of anyone on the Commission of any reluctance to go to court against the mills if it were so indicated and would have brought results.

Beulah Hand, State Representative from Clackamas County, stated that inasmuch as she represented the county that had the two largest mills being talked about, she was naturally interested and wanted to make some constructive suggestions as requested by Mr. Wendel's letter in the Oregonian. It was her opinion that because there was so much infiltration of water in the sewage collection systems, the treatment plants could not operate efficiently. She specifically referred to the Oak Lodge Sanitary District #1 system which has a secondary treatment plant. It is not a combined sewer but the area has no storm drainage system. Mrs. Hand was asked if she thought that the Sanitary Authority needed better inspection of the plans. She said not inspection of the plans but better execution of the plans. It was her suggestion that the Sanitary Authority do everything possible to see that adequate sewers are built and to go to the Legislature to get such authority if necessary as well as request additional money.

Mr. William Westerholm, Executive Secretary of the Columbia River Fishermen's Protective Association, was present to represent that group. He stated the pollution began to show in the Columbia River on July 16 of this year in the Milkmaid Drift, the Reeder Drift and also the Bachelor Drift above St. Helens, with some showing in the lower river 20 miles above

Astoria. It was his belief that the high temperature of the water released by the industries contributed greatly to this condition. He said there were about 18 fishermen turning in reports to the Public Health Service. He stated further that he had been fighting pollution for 35 years and he hoped it would soon be abated.

The Chairman then asked if anyone from the Boise Cascade Corporation mill at Salem wished to be heard. They had no report to make.

Mr. Russ Sheffer, representing Western Kraft Corp., reported that the installation of the settling basins for their mill at Albany would be completed in another week.

Mr. W.W. Towne of the U.S. Public Health Service reported further on the additional releases made from the reservoirs on the Clackamas and upper Willamette Rivers. He said the reason the releases were resumed on August 20 was that the fisheries people had predicted that the upstream migration of salmon would begin this week. An effort was therefore being made to increase the DO as much as possible and preferably to 5 ppm. He expressed appreciation for the cooperation of the mills in reducing their pollution loads. He also pointed out the value of the low flow augmentation accomplished by the release of waters from the Willamette Basin reservoirs even though water pollution control is not one of the authorized functions.

In response to an inquiry from the Chairman, Mr. Towne expressed the opinion that as a result of the restudy of the Willamette Basin now under way by the several state and federal agencies, it might be possible to get Congress to amend the law to include water pollution control as an authorized function of the existing reservoirs. He said it would very definitely be considered in connection with reservoirs built in the future.



In answer to a question by Dr. Wilcox, Mr. Towne stated that the U.S. Public Health Service had not studied the possible effects of navigation on the quality of water in Portland Harbor, but from the bacterial standpoint he thought it might be very significant.

In reply to another question from Dr. Wilcox, Mr. Towne discussed the role of the federal government in the field of research and the attempts being made to find solutions to the problems caused by industrial growth and population increase.

Mr. Wheeler referred to the DO data compiled by the Authority staff during the past 12 years and pointed out that they show that considerable progress has been made in abating pollution of the Willamette, and that in spite of the low stream flows this year the condition of the river was better than it had been in certain other years.

Mr. McPhillips then stated that at the August 16 meeting he had indicated that at this meeting he would present a motion for consideration by the Authority members dealing with this emergency situation in the Willamette. He stated further that the emergency now was pretty well over and that in addition, due primarily to Mr. Wendel's efforts in contacting the heads of the corporations, the principal mills in this case have promised to step up their schedules by one year for making the required improvements.

It was MOVED by Mr. McPhillips, seconded by Dr. Wilcox and carried that if at any time the Sanitary Authority determines that irreparable damage may be caused to fishery resources or other beneficial uses of the Willamette River or its tributaries as a result of the discharge of wastes from the pulp and paper mills, the Sanitary Authority shall take steps to effect immediately the necessary reduction of such pollution loads.

CROWN-ZELLERBACH CORP. MILL, LEBANON:

Mr. Weathersbee presented a staff memorandum dated August 26, 1965, regarding the matter of pollution in the South Santiam River caused by the discharge of wastes from the Crown Zellerbach Corp. pulp mill at Lebanon. This memorandum has been made a part of the Authority's permanent files in this matter.

He pointed out that although the company has been able to reduce its pollution load by as much as 85%, the receiving stream on occasions during the summer or fall is still seriously polluted due primarily to the fact that during the summer months much of the natural flow in the river is diverted above the mill into a ditch which carries the water to Albany. As a result there is not enough flow left in the stream below the mill to handle the residual pollution.

In reply to a question from the Chairman, Mr. Wheeler stated that there is little likelihood that the amount of diversion will be reduced in the future because the waters are used for domestic and industrial water supply purposes and power development at Albany. In all probability if the power use should ever decrease the diverted waters would be used for irrigation and so would still not be available in the lower river.

Dr. Herman Amberg, Research Manager, and Mr. W.F. Cyrus, Resident Mill Manager, were present to represent Crown Zellerbach Corp.

Dr. Amberg reviewed the pollution abatement measures undertaken by the company at the Lebanon mill during the period 1950 to 1964 and then discussed plans for further improvements proposed to be made during 1965 and 1966. A copy of his written report dated August 26, 1965, has been made a part of the Authority's permanent files in this matter.

He reported that although pulp production has increased from 55 tons/day in 1952 to 95 tons/day in 1964, the pollution load was reduced from 26,000 lbs./day in 1952 to about 9,000 to 10,000 lbs/day in 1964. Capital investment for pollution abatement measures since 1950 at this mill has been about \$402,000. He claimed that in order to maintain satisfactory water temperature conditions in the downstream portion of the South Santiam River during the warm summer months, the minimum stream flow should be increased to about 300 cfs.

He estimated that with the addition of facilities for removal of settleable solids and with other proposed improvements, the BOD load of the mill effluent in 1966 would be reduced to about 4,000 lbs./day.

Following the presentation of Dr. Amberg's report there was a discussion about the possibility of maintaining a minimum flow of 300 cfs in the river below the Albany diversion through the release of impounded waters from the Green Peter and Foster reservoirs which are presently under construction by the Army Engineers. Mr. Wheeler stated that apparently no one knows for sure yet how much flow augmentation there would actually be below the mill. Mr. Weathersbee stated that all indications are that the low flow will be on the order of 100 cfs and that such a flow cannot assimilate more than about 2,000 lbs/day of BOD without causing gross pollution.

In response to a question from Dr. Wilcox, Dr. Amberg and Mr. Cyrus assured the Authority that they are confident they can reduce the BOD loading of the mill effluent down to 4,000 lbs/day as proposed in their report. They stated that any substantial further reduction would constitute an extreme economical hardship.

Mr. Weathersbee pointed out that the proposal as outlined by Dr. Amberg at this meeting was slightly different from what had previously been discussed with the Authority's staff and therefore would require further review. With regard to the fishery resource of the South Sanitam and the effect of high water temperatures he reported the following information had been obtained from the State Fish Commission. They estimate that an average of about 1,400 spring Chinook adult salmon pass through this portion of the river each year between April and the end of July and that the tail end of this run has been blocked by low DO. The young of these fish are in the river the year round but are excluded from the portion below the mill in the summer by the low DO. They also estimate that an average of 2,600 winter steelhead trout migrate through this zone during the period of high water but their young likewise are in the river the year round.

In order to allow the staff more time to review the company's proposal and to make further inquiry into possible augmentation of low flow in the future, action by the Authority members in this matter was deferred until the next meeting.

The meeting was recessed at 12:35 p.m. and reconvened at 2:00 p.m.

FRONTIER LEATHER CO., SHERWOOD:

Mr. Eugene E. Marsh, Attorney, was present to represent the Frontier Leather Company of Sherwood. He reviewed briefly the problems of odors from the company's waste treatment lagoons and of the high chloride content of the tannery effluent. In spite of his many efforts to control the odors from the lagoons, the company's manager had still not been able to eliminate the public nuisance caused by them. Mr. Marsh said this problem was complicated by the fact that the chloride content of the tannery effluent was higher than previously expected and as a consequence the city would not accept the pretreated wastes in the municipal sewer system and treatment works.

The tannery reportedly processes some 150,000 deer and elk hides per year which are received from all over the west. They are preserved in salt and this accounts for the high chloride content of the plant effluent. There is no practical way that this content can be appreciably reduced.

