

STATE SANITARY AUTHORITY
MINUTES OF THE THIRTEENTH MEETING

June 12, 1941

The meeting of the State Sanitary Authority was called to order at 10:30 A. M., June 12, 1941, in the offices of the State Board of Health, 816 Oregon Building, Portland.

Those present were Chairman Harold F. Wendel, Dr. Frederick D. Stricker, and the Messrs. Albert Burch, Charles Stricklin and John C. Veatch.

MINUTES: Copies of the minutes having been supplied to the members in advance, the chairman, with the consent of the board, dispensed with the reading of the minutes of the meeting of March 14, 1941.

ACTIVITIES REPORT: The secretary reviewed the contents of the activities report for the months of March, April and May, 1941. Mr. Green pointed out that Dr. Levin had been called to active duty in the Army thus creating a vacancy in the Interstate Technical Advisory Committee, and that this vacancy would probably be filled by Dr. Sears of the Medical School.

PROJECT PLANS: After a review of project plans approved by the State Sanitary Engineer for the months of March, April and May, 1941,

MOTION: it was moved by Mr. Burch, seconded by Mr. Veatch, and unanimously carried, that the project plans approved by the state sanitary engineer be approved by the Sanitary Authority. A list of the approved projects follows:

<u>Date</u> 1941	<u>Location</u>	<u>Type of Project</u>
March 4	Salem	Intercepting sewer and sewage treatment plant
7	Blue River	School sewage disposal system
17	Portland	Oregon Shipbuilding Corp. Temporary sewage disposal system
26	Portland	U.S. Army Air Base Sewer System
26	Pendleton	U.S. Army Air Base Sewer System
31	Portland	Oregon Shipbuilding Corp. Sewer System
31	Medford	Prescott Memorial Park Sewage disposal system
April 21	Silver Creek Falls State Park	Sewerage system extensions
28	Fall Creek	School Dist. #67 Sewage Disposal System
May 19	Pendleton	U.S. Army Air Base Sewage Treatment Plant
19	Eugene	Preliminary plans and specifications, sewage treatment plant.

TUALATIN RIVER POLLUTION

Hillsboro: Mr. J. W. Barney, City Manager of Hillsboro, came before the Authority to discuss problems of industrial waste disposal confronting his city. Mr. Barney described the treatment plant facilities operated by Hillsboro both for domestic sewage and industrial wastes. He mentioned that experimentation with ozone had been under way for some time, but that it was not yet known whether such treatment was practical. The difficulty of floating a bond issue for additional treatment units for cannery waste was outlined and the possibility of disposing of the

industrial waste by irrigation, ponding or both was described. The problem of controlling odors and insect breeding if ponds are to be used was discussed by Mr. Barney.

Upon being questioned by the Authority, Mr. Barney related that the city was more or less obligated to treat and dispose of the waste from the B. E. Maling Company cannery. A discussion of screening processes at the plant followed, in which it was stated that all cannery waste was passed through rotary fine screens before discharge into the city sewer.

Mr. Burch raised the question of whether or not vacuum filters had ever been considered for the removal of suspended solids. Mr. Green called attention to the fact that a device called a vacuator had recently been developed for the removal of suspended solids from industrial wastes. The waste after passage through such a unit would, however, still need additional treatment for the removal of solids in solution.

Further discussion of the possibility of ponding followed, and Mr. Barney stated that it would be necessary to acquire land for the purpose. The area considered usable is flooded each winter by high water in the Tualatin River.

Dr. Stricker asked if the Ray Maling Company cannery was still ponding wastes at Woodburn. Mr. Green replied that it was and that additional capacity of ponds was being considered at the present time. Attention was called to the fact that all solid wastes such as peelings and cores are ground up and added to the plant sewer at Woodburn, complicating treatment, whereas this was not the case at Hillsboro.

Upon inquiry by Mr. Wendel, Mr. Green reported that the activated sludge units treating Hillsboro sanitary sewage were being operated more efficiently.

Mr. Barney was asked if he might be able to outline some plan for more adequate treatment in the near future. Mr. Barney stated that he believed this might be done and that if such a plan could be approved by the Sanitary Authority and State Board of Health in advance of it being submitted to the city council of Hillsboro, there should be no difficulty proceeding with the project. He intimated the irrigation, ponding or a combination of both seemed to offer the cheapest solution to the problem.

