

8/16/1965

OREGON STATE SANITARY
AUTHORITY MEETING
MATERIALS



State of Oregon
Department of
Environmental
Quality

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SPECIAL MEETING

of the

OREGON STATE SANITARY AUTHORITY

August 16, 1965

A special meeting of the Oregon State Sanitary Authority was called to order by Harold F. Wendel, Chairman, at 10:20 a.m., August 16, 1965, in Room 36, State Office Building, Portland, Oregon. The members and staff present were Harold F. Wendel, Chairman, B. A. McPhillips, 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, Harold M. Patterson, Assistant Chief Engineer, Joseph A. Jensen, District Sanitary Engineer, Bryan Johnson and Patrick Curran, Associate Sanitary Engineers; Harold L. Sawyer, Don McHarness and Ernie Schmidt, Assistant Sanitary Engineers; Ed Lynd, Water Pollution Control Technician; Glen Carter and Edison Quan, Aquatic Biologists, and Warren C. Westgarth, Director of Laboratories.

Mr. Ed Harms and Mr. Chris Wheeler were unable to attend because of prior commitments. Mr. John Amacher is on a trip to Switzerland.

The Chairman opened the meeting by remarking that everyone present undoubtedly had seen and read the publicity in the newspapers about the conditions of the Willamette River. He stated that a lot of this was due to the low water and high temperature conditions that have prevailed this year, the first time in a good many years.

The Secretary pointed out that this year Oregon has had what might be classified as a serious drouth and as a consequence the flow in the main stem of the Willamette River has been lower than it has been for a good

many years; in fact, considerably less than during any year since the cities and industries started the operation of their sewage and waste treatment facilities.

Under the program of the Corps of Engineers for the control of flow in the Willamette Basin, it has been their policy to maintain a minimum flow of 6,000 second feet at Salem. This is based on maintaining a firm figure of about 5,000 second feet at Albany. This goal is primarily for the benefit of navigation inasmuch as water quality control is not an authorized function of the Willamette reservoir projects. This year when it was indicated that the flows would probably be less than normal a letter was directed by the Secretary of the Authority to the District Engineer of the Corps of Engineers asking him to do everything possible to effect maximum augmentation of the low flows during the remainder of the summer. He replied that due to the lower than normal runoff which had prevailed since the floods last winter, they would not be able to reach their goal this summer and their present plan called for maintaining a firm flow of only 4,300 second feet at Albany, which they hoped would result in a flow of 5,500 second feet at Salem. It later developed that they were not able to maintain a flow of 5,500 second feet at Salem. During the last part of July and first part of August the flow at Salem actually ranged from 5,000 to 5,400 second feet. This naturally placed an extra heavy burden on the state's water pollution control program, but in spite of these extremely low flows, the water quality conditions in the Portland Harbor were approximately the same as they were during June and July of 1963.

It was pointed out that the cities and industries in the basin have recently increased the degree of control. For example, most of the larger cities in the Willamette Basin already have provided secondary treatment.

There are 12 new secondary treatment plants located on the Willamette and several on tributary streams. Because of the installation of these facilities, primary plants which previously served four other communities have been abandoned. All of the other cities on the Willamette River are scheduled to install secondary treatment works which will supplement their existing primary plants. These facilities will be under construction either this fiscal year or next fiscal year.

The Secretary also stated that the pulp mills on the main Willamette all have programs under way at the present time for the construction within the next two years or by the end of 1967 of primary treatment works. They are also in the process of increasing the removal of oxygen demand from their strong wastes resulting from the production of pulp.

Due to the combination of low flow this summer and the high water temperature caused by the warm weather, plus an abnormally high waste load discharge for a period of several days from one of the pulp mills, the dissolved oxygen in the lower river did reach a minimum of about 1.6 ppm for a few hours during the latter part of July. There has been only one day that the average DO as measured by one of the monitoring stations was less than 2 ppm. The Sanitary Authority since 1953 has maintained a system of sampling stations extending from Newberg to the SP & S railroad bridge. Seven stations are involved and these stations are sampled once daily. For the past three or so years the Public Health Service has operated two continuous automatic sampling, analyzing and recording stations. One is located at Swan Island and one at Marina Mart which is just above the Willamette Falls at Oregon City. This year the Sanitary Authority has a third continuous automatic monitoring station located just upstream from the city of Newberg.

The Chairman stated that the major contributors to the oxygen demand in July of this year were Crown Zellerbach at West Linn, 40,770#; Publishers' at Oregon City, 24,200#; Publishers' at Newberg, 84,400#; Boise-Cascade at Salem, 5,300#; and Western Kraft at Albany, 9,900#. Total from the 5 mills is 164,700#. For all other sources, including industries and municipalities, the oxygen demand in July 1965 was about 40,000#.