The contract which the company has with the city of Sherwood for final treatment of its wastes at the municipal sewage plant specifies a maximum chloride content of 800 ppm. Mr. Marsh reported that in recent weeks the effluent from the tannery lagoons has had a chloride content as high as 4,200 ppm and it is expected that it will further increase to 5,000 ppm.

The main objection to these high chlorides is their possible harmful effects on the use of the downstream waters of Cedar and Chicken Creeks for irrigation purposes. The Authority's staff has recommended maximum concentrations of 500 ppm in the winter time and 100 ppm in the summer for the effluent from the city treatment plant, since much of the time it constitutes most of the flow in these receiving streams.

Mr. Marsh stated that about 75,000 lbs. of sodium nitrate had been added to the lagoons in an attempt to control the odors. This had been only partially successful. He said if they cannot solve the chloride problem, there is no use in trying to solve the odor problem.

Mr. John Filbert of Cornell, Howland, Hayes and Merryfield Engineers, consultants for the tannery, then discussed the efforts made to abate the odor nuisance. Prior to the fall of 1964 all wastes from the tannery were discharged to the Sherwood sewerage system. At that time the tannery's two oxidation ponds were placed into operation. It was another six months (about March of 1965), however, before the aerated lagoon was completed, so in the meantime all pretreatment had to be accomplished by just the two oxidation ponds. This worked fairly well until late in February when the

first odor nuisance developed due to the release of hydrogen sulfide. Some 25,000 pounds of sodium nitrate were then added to the two ponds. This treatment plus the use of the aerated lagoon seemed to control the situation until June when odors again became a nuisance. An additional 7,500 lbs. of sodium nitrate was then added to each of the two oxidation ponds which seemed to help, but only until July 14 when more sodium nitrate was added to increase the available oxygen in the pond water. Further additions were made on July 24, August 6, 7, 24 and 25. The nuisance continued to exist, however.

Mr. Filbert stated that the company has been considering the possibility of building a fertilizer plant as part of its tannery operations. This would reduce the organic loading of the tannery effluent on the oxidation ponds to approximately 5 or 10 lbs. of BOD per acre per day. The normal design loading for a facility of this type is 30 lbs. per acre per day. This should completely eliminate the odor problem but would not solve the chloride problem.

In reply to a question from the Chairman, Mr. Filbert stated that the existing pretreatment facilities reduce the BOD loading of the tannery effluent by 98%, from 2,000 ppm down to 40 ppm. The average daily flow of wastes is 70,000 gallons. He said they could increase the treatment efficiency even more by the installation of another aerated lagoon.

In response to a question from Mr. McPhillips, Mr. Marsh said the fertilizer plant could be built and in operation within about six months, but the company did not want to make that expenditure unless the chloride problem could also be solved. He claimed the city would agree to revising its contract and would allow a chloride content as high as 5,000 ppm which is not considered harmful to the municipal treatment plant.

Mr. Jensen then explained the concern of the Authority's staff regarding the effects on the irrigation use of the creek waters and pointed out that it was recommended that the concentration during the irrigation season should not be more than 100 ppm.

Mr. Warren Smith, a resident of the area, testified regarding the odor nuisance created this summer by the oxidation ponds.

According to Mr. Filbert odor masking compounds had also been used but without success.

After further discussion of both the odor problem and the possible effects of the tannery effluent on Cedar and Chicken Creeks (no tannery effluent has been discharged to any creek for the past two and one-half months), Mr. McPhillips asked Mr. Marsh if he could assure the Authority that the problem would be solved within six months one way or another - either by mechanical or chemical means or by relocation of the plant.

Mr. Marsh said he could not comment on relocating the plant. He complained that it was not until the company had spent some \$150,000 on waste treatment and disposal that they were made aware of the chloride problem. He said they could remove the BOD but not the chlorides.

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler and carried that the Authority's staff immediately investigate further the chloride-irrigation problem and report back at the next meeting.

It was agreed that the chlorides had no significance as far as fish life is concerned.

TILLAMOOK AIR BASE SEWAGE DISPOSAL:

Mr. Jensen reported that by letter dated August 6, 1965, the Tillamook County Board of Commissioners had promised to proceed with plans for the installation of required sewage treatment and disposal facilities for the

Tillamook Air Base. In response to Mr. Jensen's recommendation, it was MOVED by Mr. Meierjurgan, seconded by Mr. McPhillips and carried that the preliminary study of the required project must be completed by January 1, 1966, and that construction must be completed by the summer of 1966.

The Secretary pointed out that the Bureau of Land Management and the Federal Government had given every indication that they would cooperate fully with the county in this matter.

CONFEREE FOR SEPTEMBER 8 CONFERENCE:

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler and carried that the Secretary of the Authority be designated as the conferee to represent the State Board of Health and Sanitary Authority at the third session of the conference on pollution in the lower Columbia River to be held in Portland on September 8, 1965, by the Department of Health, Education and Welfare of the Federal Government and by the states of Washington and Oregon. The first two sessions of this conference were held September 1958 and September 1959.

The Oregon industries involved in the conference include Boise Cascade Corporation at St. Helens, Kaiser Gypsum at St. Helens, Publishers Paper Company at Oregon City (because they barge wastes to the Columbia), Shell Chemical Company at St. Helens and Crown Zellerbach Corporation at Wauna. All Oregon municipalities are considered to be in full compliance with the requirements and action program developed at the second session of the conference. The Portland discharges into the Willamette River are not considered as contributing to the Columbia River problem.

All members of the Authority were invited to attend the conference on September 8.



CHIPMAN CHEMICAL COMPANY:

Mr. Bryan Johnson presented a memorandum report dated August 26, 1965, on the subject of the salmon tainting problem and Doane Lake. A copy of this report has been made a part of the Authority's permanent files in this matter. Studies conducted thus far have indicated that the effluent from Doane Lake which receives the discharges from the Chipman Chemical Company plant is probably the primary cause of the tainting of salmon that occurred during March and April of this year. Complaints were received of 181 tainted fish caught during that period - 166 from the Willamette and Multnomah Channel (between Swan Island and St. Helens) and 15 from the Columbia. No complaints were received from commercial fishermen.

In response to a question from Mr. Meierjurgan, Mr. Gitchlag of Chipman Chemical Company stated that they did not know what constituent was responsible for this problem. He said some of his company's officials were not sure that their wastes were the cause of the tainting. He then discussed their efforts to treat the contents of Doane Lake. Whereas they had previously calculated that about 100 tons of lime would be required to neutralize the pH, they had thus far actually used 400 tons and were about 90% finished.

In his report Mr. Johnson recommended that March 1, 1966, be established as the deadline at which time the effluent discharge from the plant and Doane Lake will not produce an off-flavor in the spring run of salmon.

Mr. Gitchlag said he is hopeful that the steps they are prepared to take will solve the fish taste problem, but he did not know if it could be accomplished by March 1, 1966. He asked that no definite date be established at this time. The Chairman replied that the Authority would have to set a deadline.

Mr. Weathersbee pointed out that the date recommended by Mr. Johnson was selected because it is the time when the problem will occur again unless something is done in the meantime.

It was MOVED by Dr. Wilcox, seconded by Mr. Meierjurgan, and carried that the recommendation of the staff be adopted.

Mr. Patterson then discussed the problem of odor control. He stated that the 2-4D plant had been down since July 24 and the 2-4DB plant had been down since May. Unfortunately, the 2-4D plant is scheduled to resume operation before the company completes the lake treatment, so it will be difficult to evaluate completely the effectiveness of the latter treatment. Mr. Patterson said that six complaints had been received since the June Authority meeting. Five of them were after the 2-4D plant shut down. He indicated that there may be some other plants in the area that are contributing to the problem.

No further action was taken by the members regarding this matter.

AIR POLLUTION NEAR WINCHESTER:

Mr. H.M. Patterson presented a petition complaint bearing 74 signatures which had been presented to him by Mr. Amacher and which reads as follows:

To: The Sanitary Authority of the State of Oregon  
c/o John P. Amacher, Secretary  
968 Portland State Office Building  
Portland, Oregon

WHEREAS, The undersigned are residents and inhabitants of Winchester, Douglas County, Oregon, and live in an area immediately adjacent to the North Umpqua River and the source of supply for the domestic water users of Roseburg and Winchester, Oregon.

