2/21/1967 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.

AGE NDA

STATE SANITARY AUTHORITY MEETING

10:00 a.m., February 21, 1967

Room 36, State Office Building, Portland

- VA. Minutes of regular meeting held December 20, 1966, and special meeting held January 13, 1967.
 - B. Project plans for December 1966 and January 1967.
- C. Weyerhaeuser Company, Springfield. KH 9
- 1). Wigwam burner regulations and control.
- E. Harvey Aluminum Company, The Dalles.
- F. Wah Chang Corporation, Albany.
- vs. City of Troutdale sewage disposal. 1/45,
- A. Cascade Locks federal grant application.
 - I. 1967 Legislative Bills
 - J. Date for water quality standards hearing.

MINUTES OF THE 113th MEETING of the Oregon State Sanitary Authority February 21, 1967

The 113th meeting of the Oregon State Sanitary Authority was called to order by Harold F. Wendel, Chairman, at 10:00 a.m., February 21, 1967, 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., Herman P. Meierjurgen and Edward C. Harms, Jr., Members; Kenneth H. Spies, Secretary; John Denman, Legal Advisor; E.J. Weathersbee, Deputy State Sanitary Engineer; H.M. Patterson and H.E. Milliken, Assistant Chief Engineers; Dr. Warren C. Westgarth, Laboratory Director; Harold W. Merryman, Leo Baton and Joseph A. Jensen, District Engineers; H.W. McKenzie, Leo G. Farr, Associate Sanitary Engineers; Fred Katzel and C.K. Ashbaker, Assistant District Engineers; Clint Ayer, Lloyd Cox, James Sheetz, and Robert Sherwood, Assistant Sanitary Engineers; Glen Carter, Aquatic Biologist; and Bruce Snyder, Meteorologist.

Mr. Joseph Smith of Klamath Falls who has been appointed by Governor McCall to replace Mr. John Amacher as representative of the Game Commission on the Authority Board was unable to attend because of a prior business engagement.

MINUTES:

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler, and carried that the minutes of the December 20, 1966, meeting and the special meeting of January 13, 1967, be approved.

PROJECT PLANS:

It was MOVED by Mr. Wheeler, seconded by Mr. McPhillips, and carried that the action taken on the following 39 project plans and engineering reports for

water pollution control and 6 project plans for air quality control for the months of December 1966 and January 1967, be approved:

Water Pollution Control

<u>Date</u>	Location	Project	Action
12/5/66	Josephine County	Harbeck Fruitdale Engrig. Report	Approved
12/6/66	Joseph	Sewerage system	Prov. app.
12/8/66	Albany	Relief sewer	Prov. app.
12/9/66	Cape Perpetua, USFS	Sewage treatment	Prov. app.
12/9/66	Salem	Phase I, S.Salem relief sewer	Prov. app.
12/14/66	Paisley	Engineering report	Approved
12/16/66	Multnomah County	Fanno Creek Plant improvements	Prov. app.
12/20/66	Central Point	West Pine Villa Subd. sewers	Prov. app.
12/22/66	Coos County	Package plant for Day Motel	Prov. app.
12/27/66	Beaverton	S.P. Co. Service	Prov. app.
12/29/66	Beaverton	Sewer-Cressmoor Drive	Prov. app.
1/4/67	Gresham	Kelley Creek trunk	Prov. app.
1/5/67	Medford	Meadowcrest View Subd.	Prov. app.
1/5/67	Laurelwood Academy	Sewage treatment plant impromts.	Prov. app.
1/5/67	St. Helens	Port industrial sewer	Prov. app.
1/6/67	Central Point	Pine Crest Subd.	Prov. app.
1/6/67	Lake Oswego	Redwood Add.	Prov. app.
1/6/67	Pendleton	S.W. Isaac Ave.	Prov. app.
1/6/67	La Grande	Century Estates	Prov. app.
1/10/67	Ashland	Green Springs Subd. Ext. #1	Prov. app.
1/11/67	Washington County	Oak Hills Units 3 & 5, Rock Creek, Somerset West	Prov. app.
1/12/67	Oak Lodge S.D. I	Concord Terrace #4 and 5	Prov. app.