Tualatin River - Turbidity: Mr. Charles D. Dolph, an attorney representing Avalon Park, appeared in behalf of Mr. John Frederick. The Authority advised Mr. Dolph that the operators of two gravel washing plants on Gales Creek had been directed orally and in writing to improve their operations and reduce the turbidity of Gales Creek and the Tualatin River. Mr. Green also reported that the State Highway Commission had been written about their gravel plant operations on Dairy Creek and that the situation would be investigated further, and any action necessary would be taken.

Mr. Green called attention to two letters and a petition signed by 38 persons relative to the turbidity of the Tualatin River.

OFFICE AND LABORATORY SPACE: Messrs. Wendel and Green and Dr. Stricker reported relative to new office space available on the 4th floor of the Oregon Building. After some discussion, it was agreed that arrangements should be made to obtain the space jointly with the Division of Sanitary Engineering of the State Board of Health.

MOTION: It was moved by Mr. Veatch, seconded by Mr. Stricklin, and carried that the space on the fourth floor of the Oregon Building be acquired.

PERSONNEL: Chairman Wendel advised the Authority that Mr. Green had submitted his resignation as State Sanitary Engineer. Dr. Stricker reported that the State Board of Health had appointed Mr. C. M. Everts, Jr. to succeed Mr. Green.

COLUMBIA RIVER POLLUTION SURVEY: The secretary called attention to the fact that the State Fish Commission had experienced some difficulty in obtaining sufficient funds to meet its entire \$1500 obligation to the Sanitary Authority. Five hundred dollars are still unpaid by the Fish Commission. The secretary suggested that any available Sanitary Authority funds unexpended at the end of June, 1941, be used to pay a portion of the cost of the Columbia River Survey. This suggestion was approved.

TUALATIN RIVER BASIN POLLUTION: The secretary reported that the city of Forest Grove had advised that a chlorinator would be installed as requested.

Oral commitments have been secured from representatives of the city of Gaston to likewise install a chlorinator.

SOUTH SANTIAM RIVER POLLUTION

Lebanon: The secretary read various letters written to the city of Lebanon and the one reply received from the city. After a thorough discussion, MOTION: it was moved by Mr. Burch, seconded by Mr. Veatch and carried that the secretary of the Authority be instructed to issue a citation to the city of Lebanon to appear and show cause, on a date to be later determined why the city should not cease pollution of the South Santiam River, and to serve such citation unless, in his judgment, proper progress is being made by the city of Lebanon towards carrying out the directions of the Authority.

PUDDING RIVER POLLUTION

Ray Maling Company Cannery: Mr. Everts reported relative to his

field investigations and discussions with Messrs. Reiling and Huber of the Ray Maling Company. The company proposes to reduce the volume of their waste about 40% and to install additional sedimentation and evaporation ponds for the purpose of reducing pollution of the Pudding River. Plans have not been submitted for this work, but the company's representatives are advised that it would be satisfactory to try the methods which they have in mind.

PORTLAND PROJECT STATUS: The secretary reported that City Engineer Ben S. Morrow and City Commissioner William Bowes were leaving shortly for the East for the purpose of visiting various sewage treatment plants and to interview two applicants for the position of engineer to assume charge of the Portland project investigations.

PENDLETON: The secretary reported that plans for sewer extensions in Curry's and Phelps' Additions in Pendleton had been submitted to the office for approval by the Pendleton Housing Corporation and that the plans were not approved for the reason that the city had not complied with instructions by the Sanitary Authority. Following this action, Mayor C. L. Lieuallen of Pendleton, who is also manager of the Housing Corporation, complained to Governor Sprague by telephone. The governor then called the office, and in the secretary's absence, discussed the situation with Mr. Everts. The secretary reported that he conferred with the governor regarding this matter on June 3, and that the governor had seen fit to substantiate the stand taken by the Sanitary Authority. In the discussion of this matter, it was pointed out by Mr. Everts and Mr. Green that the plans for sewer extensions had been examined, that certain changes necessary in the design had been indicated to Mr. Simms, engineer for the Housing Corporation, and that Mr. Simms had been advised to proceed with the work but not to connect to the city system until approval had been given.