WHEREAS, The Beaver State Sand and Gravel and the Douglas County Lumber Company conduct their respective industrial operations in locations North-West of the North Umpqua River at Winchester, Oregon.

WHEREAS, Dust produced by the operation of the Beaver State Sand and Gravel and sawdust and ashes produced by the operation of the Douglas County Lumber Company have recently been deposited on the land and in the water adjacent to Winchester, Oregon.

WHEREAS, The dust, sawdust and ashes being deposited by said industrial operations is polluting the air and water, creating a nuisance, and causing damage to plant and fish life in the area of Winchester, Oregon,

NOW, THEREFORE, In order to protect the domestic water supply, preserve fish life, and prevent further loss of plant life and nuisance to the inhabitants of Winchester, Oregon, we respectfully request that the Sanitary Authority of the State of Oregon take such action as shall be necessary and proper concerning the injurious operations of the Beaver State Sand and Gravel and the Douglas County Lumber Company.

Dated, July 30, 1965.

He stated the staff had begun an investigation and found that Beaver State Sand and Gravel mentioned in the complaint should have been R.L. Houck and Sons Corporation. Mr. Patterson also stated that some sampling and further field work would be necessary in relation to the Douglas County Lumber Company. Mr. Wendel inquired if these same 74 people had a water complaint too to which Mr. Patterson replied that the emissions from the wigwam waste burner and from the asphalt plant in operation were falling into the water and that as soon as the air part of it was controlled, the water part would be controlled also. No action on the part of the Authority members was considered necessary at this time.

IDEAL CEMENT COMPANY - GOLD HILL:

Mr. Baton read a review and current report on Ideal Cement Company, which has been made a part of the Authority's permanent files in this matter. The staff recommended that an informal invitation be extended to Mr. Hooton and the company to attend the next meeting of the Sanitary Authority to determine the progress of the company and their proposed program.

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler and carried that the Authority adopt the staff recommendation with the provision that the Chairman write to the President of Ideal Cement Company to see if he could get some action, in view of the fact that the Chairman has been so successful in writing directly to heads of the companies.

PERSONNEL:

The Secretary announced with regrets the resignations of three staff members. Mr. Howard Smith, Assistant Chief of the Air Quality Control Section, has accepted the position of director of the new five-county Mid-Willamette Air Pollution Authority. Mr. Robert F. Wood, Associate Engineer, will be taking graduate work to prepare himself for a career as an educator in the field of public health engineering. Mr. Harold L. Sawyer, Assistant Engineer, will continue his graduate studies at the University of Washington.

The Secretary also reported that Mr. Joseph A. Jensen has been granted a nine-months leave of absence to take graduate work at the University of Washington. He will return to the staff next July.

Mr. A.D. Smythe, Associate Engineer, was introduced as the new staff member in charge of water supply sanitation. Other new staff members introduced were Don McHarness and E.A. Schmidt.

No date was set for the next meeting.

There being no further business the meeting adjourned at 3:40 p.m.

Respectfully submitted,

  
Kenneth H. Spies  
Secretary

Project Plans

During the month of July, 1965, the following 17 sets of project plans and engineering reports were reviewed and the action taken as indicated by the Water Pollution Control Section.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
7-2-65	Gervais	Sewage collection and treatment	Prov. app.
7-6-65	Beaverton	Trunk "D" and Pumps 4 & 7	Prov. app.
7-7-65	Portland	S.W. Columbia-Wilcox Interceptor	Prov. app.
7-8-65	Linn County	Diamond Hill sewerage system	Prov. app.
7-12-65	Eugene	Panorama View, Hills Vista	Prov. app.
7-12-65	Eugene	Clayton Hills Addn., Watkins Lane	Prov. app.
7-12-65	Eugene	Womack Subd. sewers	Prov. app.
7-12-65	Eugene	Wilson & Conger (3rd addn.)	Prov. app.
7-12-65	Eugene	Birchwood Park sewers	Prov. app.
7-12-65	Eugene	Sixth Addn. to Bar M Ranch	Prov. app.
7-12-65	Eugene	WS-65-1	Prov. app.
7-12-65	Green San. Dist.	Laterals A, B, D. Main 1	Prov. app.
7-12-65	St. Helens	IV treatment-Shell Oil Co.	Prov. app.
7-22-65	Green San. Dist.	McCurdy's Meadowsbrook Subd.	Prov. app.
7-29-65	Multnomah County	Sylvan Interceptor	Prov. app.
7-29-65	Huntington	Sewage treatment plant	Prov. app.
7-30-65	Wauna	Settling ponds for Crown-Zell.	Prov. app.

Project Plans

During the month of June, 1965, the following 21 sets of project plans and engineering reports were reviewed and the action taken as indicated by the Water Pollution Control Section.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
6-1-65	West Linn	Lateral in Linn Addition	Prov. app.
6-1-65	Corvallis	Lateral Project #102	Prov. app.
6-1-65	Roseburg	Laterals - Chadwick & Lane Sts.	Prov. app.
6-1-65	Salem	Sewers - Arcadia Subd.	Prov. app.
6-1-65	Tualatin	Sewage treatment plant - Peerless Truck and Trailer Co.	Prov. app.
6-1-65	Roseburg	Sewer - N. W. Keasey	Prov. app.
6-2-65	Forest Grove	Laterals - Sheelar Manor #3	Prov. app.
6-4-65	King City	Sewerage system	Prov. app.
6-7-65	Portland	Tryon Pump Station	Prov. app.
6-8-65	Aloha San. Dist.	Interceptor "D"	Prov. app.
6-10-65	Mult. County	Panavista Subd.	Prov. app.
6-10-65	Hubbard	Sewerage-Engineering Report	Prov. app.
6-11-65	Beaverton	Sanitary sewers, gravity collection	Prov. app.
6-11-65	Roseburg	Sewers - Lesco Subd.	Prov. app.
6-11-65	Hillsboro	Sewer extensions	Prov. app.
6-11-65	Springfield	Sewers, SP-14-65, SP-15-65	Prov. app.
6-11-65	Klamath Falls	Sewers - Blocks 12 and 13	Prov. app.
6-14-65	Oak Lodge #2	Lateral XC-1-9	Prov. app.
6-14-65	Lake Oswego	Sewers LID-86 - Lake Haven	Prov. app.
6-16-65	Whitford McKay	Temporary pump station	Prov. app.

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
6-17-65	Springfield	Ken-Ray Park Subd. S-61-65	Prov. app.
6-25-65	Gresham	Richard & Mary Addn. sewers	Prov. app.
6-30-65	Eugene	Add to sewage treat. plant	Prov. app.
6-30-65	State Park	Flow Measuring-Dillard's Beach	Approved

---

WPC-BON

7-2-65/75

Project Plans and Reports

The following reports were received and processed by the Air Quality Control staff during July 1965:

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
July 1	Corvallis	O.S.U. Circular #34 (Wood Residue Incineration in Teepee Burners)	Review
July 26	Sherwood	Frontier Leather Company Engineering Report on Pro- posed Control Facilities for Air and Water Pollution	Review

OSHH-AQC  
8/3/65-65



Project Plans

The following plans or reports were received and processed by the Air Quality Control staff during June 1965:

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
June 1	Salem	School for the Deaf incinerator	Cond. approval
June 4	The Dalles	Wehanka High School incinerator	Cond. approval
June 23	Newberg	Nap's Market, incinerator	Cond. approval
June 29	Lane Co.	Danebo Elementary School incinerator	More information requested

Summary of Willamette River Data 1953-1964

Monthly Averages of Lowest DO Values Recorded in Portland Harbor

(Monthly minimums shown in parentheses)

(Expressed in ppm)