The Chairman said that last week he had written to Norman Chandler who is the head of the Times Mirror Publishing Co. of Los Angeles, owners of Publishers' Paper Company, and to Mr. Hunt, President of Crown Zellerbach, enclosing copies of recent news clippings and editorials from newspapers and stating that the Sanitary Authority does not want to go through another summer like this.

Mr. McPhillips stated that he was somewhat disturbed to see that the pollution load during July 1965 was the largest since 1957 and we have supposedly been going through a period of improvement. He said that he would like for industry to give the members of the Authority an explanation as to why there has been no improvement in almost 10 years.

The Secretary pointed out that one of the main reasons for the relative lower loads in 1958 and 1959 was due to the fact that during those years the mill at Newberg was only in partial operation. One explanation for the real high loading this year at the Newberg mill was the fact that they had under construction some improvements to the lagoon which they use to impound the wastes. While this construction was under way, the mill at Newberg was unable to store as much liquor as they normally did. It was pointed out further, however, that even after the

project was finished and the amount of storage increased, the loading was still about 50% higher than last year.

Mr. R. L. Carlson from Crown Zellerbach, West Linn, stated that at last report about 38,000# were going into the river from their West Linn mill and that he anticipated next year it would be about the same.

The Chairman stated that if Crown Zellerbach at West Linn is not out of the river until the end of 1967, that would mean that we would get no relief from present conditions, under the same production, until the summer of 1968.

In answer to a question raised by Dr. Wilcox regarding the present river conditions, the Secretary said that he had some data gathered by the staff as of 8 a.m. this date. At Marina Mart which is just above the Falls, the DO was 6.2 ppm; Sportcraft which is the first station below the Falls, 6.3 ppm; Steel bridge, 3.2 ppm; and SP&S railroad bridge, 3.3 ppm. He stated that this improvement probably is due in part to the additional water being released from the Clackamas River at the request of the U.S. Public Health Service and the Sanitary Authority. The additional releases from both the Clackamas and Willamette were started August 12.

Mr. Towne from the U.S. Public Health Service stated that the DO just above the Clackamas last Friday, August 13, was a little over 4 ppm and below it had increased to something over 5 ppm about a mile below where there was a chance for mixing. This additional flow from the Clackamas was shut off Sunday afternoon, August 15, at about 3 p.m. on the basis of higher oxygen readings at Oregon City.

Mr. Carlson stated that the major work at Crown Zellerbach is being engineered now and it does take time. The lagoon work is already done,

but whether it is effective or not will not be known until the lagoon is filled at the end of the season. When the clarifier is completed, there will have to be trial periods to see exactly what the efficiency will be. He stated that this is a major construction project and is affected by high water in the winter time. He stated also that their fiber loss to the river in the last 2 or 3 months has been reduced by 17%, the liquor storage increased by 25% and overall there has been a substantial improvement.

Mr. James A. Wilson, Publishers' Paper Co., stated that the BOD demand last week at the Oregon City plant was something less than 21,000# and that is probably the minimum which can be obtained under present operations. He said that they took over the Newberg plant on April 1, 1965. It was found that there had been some engineering work done by the former owners toward enlarging the lagoon which was supposed to have been 60 million gallons. Their own engineers were put on the job and decided this wasn't enough. Their engineers came up with a plan of something over 100 million gallons; however, some difficulties were encountered such as time problems, soil problems, etc. Shortly after the 1st of June the program of increasing the lagoon from 44 million gallons to 80 million gallons was started and this was completed about the middle of July. Another pump has been installed and the amount of effluent going to the lagoon has now been doubled. This will probably mean a storage problem later this season but he was sure they could work something out to keep the load down. Mr. Wilson said that it would be his chemist's guess that now there has been between 80 and 85% decrease in the load.

The Secretary asked Mr. Wilson what their rate of storage is now.

Mr. Wilson replied that it was about 1 1/2 million gallons per day. He stated that they now have a thousand gallon per minute pump.

Mr. McPhillips asked about the company's long-range program for reduction in the load at Newberg.

Mr. Wilson replied that if more storage is needed they have the room for it.

The Secretary pointed out that the location of this mill is probably as critical as any other source of pollution on the river due to the fact that anything introduced at that point utilizes oxygen from the river as it flows through the Newberg pool as well as through the Portland Harbor. In other words a higher percentage of the oxygen demand of these wastes is satisfied by the river than from those discharged into the Harbor.

Mr. McPhillips stated that as a suggestion to help speed up the program the Authority might request a reduction in pulp production during the critical periods. He suggested a voluntary reduction at a certain point in the river flow and if the companies do not see fit to voluntarily go along with this, steps should be taken to see that production is curtailed to reduce this pollution during these periods.