After discussion by all board members, it was decided that a representative should visit Pendleton at the first opportunity, confer with the city officials and the Housing Corporation officials regarding the matter, and determine whether or not the city is proceeding in good faith.

SIGNING OF CHECKS AND VOUCHERS: The secretary called attention to the fact that with his resignation, it would be necessary to have authority from the board for the new secretary to sign vouchers and checks. Mr. Wendel advised that such a resolution would be prepared and transmitted to Salem.

EXECUTIVE SESSION: At the request of Chairman Wendel, the secretary and assistant sanitary engineer left the meeting while various matters were discussed in executive session. Following the executive session, Chairman Wendel reported the following actions by the Authority.

PERSONNEL: MOTION: It was moved by Mr. Burch, seconded by Mr. Veatch and carried, that the difference in salary of \$12.50 per month authorized by the State Budget Director and due Mr. Green for the months of April, May and June be paid.

Dr. Stricker reported that Mr. Everts had been appointed State Sanitary Engineer by the State Board of Health and would be paid \$235 per month from Board of Health funds.

MOTION: It was moved by Mr. Veatch, seconded by Mr. Burch, and carried, that Mr. Everts' salary be supplemented by \$37.50 per month from Sanitary Authority funds. The matter of later increases in salary for the State Sanitary Engineer was discussed informally.

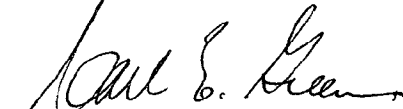
During a discussion of duties of the state sanitary engineer, it was recommended by Dr. Stricker that the state sanitary engineer continue to function as secretary and chief engineer for the Authority as in the past.

Discussion followed regarding moneys available for personnel and the amount which should be offered in obtaining an Associate Sanitary Engineer and the Assistant Sanitary Engineer. MOTION: it was moved by Mr. Veatch, seconded by Mr. Burch and carried, that the state sanitary engineer be authorized to offer up to \$250.00 per month as salary to be paid to an Associate Sanitary Engineer.

MOTION: It was moved by Mr. Burch, seconded by Mr. Stricklin and carried, that a salary up to \$200.00 per month be authorized for an assistant sanitary engineer.

ADJOURNMENT: There being no further business to come before the Authority, the meeting adjourned at 1:30 P.M. to convene on Friday, September 12, 1941, at 10 A.M.

Respectfully submitted,



Carl E. Green
State Sanitary Engineer
Secretary

CEG/hs

TRANSCRIPT OF HEARING
ON
HILLSBORO INDUSTRIAL WASTE DISPOSAL

June 12, 1941

Those present at the hearing were:

STATE SANITARY AUTHORITY

Members:

Harold F. Wendel, Chairman
Albert Burch
Dr. Frederick D. Stricker
Charles E. Stricklin
John C. Veatch

Carl E. Green, State Sanitary
Engineer and Secretary

Curtiss M. Everts, Jr.,
Assistant Sanitary Engineer

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Mr. J. W. Barney, City Manager
Hillsboro, Oregon

Mr. J. W. Barney, City Manager of Hillsboro, appeared before the State Sanitary Authority to discuss the matter of industrial waste disposal confronting his city.

Mr. Wendel: It is your desire to discuss with the Commission your plant at Hillsboro?

Mr. Barney: I want to talk to you about the disposal of our cannery wastes. You are probably not familiar with our problem in Hillsboro, but a few years ago, the city constructed an activated sludge plant to treat its domestic sewage. This plant, I believe, does a pretty good job. There is located in Hillsboro one of the largest canneries in the state, and the waste from this cannery is responsible for conditions in the Tualatin River, and it is this problem that I wish to discuss with you today. So far, we have been unable to find any method

for the disposal of cannery wastes that we believe would be efficient enough to improve conditions in the river. We have considered irrigation and ponding although we realize that following such a plan may cause complaint. We have experimented with ozone treatment, but our results were not conclusive, and some time may elapse before this treatment process is satisfactorily developed. There are great possibilities in the ozone method of treatment for cannery wastes, but as yet we do not have enough information concerning it. Due to the fact that we have just floated a bond issue, and a rather sizeable one for a city of our population, another bond issue will be difficult to obtain.