	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>
1953	-- --	2.7 (2.0)	1.5 (0.7)	1.9 (0.9)	5.1 (3.2)
1954	6.7 (6.7)	5.5 (3.8)	2.9 (2.7)	4.3 (3.2)	5.1 (5.1)
1955	7.2 (5.9)	5.6 (4.1)	3.0 (2.2)	3.8 (3.3)	-- --
1956	-- --	4.0 (2.5)	3.0 (2.6)	4.3 (4.2)	5.1 (3.8)
1957	3.6 (2.8)	2.4 (0.8)	1.5 (0.6)	3.0 (1.4)	5.0 (2.9)
1958	4.8 (1.8)	4.4 (2.9)	3.4 (2.4)	4.5 (3.8)	5.9 (5.7)
1959	4.7 (2.9)	4.3 (1.5)	2.9 (2.2)	5.2 (3.1)	8.7 (8.7)
1960	5.8 (5.2)	4.4 (3.5)	3.6 (3.0)	4.8 (4.3)	5.4 (3.7)
1961	4.6 (3.0)	3.4 (1.9)	2.6 (1.8)	5.0 (4.1)	6.4 (5.1)
1962	6.1 (5.2)	4.4 (3.5)	3.6 (2.8)	3.6 (2.7)	5.5 (3.8)
1963	4.5 (2.5)	4.5 (3.4)	3.2 (2.0)	3.0 (2.0)	4.8 (3.4)
1964	7.2 (5.1)	4.2 (2.6)	4.1 (3.0)	4.3 (3.2)	5.7 (4.8)
1965	4.5 (3.1)	3.4 (2.2)			

Mean Monthly Stream Flow as Measured at Salem (CFS)

	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>
1953	21,380	9,112	6,016	5,958	8,955
1954	15,670	8,681	6,645	8,549	10,870
1955	22,860	10,410	6,409	7,562	18,240
1956	19,880	8,934	6,280	7,292	12,310
1957	10,620	6,052	5,850	6,991	9,614
1958	13,590	7,328	5,878	7,463	8,921
1959	11,200	6,158	5,472	9,190	18,260
1960	15,510	6,345	5,945	6,559	9,445
1961	11,290	6,419	5,843	6,602	10,930
1962	13,300	6,543	6,435	6,886	18,360
1963	9,886	7,765	6,078	7,077	11,023*
1964	20,040*	8,699*	7,220*	8,132*	9,646*
1965	7,941*	5,490*			

Minimum Daily Stream Flow as Measured at Salem (CFS)

	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>
1953	12,900	5,820	5,280	5,650	6,820
1954	12,000	6,550	6,080	7,120	7,500
1955	13,900	7,180	6,080	5,950	7,710
1956	13,500	6,650	5,920	5,780	5,750
1957	7,530	5,250	5,450	6,000	7,260
1958	9,680	6,100	5,620	6,000	7,450

\*Subject to revision

	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>
1959	7,520	5,480	5,300	5,440	9,200
1960	8,300	5,760	5,300	5,940	6,600
1961	7,100	5,910	5,690	5,850	5,740
1962	8,840	5,690	5,760	5,810	7,840
1963	7,400	6,480	5,620	5,150	8,840*
1964	13,000*	7,480*	6,700*	6,700*	7,700*
1965	6,200*	4,900*			

	<u>Min. DO Recorded During Year</u>	<u>Lowest Monthly Average DO</u>	<u>Median Low DO During July- Aug.-Sept.</u>	<u>Maximum Water Temperature (°C)</u>				
				<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>
1953	0.7	1.5	2.0	—	20.0	23.0	20.0	17.0
1954	2.7	2.9	3.8	13.0	22.0	21.0	20.0	15.0
1955	2.2	3.0	3.3	15.0	20.0	22.0	20.0	—
1956	2.5	3.0	3.7	—	25.0	24.0	21.0	16.0
1957	0.6	1.5	2.0	20.5	23.0	22.5	22.0	17.0
1958	1.8	3.4	4.2	21.5	27.5	26.0	21.0	17.0
1959	1.5	2.9	4.8	20.0	25.5	23.0	19.0	14.0
1960	3.0	3.6	4.1	21.0	26.0	24.0	19.0	17.0
1961	1.8	2.6	2.9	22.0	25.0	25.0	20.0	17.0
1962	2.7	3.6	3.8	21.0	24.0	22.0	20.0	17.0
1963	2.0	3.0	3.4	22.0	21.0	22.0	22.0	19.0
1964	2.6	4.1	4.1	18.0	22.0	22.0	19.0	17.0

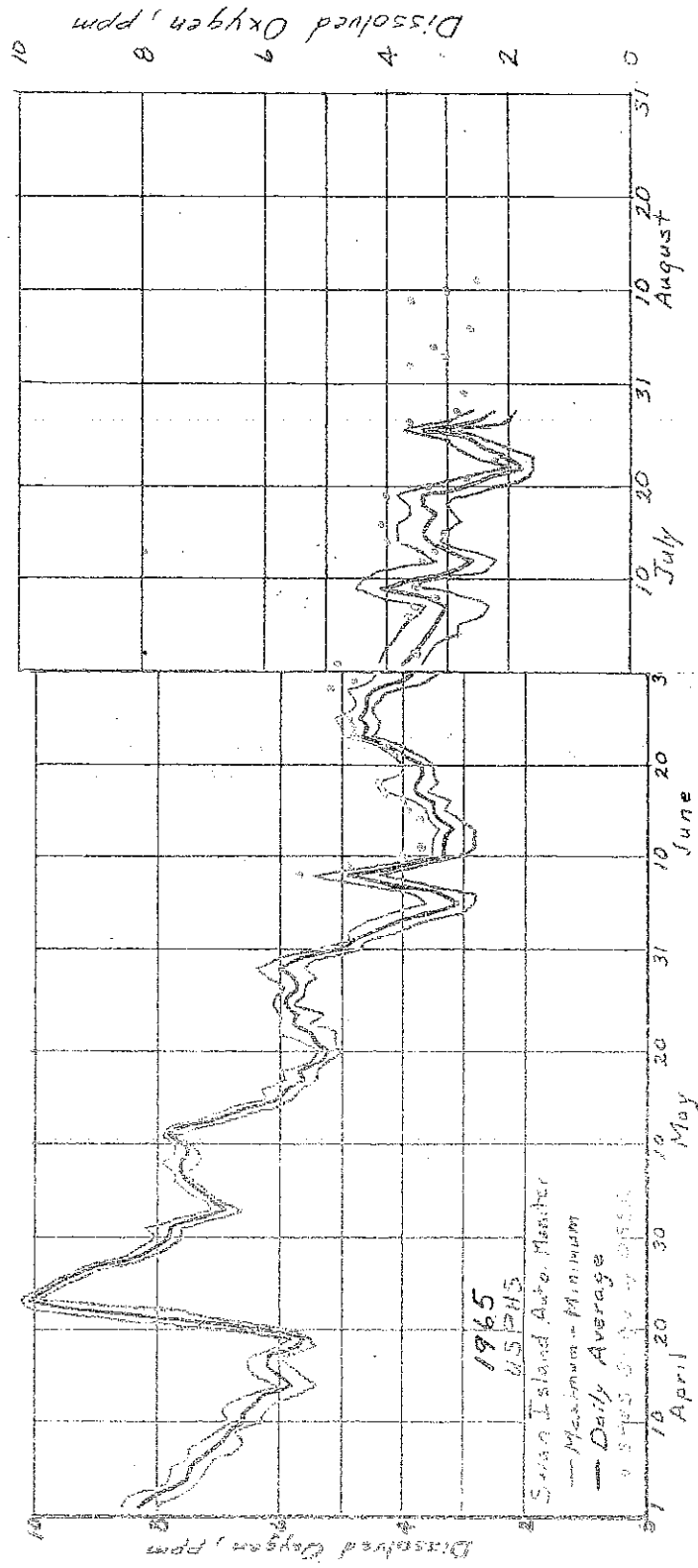
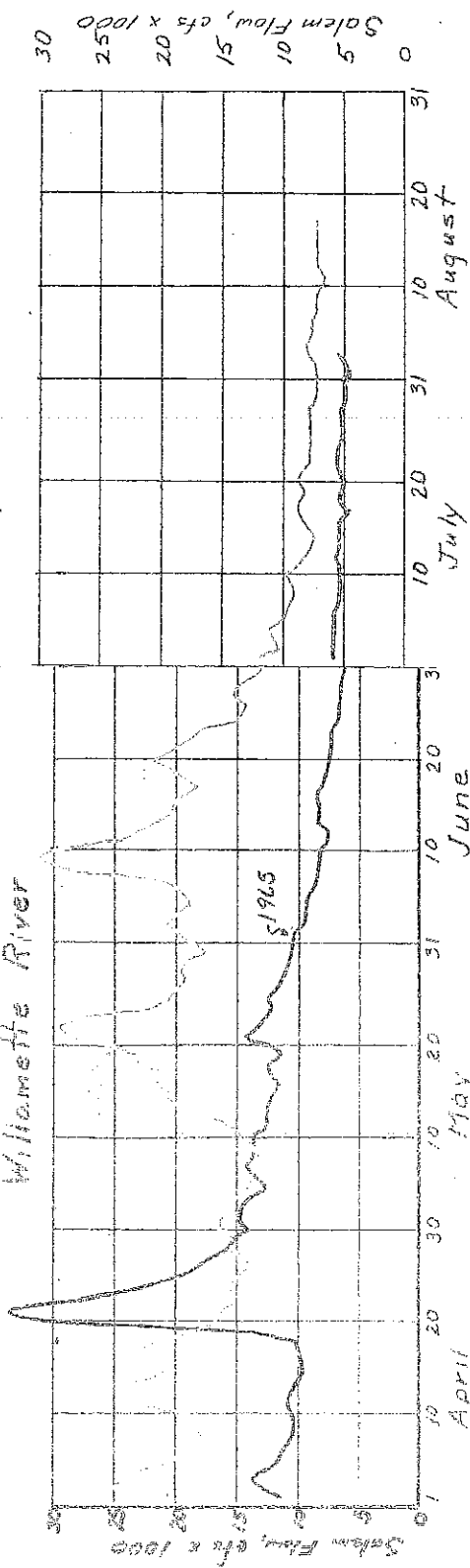
\*Subject to revision