Date	Location	Project	Action	
1/12/67	Bunker Hill S.D.	Lateral B-3-1	Prov. app.	
1/13/67	Gresham	Green Acres Subd.	Prov. app.	
1/13/67	Metzger San. Dist.	Lateral AO-7-1	Prov. app.	
1/16/67	Sunset Valley S.D.	Revision of Pioneer pump sta.	Prov. app.	
1/16/67	Multnomah County	Prestige Park Subd. sewers and temporary septic tank	Prov. app.	
1/18/67	Multnomah County	Fanno Creek plant chlorine contact tank	Prov. app.	
1/18/67	Roseburg	Sewer extensions	Prov. app.	
1/19/67	Wood Village	Shamrock Terrace Subd.	Prov. app.	
1/19/67	Lake Oswego	LID #102	Prov. app.	
1/23/67	La Grande	Oro Dell Blvd. SID 1-25, Highway Avenue	Prov. app.	
1/23/67	Oak Lodge S.D. I	Lateral F-0-6-a	Prov. app.	
1/23/67	Springfield	S-63 (South 40th Street)	Prov. app.	
1/25/67	West Slope S.D.	West Slope Drainage Basin Report	Approved	
1/25/67	Pendleton	Blue Mt. Heights Subd.	Prov.app.	
1/30/67	Springfield	S-69, Sequoia Park Subd.	Prov. app.	
1/31/67	Winston	Brantley Drive lift station	Prov. app.	
1/31/67	South Suburban S.D.	Mazama Gardens Subd.	Prov. app.	
Air Quality Control				
Date	Location	Project	Action	
12/21/66	Boardman	Riverside High School Incinerator	Comm. subm.	
12/21/66	Salem	Whitaker School Incinerator	Comm. subm.	
12/23/66	Central Point	Central Point Jr. High School - Incinerator	Comm. subm.	
12/29/66	Sa1em	State Dept. of Agriculture - Pathological Incinerator	Not app.	

grand a min The

Date Location Project Action

1/4/67 Salem Dept. of Agriculture Not app. Pathological Incinerator

1/17/67 Detroit Detroit High School Incin. Action pending

HARVEY ALUMINUM

The matter of Harvey Aluminum's request for a formal dismissal of the Order for Continuance of Public Hearing dated April 11, 1961, was continued from the December 20. 1966, meeting of the Sanitary Authority.

Mr. Patterson read a staff report which recommended that (1) the staff continue to monitor in The Dalles area during the 1967 growing season;

(2) the Sanitary Authority dismiss the Order for Continuance of Public Hearing dated April 14, 1961; and (3) the Department of Health, Education and Welfare be requested to conduct studies to determine air quality criteria for fluorides including but not limited to the growth of apricots, cherries, peaches, prunes, alfalfa and pine trees.

This report has been made a part of the Authority's permanent files in this matter.

Mr. Wendel asked if there had been any recent complaints in the area and Mr. Patterson replied no. Mr. Wheeler then asked if staff recommendation No. 1 intended to imply that monitoring would not be continued after 1967. Mr. Patterson said it was planned to monitor until the problem is completely solved. He pointed out that in addition to this the arbitrators will set up about 6 monitoring stations and the Experiment Station will have about 10 during 1967 in their study program. The staff will have access to all that data as soon as they are reported.

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler and carried that the recommendations, with the deletion of the date 1967 in the first recommendation, be adopted.

WEYERHAEUSER COMPANY

The Secretary reported that on January 13 the Sanitary Authority had held a special meeting in the matter of air pollution in the vicinity of the Weyerhaeuser mill at Springfield. At that meeting the staff had submitted five recommendations and a motion had been made, seconded and carried that the Company submit a reply or response within one month regarding these five recommendations. A letter from Mr. John McEwen addressed to the Secretary and dated February 9, 1967, which included a response to the five recommendations, was then read. A list was attached to the letter giving the names and titles of 29 current or recently completed kraft mill air protection research projects. The Secretary stated that he notified Weyerhaeuser Company that their letter would be considered by the Sanitary Authority Board at its meeting today and that the Authority staff would be most anxious to confer with them regarding the selection and retention of a qualified consultant. He said he had also requested more information regarding the 29 research projects which they listed.

In an attempt to find a consultant or group of consultants who would be both qualified and interested in working on this particular problem, a letter had recently been sent by the Secretary to some 16 people or organizations.

- Mr. Merryman informed the members of his observations of conditions since January 13.
- Mr. Farr reported that 79 complaints had been received since the last meeting.
 - Mr. Harms also reported on the observations he had personally made.
- Mr. Meierjurgen questioned item 2, subsection 4, of the Weyerhaeuser reply and asked if the staff felt there had to be agreement on both the Company's

part and the Authority's part before the Company would shut down in order to control the odor. Mr. Harms stated that he did not think it would be a binding agreement but that the Authority would have to depend upon the Company's good faith and sense of public well-being.

Dr. Wilcox asked if the words "The Authority staff" would help.

Mr. Denman said he was concerned with the clarification of the statement under subsection h.