Mr. Burch: Does the cannery discharge into your sewer system?

Mr. Barney: Yes. We could divorce ourselves from the cannery and force them to take over, but we are more or less obligated to take care of that. We have been charging a service charge for the lines that we built to accommodate the plant and get it into our outfall line, so that I feel that if we break from the cannery, it's going to be disastrous for everyone. Might even run to a court fight.

Dr. Stricker: Do they screen all their wastes?

Mr. Barney: The screen as well as they can. They have been doing a pretty good job of screening this year. Much better than last year.

Dr. Stricker: Are they using grinding pumps? To grind up the solids?

Mr. Barney: No.

Mr. Burch: What type of screens do they use?

Mr. Barney: Rotary, fine mesh screens.

Mr. Burch: Have they ever tried vacuum filters?

Mr. Barney: I believe not.

Mr. Burch: They are expensive to install, but not expensive to operate. They take care of all solids.

Mr. Barney: After the material goes into our plant, we give it primary sedimentation and settle out all settleable solids.

Mr. Wendel: Have you seen the chart showing what these wastes do to the river?

Mr. Barney: No, but I've seen the river.

Mr. Wendel: Is there any hope of a solution in sight?

Mr. Barney: I was wondering how the State Board of Health would feel about irrigation. There is some property available, but there's too much water for the amount of land there. If ponding would be practical, we could control the odors and nuisance.

Mr. Green: Do you have a site?

Mr. Barney: We would have to buy the property owned by Mr. Trent. One farm of a little over a hundred acres.

Mr. Green: During the seasons when there is considerable spring rainfall, while it is more difficult to get rid of the waste, the damage in the stream might be less. The condition of the water during the recreational season is our main concern. Low flows usually occur during this season of the year. There has been developed in southern California a unit called a "vacuator," in which it has been demonstrated that high removal of solids such as cannery suspended solids can be removed in a fairly small unit. Such a unit is now under construction for a large plant in Palo Alto. It looks hopeful that it may be of benefit insofar as that phase is concerned. It may be that ground disposal may be the answer to the other problem.

Mr. Barney: We would simply have to buy the property adjacent.

Mr. Green: The Trent property?

Mr. Barney: Yes. If we use irrigation or ponding, we would have to buy that property. We have spent quite a little money already trying to appease Mr. Trent.

Mr. Burch: You could probably pond there during the summer months.

Mr. Barney: The cannery doesn't operate during the three winter months, and this particular site that we hope to use for ponding is covered by eight to twelve feet of water in the winter.

Mr. Burch: Then there'd be no need to drain it.

Mr. Barney: We might have to take some measures for odor and mosquito control. We could probably put over a plan employing ponding or irrigation. Our people are not at all opposed to cleaning up. In fact, I think we can boast of probably as progressive town as there is in the valley. I think Mr. Green will agree that the city of Hillsboro has tried to solve the problem as best they can. If we are forced to go into a more expensive treatment or disposal system, we will simply have to force the cannery to pay more.

Mr. Veatch: This would just concern cannery wastes only?

Mr. Green: There are two outfall lines, one for the city sewage and one for the cannery. These two lines are kept separate.

Mr. Wendel: As far as ponding would be concerned, that would be a State Board of Health problem.

Dr. Stricker: Are they ponding at Woodburn?

Mr. Green: Yes. They have some odor from that pond when pear packing is on, but the people take it for granted and don't object much.

Mr. Wendel: I think that the proposal that Mr. Barney makes is good.

Mr. Barney: At Woodburn, they grind all their wastes. I was just thinking that by use of screens perhaps we would get off easier. We would have much less solids to decay.

Mr. Burch: Use a vacuum filter for solids. Put in a press and sell for feed.

Dr. Stricker: The cost of packing doesn't pay for food value. Pear wastes are practically all cellulose. It is an expense for them to haul it away, and they don't like to do it any more than they have to.

Mr. Wendel: Do you feel that you're getting better efficiency in the treatment plant in Hillsboro?

Mr. Green: The activated sludge plant is doing better.

Mr. Wendel: I meant from the standpoint of operation.

Mr. Green: Yes. They have been working on ozone experiments, only on a small scale so far, but it might turn out to be something. Mr. Barney, could you go ahead sometime fairly soon with some sort of plan as discussed heretoday?