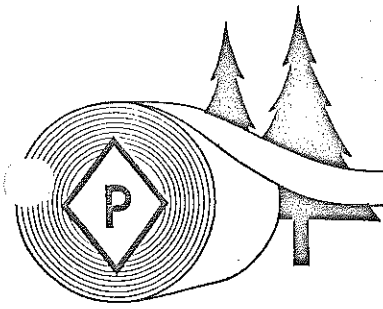
July 1965 Data - Willamette River

Date	River Flow at Salem cfs	Max. Water Temp.*		Newberg			Dissolved Oxygen			
		(A)	(B)	Old Br.	New Br.	Canby Ferry	Marina Mart	Sport-craft	Steel	SP&S
1	5,950	21	19	7.7	7.8	7.1	6.8	5.4	4.2	4.8
2	5,950	21.5	19	7.7	7.6	6.3	7.0	5.5	4.4	3.5
6	5,950	23	22	8.0	8.2	6.6	5.9	5.2	3.0	3.6
7	5,700	22	22	8.1	7.8	7.6	6.4	5.5	3.6	3.5
8	5,700	22	21	7.6	7.5	7.7	7.3	6.0	5.2	3.1
9	5,700	22	22	7.9	7.6	6.7	7.5	6.0	4.7	3.5
12	5,950	21	21	7.8	7.6	5.0	4.7	4.2	3.1	3.4
13	5,400	21	21	8.0	8.0	4.9	4.3	4.3	3.6	3.2
14	5,400	22	21	7.9	7.8	5.0	4.8	4.5	3.9	4.0
15	5,400	22	20	7.4	7.3	5.3	5.3	4.0	3.0	3.0
16	5,400	23	21	7.1	7.3	5.1	4.9	4.5	3.4	4.1
19	5,400	21	21	6.8	7.2	4.9	4.9	5.3	3.5	4.0
20	5,150	24	20	7.3	6.9	4.4	4.9	4.9	3.1	3.3
21	5,400	20.5	20.5	7.0	7.3	4.0	4.3	4.5	2.2	2.7
23	5,600	20.5	21	7.9	7.8	5.0	4.5	4.2	3.2	2.2
26	5,400	20.5	20	6.6	6.8	6.7	6.6	5.7	2.8	2.8
27	5,400	20	20	7.2	7.6	6.9	7.1	5.6	2.8	3.6
28	5,400	21.5	20	7.5	7.8	6.6	7.1	6.3	2.9	2.8
30	5,150	23.5	22	7.5	7.6	7.0	5.9	5.8	4.2	2.7
Average	5,547			7.5	7.6	5.9	5.8	5.1	3.5	3.4
Average 1964	8,600			7.8	7.6	6.4	6.3	6.1	4.7	4.3
Minimum 1965				6.6	6.8	4.0	4.3	4.2	2.2	2.2
Minimum 1964				7.0	6.7	5.3	5.0	4.5	3.1	2.6
Minimum 1963				7.7		5.6	5.2	5.4	4.3	3.4

\* (A) Newberg Pool (B) Tidal Reach Below Falls

Willamette River





# PUBLISHERS' PAPER CO.

POST OFFICE BOX 551 ···· OREGON CITY, OREGON

July 6, 1965

Mr. Kenneth Spies,  
Secretary and Chief Engineer  
Oregon State Sanitary Authority  
1400 S. W. Fifth Avenue  
Portland, Oregon

Dear Mr. Spies:

In reference to your request for the proposed completion dates for the projects outlined by Cornell, Howland, Hayes & Merryfield in their report dated December 17, 1964, Publishers' Paper Co., subject to the approval by its Board of Directors of an authorization for the expenditure of the required sums, will complete the four stages as follows:

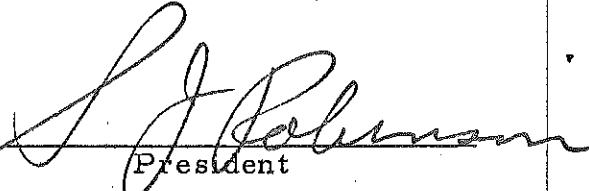
Stage 1	December 1, 1965 (Has been approved)
Stage 2	December 1, 1966
Stage 3	December 1, 1967
Stage 4	December 1, 1968

We hope this supplies you with the information you requested.

Yours very truly,

PUBLISHERS' PAPER CO.

By

  
President

Division of  
Sanitation & Engineering  
Oregon State Board of Health

RECEIVED

JUL 7 - 1965

KKS

DNF TEMP PERM

PULP AND PAPER MILL LOADINGS DISCHARGED TO WILLAMETTE RIVER

Average 5-Day BOD Loading During the Month of August  
(Lbs. per day)

Mill and Location	1957	1958	1959	1960	1961	1962	1963	1964	July 1965
Crown Zellerbach, West Linn	70,100	59,800	35,100	41,500	44,900	53,500	35,640	44,020	40,770 (75.7)*
Publishers' Paper Co., Oregon City	37,000	35,900	20,900	20,900	25,200	24,000	20,650	22,080	24,222 (73)*
Spaulding Pulp & Paper, (Production days in August) Newberg	57,900	44,700 (7)	18,300 (13)	7,600 (29)	21,900 (18)	30,700 (26)	34,970 (30)	46,190 (31)	84,404 (43.4)**
Boise Cascade Co., Salem	12,900	8,600	5,300	1,500	2,400	4,800	3,020	4,700	5,352 (93)*
Western Kraft Albany	10,700	4,100	6,700	7,600	6,800	7,400	6,090	10,890	9,960**
Total	188,600	103,100	86,300	79,100	101,200	120,400	100,370	127,880	164,708

\* Percent reduction

\*\* Average of 3 weekly values

# Went to maximum storage rate July 21, 1965, following completion of lagoon expansion. Values for last week in July were as follows - - - 62,600 (62%)\*.

4 August

*Carton Indenture  
Return*



# OREGON JOURNAL



AN INDEPENDENT NEWSPAPER

C. S. JACKSON, Founder

P. L. JACKSON, Publisher, 1924-1953

MARIA C. JACKSON, Chairman of the Board, 1946-1955

*Be calm, be confident, be cheerful and do unto others as you would have them do unto you.*

WM. W. KNIGHT, Publisher

ARDEN X. PANGBORN, Editor

14N

THURSDAY, AUGUST 12, 1965

3M

## Nature Deals A Setback

It is ironical that pollution in the lower Willamette River should reach a critical level just at a time when a real breakthrough is visible in the long battle to clean up the Willamette.

Nature has conspired to set back man's efforts for a while. This is cause for distress but not total discouragement. Extreme heat and an extreme low flow of the river have lowered the level of the water's quality in the Willamette to the point where fish life may be endangered and where individuals using the river for recreation are assuming greater risks to their health.