The Chairman asked Mr. McPhillips if he would consider putting that in the form of a motion.

Mr. McPhillips replied that he would but first a few questions should be answered such as what are the limits of critical water quality, at what stream flow should reduction be requested, etc.

Mr. McPhillips said that the regular meeting of the Sanitary Authority is less than 10 days, August 26, and that a motion made by him at this time would have little effect. He stated that all the representatives of industry

are at this meeting today and that he thought they ought to do a little soul searching among themselves as he expects to make a motion with specifications as to river flow at the regular meeting of the Sanitary Authority on August 26. Industry can expect this motion to be made and that everything possible will be done to encourage their voluntary cooperation in this matter.

The Secretary said that at the meeting the week before with the pulp mills, two major concerns were discussed: (1) to have enough dissolved oxygen as of that time to prevent any fish kills (the fisheries people present at that meeting had indicated 2 ppm), and (2) having enough oxygen not just to prevent fish kill, but to promote migration through the Harbor. Based on all the information that can be obtained from the fisheries biologists, it appears that 4 1/2 to 5 ppm are needed in the Portland Harbor in order to get the upstream migrants to move through the area. The fisheries agencies had indicated that upstream migration should be expected to take place beginning about August 25.

Mr. McPhillips asked if there were any assurance that the Corps of Engineers would supply enough water under present working arrangements to keep enough oxygen in the river for the fish to migrate upstream through the Harbor and into the Clackamas River.

The Secretary stated that with the additional releases which were started August 12 the flow now is running a little over 6,000 second feet at Salem, that Bonneville Power Administration has indicated that they will probably call for power releases by September 7, and that if that comes to pass, there will be an additional 1,000 second feet.

The Chairman then stated that the indication is that this will be non-recurring, and that we cannot expect this in the future.

Mr. Poston from the U. S. Public Health Service was then called upon by the Chairman to say a few words. He stated that he had hoped the Sanitary

Authority would go into the matter which was discussed at Thursday's meeting with the mills. He called to the attention of the Authority that the additional water which is being made available now to the river comes from water that was stored for power purposes. He said the Corps of Engineers and Bonneville Power Administration agreed to release this water upon assurance from the Secretary of the Authority and himself that industry would be approached as to whether or not they would agree to reimburse the Government for the benefits and for loss of power.

The Chairman stated that at Thursday's meeting the representatives from all the companies were told that Bonneville wanted a guarantee of reimbursement of a possible amount of \$13,000 to \$60,000 from somebody and that the Government would require this for giving the water in an unauthorized way - not authorized by Congress. The Chairman then asked if the representatives of the different companies had taken steps to allocate these funds.

Mr. Donald Benson from Northwest Pulp and Paper Association replied that the representatives of industry had gotten together on this, and were in accord to honor the request, but would like about five minutes to make a final decision.

Representatives of the mills then left the meeting for a few minutes after which Mr. Benson stated that the pulp mills would be very happy to support the Sanitary Authority this 1965 year for the 500 second feet that was asked for in additional flow from the reservoirs in the Willamette system to support the water quality conditions up through September 7. He went on to say that if it is found that conditions are satisfactory without the use of this water, that it be requested not to be released.

The Secretary then advised Mr. Benson that if the Sanitary Authority is to be relied upon to make a determination of the amount of water that has actually been released and the need for it, the Sanitary Authority in turn would have to rely upon the Corps of Engineers to confirm those releases. It would then be up to Bonneville Power Administration to determine whether or not the utilization of that water at this time actually has reduced their revenue at a later date. The Secretary asked when this date might be.

Mr. Towne replied that he did not know as he could not speak for Bonneville Power Administration, but it would probably be when they can determine from actuality rather than probability whether this is or isn't a low flow year.

Dr. Wilcox stated that he thought the industry should be commended for its willingness to assume this cost.

The Chairman then said that Mr. Robert Straub, State Treasurer, had paid him a visit recently at his office and that Mr. Straub had asked him if the Sanitary Authority was getting everything it needed from the Government at Salem to expedite its work. He said he had replied that he had no complaints at present at all, that the Sanitary Authority had asked for more money originally than it got, but that vacancies in the professional staff could not even be filled with the money which was appropriated. He stated further that to his great surprise there subsequently appeared in the paper an accusation by Mr. Straub that the Governor is responsible for the conditions on the Willamette. The Chairman went on to say that Mr. Straub did not get that from him and that the Sanitary Authority assumes full responsibility for the conditions in the Willamette.

There being no further business the meeting was adjourned at noon.
The next scheduled regular meeting will be held on August 26.

Respectfully submitted,

Kenneth H Spies

Kenneth H. Spies
Secretary