Mr. Barney: I think so. If we can work out something that isn't too expensive and will meet with the approval of the Sanitary Authority and the State Board of Health. In other words, when I can be able to tell my people that these are the requirements of the Sanitary Authority and the State Board of Health, and that when this is done, it will meet with their approval, I think they will be willing to cooperate.

Mr. Veatch: We want you to work out a practical plan for waste disposal.

Mr. Barney: The council knows nothing about things like this. They just don't know which way to turn, but as soon as something concrete is put before them, they will act upon it.

Dr. Stricker: Does the Carnation Company waste go through your outlet?

Mr. Barney: Yes, through our line. The waste goes through from their plant to our outfall sewer and the river.

Mr. Green: The milk wastes are not so strong as compared to the other wastes.

Mr. Barney: I understand that the ozone treatment of wastes is being used extensively in some places in Europe.

Mr. Green: It has been used in France for some time. There is a company in the United States using it, too.

Mr. Veatch: I knew a Belgian who was working on that. His laboratory tests were fine, but he never could produce it in sufficient quantities to be of practical use for sewage treatment.

Dr. Stricker: For swimming pools and water supplies, we would not recommend it at all. It is uncertain.

Mr. Barney: Probably take a number of years to develop it to where it might be used for sewage.

Mr. Wendel: Do you see a solution in sight?

Mr. Barney: I first thought of irrigation. But after the experience this spring, we find that irrigation alone won't take care of it.

Mr. Green: Have you consulted anyone at the Oregon State College Experiment Station?

Mr. Barney: No. I have looked up in books how much waste can be disposed of by irrigation on land. If conditions were ideal, a hundred acres would consume a lot of water.

Mr. Green: Dr. Powers is an expert on such things. There is a project now to dispose of pulp and paper mill wastes by irrigation on

Lands near Lebanon. You might be able to get some advice and assistance on your problems there. Dr. Powers knows the soils in the Valley, how much water may be applied to them, etc. Don't you think it's a good idea to contact Dr. Powers, Mr. Stricklin?

Mr. Stricklin: It's worth a trial.

Mr. Barney: This soil consists of gumbo and then quicksand. I even thought of digging down into the quicksand strata. It isn't very deep, 8 or 10 feet to the quicksand strata. The only trouble is we can't deal with the gentleman by the river.

Mr. Stricklin: How much water do you estimate it can handle during the summer?

Mr. Barney: 650,000 gallons each 24 hours. With the Carnation Company, it would be a million gallons a day of industrial wastes.

Mr. Stricklin: There are possibilities for irrigation.

Mr. Green: That is why I suggested Powers might be contacted.

Mr. Wendel: The paper mills are very cooperative. They are spending a thousand dollars on research this summer to try to find a way to dispose of their wastes. Why not take it up with the cannery, and see if they would do likewise?

Mr. Green: The college is doing the work. The pulp and paper mill is paying the costs.

Mr. Barney: I believe that if we get some system that is satisfactory all the way around, I think we can bring the cannery people to a reasonable settlement. Also the Carnation Company.

Mr. Stricklin: Mr. Green, why don't the three of you--your office, the city and the college--see if you can work something?

Mr. Green: I would be glad to take it up with the men at the

college, if that meets with your approval, Mr. Barney. They could give us advice as to the capacity of the land to carry water, the type of crops, etc.

Mr. Barney: Would it be feasible to set up for irrigating what we could, and pond the other? Pond half of it or something like that.

Mr. Green: You might be able to put someone on that property to farm it for you and defray some of the cost.

Mr. Barney: I'm afraid that if it was known that we had intentions of buying it, the cost might go up.

Mr. Burch: Some remote farmer might get an option on the place.

Mr. Veatch: Does this waste have any fertilizing value?

Mr. Green: Very little.

Mr. Barney: If we control this one farm, there would probably be 50 or 60 acres more of adjoining property we could irrigate.

Dr. Stricker: Seems to me Trent was rather indisposed to sell.

Mr. Barney: He said once that he would. We wouldn't want to put any money into it until we feel sure we can go ahead. I hope we can work out something that will meet with your approval and not cost too much money.

Mr. Wendel: Thank you, Mr. Barney.