The extreme heat is temporary. The low flow of the river will be with us a while longer, depending in part on how much water can be released from storage in Willamette Basin reservoirs. (Next winter we may be worrying again about too much water.)

Sewage and industrial waste are being poured into the river at a rate which is not acceptable. But as The Journal pointed out on this page a few weeks ago, important progress is being made to control such contamination. Within a few years, controls will be in effect which will prevent a repetition of this summer's experience even in the face of extreme weather conditions.

An important step was taken in July with activation of Portland's Tryon Creek sewage treatment plant at Lake Oswego which will serve large population areas. Portland's program to comply with the standards of the State Sanitary Authority is moving forward. Other communities on the Willamette are acting to provide secondary treatment within a few years.

The pulp mills are installing equipment which within three years will enable them to handle waste in a way that will meet SSA requirements. The ultimate completion of storage dams in the Willamette Basin project will add to the supply of water which may be used to help flush out the river in summer, as well as control floods in winter.

Pollution control is a major problem facing cities and industrial areas all over the country. Efforts here have been in advance of those in most other places. The present critical situation should not becloud this fact.

To: Members of State Sanitary Authority  
From: E. J. Weathersbee  
Date: August 26, 1965  
Subject: Pollution of South Santiam River by Crown Zellerbach Corporation Mill at Lebanon, Oregon

The Crown Zellerbach Corporation pulp and paper mill at Lebanon has caused serious pollution of the South Santiam River for many years.

Each year during the summer low-flow season, the river below the mill is characterized by low dissolved oxygen, foam, floating sludge rafts, and a general discoloration of the water.

In 1953, an evaporation and recovery system to permit concentration and either recovery or burning of sulphite waste liquor was installed to decrease stream pollution.

By this means the total pollutional load of the mill is being reduced during the critical low-flow season by approximately 85%.

In spite of this significant reduction in waste discharges, serious pollution continues to occur because of extreme low flows in the South Santiam River below the mill. These extreme low flows are primarily due to the diversion of almost 2/3 of the river flow during the summer into the Pacific Power and Light power ditch intake at Lebanon.

Early this year the Sanitary Authority staff made a detailed analysis of this problem and in our report of April 1965 made recommendations to the Crown Zellerbach Corporation for solving its pollution problems at its Lebanon mill as follows:

1. Continue with its proposed program of in-plant control to effect the maximum possible reduction in waste discharges through recycling, reclaiming, and reusing waste waters and waste constituents.

2. Continue with its proposed installation of facilities to provide primary sedimentation or equivalent of all unclean waste waters to prevent build up of sludge deposits in Marks Slough or the South Santiam River.
3. Study and propose further methods to limit its BOD discharges to the river to the range of 15-20 pounds/day/cfs of river flow for DO purposes with the understanding that additional corrective measures may be required should serious slime problems continue to occur.

At expected low river flows of 100 cfs, this would require that the mill reduce its total waste load to the river to approximately 2000 pounds BOD/day. Recent waste discharges to the river, with maximum recovery of waste sulfite liquor, have varied between 5000 and 8000 #BOD/day.

On July 16, 1965, Dr. Herman Amberg, Director of Crown-Zellerbach Central Research Center, and Mr. W. F. Cyrus, Resident Manager of the Lebanon mill, brought in a proposal for further reducing the waste discharges at the Lebanon mill. This proposal dated June 30, 1965, consists essentially of the following:

1. To obtain maximum possible improvement in their waste effluents by continued in-plant changes in equipment and operation to minimize BOD and solids.
2. To provide treatment of their "improved effluents" by sedimentation and oxidation in their existing log pond system. They have proposed to convert their small (1.47 acre) log pond to a fibre settling pond and their large (17.9 acre) log pond into a waste oxidation pond for use by the summer of 1966.

The staff's preliminary evaluation of the proposal indicates the following:

1. That the reduction in BOD will not be sufficient to abate pollution of the South Santiam River.
2. That based on expected high BOD loadings, an area air-pollution problem is likely to result from the proposed oxidation ponds.
3. Based on information from the State Engineers' office, there is very possibly a hydraulic linkage between the log ponds and the area ground water supply and any seepage from the lagoons could cause pollution of nearby wells.



To: ESW

# Crown Zellerbach Corporation

MANUFACTURERS OF PULP AND PAPER

LEBANON, OREGON 97355

June 30, 1965

Mr. Kenneth H. Spies  
Secretary & Chief Engineer  
Oregon State Sanitary Authority  
State Office Building  
1400 SW 5th Avenue  
Portland, Oregon 97201

*Rec'd 7/16/65  
KHS*

Dear Mr. Spies:

Following are our proposed actions on the recommendations in your report, "Pollution of the South Santiam River Near Lebanon." We will discuss these in the same manner in which these recommendations are made on Page 15.

## OSSA Recommendation No. 1

Continue with its (Crown Zellerbach's) proposed program of in-plant control to effect the maximum possible reduction in waste discharges through recycling, reclaiming, and reusing waste waters and waste constituents.

The following steps to reduce river contamination have been made, or are currently in progress:

- a. We have changed our No. 1 paper machine white water system to reduce the fiber contamination to our effluent. Based on the first few weeks of operation following the change, fiber in our effluent has been reduced between 600 and 700 pounds per day.
- b. We are installing a sump pump from our beater room and paper mill which will pump this effluent to Sweco screens. We estimate between 1,000 and 2,000 pounds of fiber per day will be removed from our effluent by this means. This should be completed near the first of July.

- c. We are putting in a sump, pump, and piping to return our decker effluent to our high yield pit washing system. We expect this to reduce our fiber load in our effluent 500 to 1,000 pounds per day, as well as reduce the total effluent volume. Piping on this project is in progress, and we hope to be able to complete this soon.
- d. We plan to divert our blowpit effluent over a side-hill screen before sewerage to remove additional fiber. This should reduce the fiber in our effluent approximately 500 pounds per day.
- e. We have modified our operating procedure in our pulping and recovery system so that we are now removing over 90% of our waste sulfite liquor from our final effluent. This is considerable better than a few years ago.

OSSA Recommendation No.2

Continue with its (Crown Zellerbach's) proposed installation of facilities to provide primary sedimentation or equivalent of all unclean waste waters to prevent build up of sludge deposits in Marks Slough or the South Santiam River.

Final studies and engineering work are being finalized to permit the use of our existing log pond system for sedimentation and oxidation of our "improved effluent". We believe that the engineering work, as well as the actual construction, could be completed in time to permit use by the summer of 1966.

Our plan is to use our existing log pond system, which is no longer used as such. Our small log pond has a surface area of about 1.47 acres. The flow rate through this pond is sufficiently low to afford good clarification. The clarified effluent from this pond would move through the existing log pond canal to the 17.9 acre log pond. (See attached print). This pond should provide sufficient oxidation area for appreciable BOD reduction. We would operate with a trickle dam overflow to a point well down Marks Slough from our present point of discharge.

Mr. Kenneth H. Spies

- 3 -

6/30/65

We believe this system would: (a) Effectively remove settleable solids, thereby improving the condition of Marks Slough and reducing the possibility of deposits in the river itself; and (b) in conjunction with the other reductions in solids load and consequent BOD, this would further reduce the BOD load of our effluent to the river.

OSSA Recommendation No.3

Study and propose further methods to limit its BOD discharges to the river to the range of 15 - 20 pounds/day/cfs of river flow for DO purposes, with the understanding that additional corrective measures may be required should serious slime problems continue to occur.

We will continue to investigate available means of reducing the solids content of our effluent by in-plant changes. We will also have our Central Research Department continue to investigate technological changes which may help improve river conditions in the South Santiam.

Enclosed is a print showing our proposed settling and oxidation lagoons.

Yours very truly,

CROWN ZELLERBACH CORPORATION

Resident Manager

CZ Corp. Lebanon  
W.F. Cyrus/L  
(Attach.)

TO : Chairman & Members of The  
Oregon State Sanitary Authority

FROM : Portland District Engineer's Office

SUBJECT: Tillamook Air Base Sewage Disposal

DATE: August 24, 1965

Gentlemen:

At the Sanitary Authority meeting on June 24, 1965, the matter of the Tillamook Air Base sewage disposal system was considered by the members. It was determined at that meeting that unless the Authority was notified in writing by July 15, 1965, that steps would be taken to abate the pollution of the Trask River and Tillamook Bay within a reasonable period of time, the Board of County Commissioners of Tillamook County and the Tillamook County Airport Commission should be cited to appear at a public hearing to show cause, if any exists, why pollution of the public waters of the Trask River and the Tillamook Bay should not be abated.

The pollution of these waters, as you will recall, originates from an industrial complex and the Job Corps Center, located at the Tillamook Air Base. Since June 24th the staff has met with the Board of Commissioners and the Airport Commission and has communicated with the General Services Administration in regard to this problem. In a letter from General Services Administration dated July 29, 1965, we were advised of the ownership of the land area of the Tillamook Air Base, and that "the sanitary sewer and water distribution systems have been transferred to Tillamook County." In a meeting with the two commissions on August 3, 1965, the county officials finally admitted that a problem did exist, and they agreed that they shared responsibility. In a letter dated August 6, 1965 County Judge H. Clay Meyers

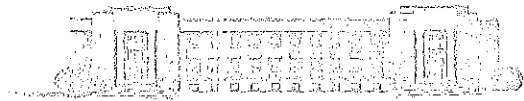


has indicated that the County Court would immediately communicate with the Bureau of Land Management to work out details of a solution to this pollutional problem. The County Court is also considering an application to the Housing and Home Finance Agency for planning funds for a preliminary study for solution to this problem. A copy of Judge Meyers' letter is attached to this report.

RECOMMENDATIONS:

It is the opinion of the staff that reasonable steps are being taken by the County Court of Tillamook County and the Tillamook Airport Commission to find a solution to this waste disposal problem. We would recommend, however, that a time limit for completion of the study be given. It would seem that January 1, 1966 would be ample time for this preliminary study. Construction should follow during the summer of 1966.

WS-OSBH-15  
8/24/65



*Tillamook County*  
TILLAMOOK, OREGON 97141

August 6, 1965

Mr. Kenneth H. Spies  
Secretary and Chief Engineer  
State Sanitary Authority  
1400 S. W. 5th Avenue  
Portland, Oregon 97201

Dear Mr. Spies:

On the 3rd of August a conference was held at the County Court House in Tillamook with Mr. Jensen and Mr. Katzel of your department; Mr. Maxwell, Tillamook County Sanitarian; Dr. Gilberts, Tillamook County Health Officer; two members of the Tillamook County Court; the Tillamook County Airport Commission and its manager.

At this meeting it was decided that the County Court would immediately communicate with the Bureau of Land Management who appears to be the most active user on the base and request a meeting as soon as possible with the interested parties-- looking forward to a solution of our problem. It is hoped we can do this within the next two weeks.

We recognize the seriousness of situation, and the suggestion has been made that we make application through government channels for an engineering survey. The County Court is now exploring the possibility of obtaining necessary funds for such a survey.

We trust you will bear with us.

Very truly yours,

TILLAMOOK COUNTY COURT

*H. Clay Myers*  
H. Clay Myers  
County Judge

Division of  
Sanitation & Engineering  
Oregon State Board of Health  
**RECEIVED**  
AUG 9 - 1965

DNF	TEMP	PERM
-----	------	------

MEMORANDUM

To: Members of the State Sanitary Authority  
From: Water Quality Control Staff  
Date: August 26, 1965  
Subject: Status Report—Salmon Tainting Problem and Doane Lake

For the past several years, the Sanitary Authority has received occasional complaints during the spring chinook salmon fishing season regarding tainted fish caught in Multnomah Channel. During this past spring, the number of complaints received increased to a very substantial number.

Between March 16 and April 21, a total of 129 complaints were received and recorded by the Fish Commission, Game Commission, and Sanitary Authority. These complaints listed 166 tainted salmon caught in the Willamette River and Multnomah Channel between Swan Island and St. Helens, and 15 tainted salmon caught in the adjacent water of the Columbia River for a total of 181 tainted fish.

One of the potential sources of taste-causing substances investigated, and still being investigated, was the effluent from Doane Lake.

Twenty gallons of Doane Lake water were collected and taken to Oregon State University for bioassay analysis. Eight- to ten-inch rainbow trout, provided by the Game Commission, were used as the test fish. The first results indicated that the water from Doane Lake would produce an off-taste in the test trout similar to that observed in the salmon in from one to eight days' exposure time in dilutions as small as 0.0001% or 1 part per million.

A second test on the same water sample produced similar results after two days' exposure. Since the one part per million dilution was the weakest solution tested, the dilution required before the lake water would not produce an undesirable taste in the trout was not determined.

From data available, it may be estimated that the average flow from the lake to the river during the fish tainting problem period was approximately 0.5 cfs.

Flow in the Willamette River during the April-May period varied between 10,000 and 20,000 cfs.

Dilutions available in the river water may then be estimated at not greater than 40,000 to one, or much more concentrated than the bioassay dilutions of 1,000,000 to one.

At the Sanitary Authority meeting held on June 24, 1965, it was reported that the Chipman Chemical Company had proposed to add lime to the waters of Doane Lake to increase the pH. The purpose of this was to reduce the objectionable odors coming from the lake.

What effect this treatment may have on the lake water in regard to its potential for creating off-flavors in fish has not yet been determined. The latest information indicates that the lake treatment is better than 80% completed. When the treatment is completed, a similar bioassay and taste test will be conducted on the treated lake water to determine what further steps will need to be taken.

The Chipman Chemical Company has been in contact with Dr. Warren, Associate Professor of Fisheries at Oregon State University, regarding a more complete program to study the relationships between the plant's liquid effluents and the off-flavors produced in fish.

A meeting has been scheduled for Monday, August 30, between the staff members of the Game Commission, Fish Commission, Chipman Chemical Company, and Sanitary Authority at Dr. Warren's office to discuss the details of the program further. Dr. Warren estimated that the study may take between three months and one year to complete, depending upon the initial results.

Another test, using the effluent from the McCormick and Baxter Creosoting Company, was conducted. Preliminary results indicate that this effluent produced only a slight off-flavor in a 1% concentration, or 10,000 parts per million, and no off-flavor in a 0.1% concentration, or 1,000 parts per million.

In a letter dated December 12, 1963, Chipman Chemical Company stated that all equipment necessary to abate water pollution in the Willamette River would be completed and ready for operation by November 1, 1965.

Although the initial concern regarding the waste effluents being discharged to the river by Chipman Chemical Company was its toxicity to fish life, it now appears that the problem of tainting fish is of primary concern.

It is entirely possible for the company to construct facilities that will produce a non-toxic plant effluent but will still produce an off-flavor in fish. A revised schedule that would establish a date at which time the water seeping from the lake and the effluent from plant would not produce an off-flavor in fish seems to be required.

In order to prevent the reoccurrence of the problem of tainted chinook salmon in Multnomah Channel, it is recommended that March 1, 1966, be established as the deadline at which time the effluent discharge from the plant and from Doane Lake will not produce an off-flavor in the spring salmon.

To: The Sanitary Authority of the State of Oregon  
% John P. Amacher, Secretary  
938 Portland State Office Building  
Portland, Oregon.

RECEIVED  
JUL 31 1965  
L.H. Feltner

WHEREAS, The undersigned are residents and inhabitants of Winchester, Douglas County, Oregon, and live in an area immediately adjacent to the North Umpqua River and the source of supply for the domestic water users of Roseburg and Winchester, Oregon.

WHEREAS, The Beaver State Sand and Gravel and the Douglas County Lumber Company conduct their respective industrial operations in locations North-West of the North Umpqua River at Winchester, Oregon.

WHEREAS, Dust produced by the operation of the Beaver State Sand and Gravel and sawdust and ashes produced by the operation of the Douglas County Lumber Company have recently been deposited on the land and in the water adjacent to Winchester, Oregon.

WHEREAS, The dust, sawdust and ashes being deposited by said industrial operations is polluting the air and water, creating a nuisance, and causing damage to plant and fish life in the area of Winchester, Oregon,

NOW, THEREFORE, In order to protect the domestic water supply, preserve fish life, and prevent further loss of plant life and nuisance to the inhabitants of Winchester, Oregon, we respectfully request that the Sanitary Authority of the State of Oregon take such action as shall be necessary and proper concerning the injurious operations of the Beaver State Sand and Gravel and the Douglas County Lumber Company.

Dated, July 30th, 1965.

NAME

ADDRESS

TO : Chairman & Members of The  
Oregon State Sanitary Authority

DATE: August 25, 1965

FROM : Portland District Engineer's Office

REGARDING: Frontier Leather Company

Gentlemen:

For a number of years the Frontier Leather Company and the matter of treatment of this industry's waste by the City of Sherwood has been of concern to the members and staff of the Oregon State Sanitary Authority.

At the present time, construction of an industrial waste treatment facility by Frontier Leather Company has been accomplished as well as the expansion of the municipal facility by the City of Sherwood which was designed to accept waste effluent from Frontier Leather Company for additional treatment. A contract between the City of Sherwood and Frontier Leather Company was signed April 24, 1964 whereby Frontier Leather Company agreed to pretreat the industrial waste and pump the pretreated effluent to the City of Sherwood and to maintain a certain set of standards for this pretreated effluent.

The contractual agreement for one of the constituents of this pretreated waste was that Frontier Leather would maintain a chloride content of no more than 800 mg/l. At the time of completion of the city's treatment works, tests were made of the industry's pretreated effluent, and it was found that all aspects of the contractual agreement were met, with the exception of the chloride content which has been consistently in excess of the 800 mg/l that was specified. At present, this chloride content is approaching 3,000 mg/l, and it is reported by the engineers that it will increase to about 5,000 mg/l.

Under the circumstances, the city has felt that it cannot accept this industrial waste at this increased chloride content, but at present is cooperating with the company and will accept an effluent that is diluted to

the point of containing no more than 1,500 mg/l of chloride. This amended contract expires the latter part of this month. Of concern to the staff is the fact that dilution by the normal domestic flows from the City of Sherwood and sustained flows in Cedar Creek, the receiving stream will not dilute this highly concentrated chloride content to be compatible with down stream usage. We have determined that several irrigational water rights are outstanding. Chloride content should not exceed 100 mg/l in the receiving stream where the water is used for crop irrigation. The company and its consulting engineers, as well as the city, have been advised of this criterion and the engineers are now trying to develop methods of coping with this problem from the water pollution aspects.

As for the air pollutional aspects of this problem, complaints were received from residents in the Sherwood area early this year when the pre-treatment lagoons at the industrial site began to give off odors. At that time, Frontier Leather Company treated the two cell lagoon with Sodium Nitrate and the odors subsided for a time. However, in the latter part of June, complaints were again received by the staff and have been received off and on since that time. It would appear that this has become almost a continuous nuisance. Several additional treatments of the lagoons with Sodium Nitrate have temporarily quelled the odors, but have not provided a final continuous solution to this problem.

In communicating with the company's engineers, we have learned that plans for additional over-all treatment are proposed. This will incorporate both air and water quality control, but the company is reluctant to proceed until it is determined that effluent from the pretreatment facility can be deposited in the receiving stream.



A Hydrogen Sulfide monitoring station was established by the staff about 600 feet south of the lagoons. We have determined that Hydrogen Sulfide levels, high enough to cause paint damage, have occurred on several occasions. Without doubt, the odors emitted from these lagoons are a serious problem and gives reason for legitimate complaint for the residents in the Sherwood area.

The company recently indicated that an attempt was being made to employ an odor masking agent in the vicinity of the lagoons. We do not feel that this will be an adequate solution from the standpoint of the Hydrogen Sulfide levels and the possibility of paint damage.

**RECOMMENDATIONS:**

It is the recommendation of the staff that Frontier Leather Company be advised to immediately abate the air pollution caused by the waste treatment lagoons. That they immediately adopt a satisfactory test that can be used to determine when odors will be given off by these waste treatment lagoons and initiate adequate treatment methods that will abate all odor problems. The Frontier Leather Company's engineers are already working on the water quality aspects of this problem.

*Short Term BOD*

MEMORANDUM: -

TO : Members of State Sanitary Authority  
FROM : Air Quality Staff  
DATE : August 26, 1965  
SUBJECT: Ideal Cement Company, Gold Hill, Jackson County

REVIEW

As a result of a motion made at the Sanitary Authority meeting on August 15, 1963, the Ideal Cement Company submitted a proposal for additional control facilities and process changes in a letter from Mr. A.W. Hooton dated October 10, 1963.

Since that time the company has continued to submit monthly reports on stack sampling, fallout data, and operation of the plant for staff review. A number of joint surveys have been completed by the Sanitary Authority staff and plant officials. On June 3, 1964, Mr. L.L. Baton and Mr. R.F. Wood completed a survey and reported that the major items in the company's proposal of October 1963 had been completed. The findings of the survey were that the remaining sources of dust were (1) dust generated by road travel to the quarry crusher and in the plant area, (2) emissions from the lime kiln stack, (3) dust from handling clinker, (4) dust from handling finished cement in the packing section, and (5) dust from dumping of agricultural lime. As a result of that survey and a staff letter on October 19, 1964, some of the sources outlined were controlled or emissions reduced. It was also pointed out to the company that control measures beyond those currently employed would be necessary to meet air quality regulations.

On March 10, 1965, the company was advised by letter that fallout levels in the residential areas still exceeded those outlined in our regulations.

The same letter requested the company to propose a plan for specific projects on a time schedule and requested that the plan be presented for review by June 1, 1965.

CURRENT

At the conference on June 3, Mr. Hooton advised the staff that the company had completed all the items in the proposal to reduce air pollution submitted with the company letter of October 10, 1963, except that the voltage on the electrostatic precipitator had not been changed. This change was not made because it was later found not to be technically feasible to provide different potentials to each of the collector units. Mr. Hooton felt the improvement made in the agriculture lime facility has resulted in a significant reduction in air pollution. Mr. Hooton stated that the other sources mentioned by the staff were not significant to the total problem; however, he would check to see if the roads needed to be or had been oiled this season.

Mr. Hooton concluded that he felt that a major reduction had been accomplished by the company and that further significant reduction would necessitate a major expenditure by the company. He said that since the plant at Gold Hill is old, it does not lend itself to revisions which would be necessary for incorporation of additional control facilities, and consequently he felt management would not likely expend major funds on the Gold Hill plant.

On June 22, 1965, additional information was presented to the company and the company was advised that controls will be necessary. We have had no response from the company to date, although monthly reports continue to be received.

Since it appears the staff will not be able to make further progress on this problem, it has been brought to the attention of the Sanitary Authority for consideration.

OREGON STATE SANITARY AUTHORITY

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

August 18, 1965

Members of the State Sanitary Authority

Harold F. Wendel, Chairman  
Dr. Richard H. Wilcox, Member  
Chris L. Wheeler, Member

Herman P. Meierjürgen, Member  
B.A. McPhillips, Member  
Edward C. Harms, Jr., Member

Gentlemen:

Attached for your information is a copy of the tentative agenda for our next meeting which will be held on Thursday, August 26, beginning at 10:00 a.m. in Room 36 of the Portland State Office Building.

Unfortunately Mr. John Amacher and Mr. Ed Harms will not be able to attend. John is on a trip to Switzerland and Ed has a case in court on that date. I hope that all the other members will be able to be present as it undoubtedly will be a most important meeting.

Arrangements have been made at the Americana for luncheon at noon.

Very truly yours,

Kenneth H. Spies  
Secretary and Chief Engineer  
State Sanitary Authority

KHS:vt  
Enc.

- cc John Demman
- cc E.J. Weathersbee
- cc H.M. Patterson ✓
- cc H.W. Merryman
- cc Leo L. Baton
- cc Joseph A. Jensen
- cc Fred M. Bolton

COPY

Tentative Agenda

STATE SANITARY AUTHORITY MEETING

10:00 a.m. August 26, 1965

Room 36, State Office Building

- A. Minutes of June 24, 1965 meeting
- B. Project plans for June and July 1965
- C. Willamette River pollution
- D. Crown Zellerbach Corp. mill at Lebanon
- E. Tillamook Air Base sewage disposal
- F. Designation of conferree for Sept. 8, 1965 conference on pollution in lower Columbia River
- G. Chipman Chemical Company water and air pollution *HMP*
- H. Petition re: air pollution near Winchester, Douglas County *HMP*
- I. Frontier Leather Co., Sherwood *JAJ* *Noted*
- J. Ideal Cement Co., Gold Hill *Leo Baten*
- ~~K. Union Carbide, Portland~~

*called by W & D*