It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler, and carried that the Secretary be directed to seek clarification of item 2, subsection 4, in the Weyerhaeuser letter of February 9, 1967.

Mr. Harms said he thought it was not the deletion of subsection 4, but the clarification from the standpoint as to how agreement had to be reached and how the staff would arrive at any criteria as to excessive air pollution that was needed.

Mr. Wheeler recalled that at the last meeting the staff was directed to approach other industries on this subject and wondered if any response had been received. The Secretary stated a letter had been received only from Boise Cascade.

It was MOVED by Mr. Harms, seconded by Dr. Wilcox, and carried that the requests that were contained in the staff recommendations concerning Weyerhaeuser Company be sent to the other pulp mills with a reminder that the Authority would like to have a response from them as this would apply to those firms that have not replied.

Mr. Harms requested that copies of the letter from Boise Cascade be sent again to the Authority members.

CITY OF TROUTDALE

An engineering report in the matter of raw sewage discharge by individuals in the city of Troutdale to the public waters of the Sandy River, State of Oregon, was read by Mr. Jensen.

Mr. Vosburg, attorney for the Hollingshead Estates, city of Troutdale, and Mr. C.W. Parrish were present to represent the Hollingshead Estate.

Mr. Vosburg said it was correct that they did not assume responsibility for this condition because in their opinion it was the obligation of the city of Troutdale, but they did recognize their responsibility as good citizens and therefore wished to help in any way they could.

It was called to the attention of the board that this sewer in addition to the sewage it carries, also acts as a storm sewer for the city of Troutdale with the street flow being directed into this particular sewer. Mr. Vosburg stated the Hollingshead Estate contributed minute amounts of sewage.

Mr. Denman asked and Mr. Vosburg acknowledged that the buildings owned by the Hollingshead estate include the hotel, cafe, barber shop, rummage shop, liquor store, food lockers, three vacant buildings and two homes. Mr. Denman then asked that if Hollingshead Estate being the lessor actually owns these properties, on what do they base their assertion that the city is responsible. Mr. Vosburg replied that it is in the public street so they assumed that the sewer is the property of the municipality.

Mr. Jensen stated the sewer discharges into the Sandy River not far from a park and swimming areas.

Mr. Wendel asked why it was impossible for the city of Troutdale to provide sewage treatment facilities. He was answered by Mr. Jensen who said that final engineering plans had to be prepared. He said the preliminary engineering report had been completed in November 1965, but he did not

believe the city's engineers had been authorized to go ahead with the final design of the project.

Mr. C.W. Parrish stated that he spent a day in December with Mr. Wierson of CH2M and it was his understanding that Mr. Wierson had filed a supplemental report with the Sanitary Authority.

The Chairman asked Mr. Parrish about the city's financial plan.

Mr. Parrish replied that the city was going to have to have a bond issue and he was sure the residents all want a public sewerage system because they are under continual expense to pump out their individual septic tanks.

Mr. Harms said that he thought the city of Troutdale should be cited, particularly since it is a question of whether or not it is their sewer. It was Mr. Harms' suggestion that any motion made to adopt the staff's recommendations should include the words "city of Troutdale" in Recommendation #14.

Mr. Denman stated he thought that all parties which investigation may show could possibly be a part to this problem should be enjoined.

Mr. Parrish asked if it would be possible to hold this in abeyance for at least a year until the city's sewage treatment plant is in operation in order to not duplicate expenses.

Mr. Wheeler stated that it was his feeling unless the citation is issued and the city of Troutdale is included, that a year from now the situation would probably be the same as it is now.

It was MOVED by Mr. Wheeler, seconded by Mr. McPhillips and carried that the staff recommendations be adopted with the change that the citation include the city of Troutdale, trustees of the Hollingshead Estate, Mr. Robert Dix, Mr. Art Bunting and any others who may be contributing to this problem directing them to appear and show cause, if any exists, why an order should not be issued for abatement of this pollution.

It was MOVED by Mr. Harms, seconded by Mr. Wheeler, and carried that the hearing or citation be conducted before a hearings officer.

CASCADE LOCKS

Mr. Milliken read a staff report dated February 21, 1967 which has been made a part of the Authority's permanent files in this matter. He said that early in July 1966 the city of Cascade Locks had been authorized to receive a priority for a grant for sewage construction under P.L. 660, that due to a turn over of almost all their city officials, the city of Cascade Locks has had a delay in their planning, and that CH₂M has now been retained to design a sewage treatment plant for the city.

Mr. Milliken said the staff of the Sanitary Authority had previously set a date of March 1, 1967 as a deadline for the city to have its financing ready. He said the city had recently indicated that it wants to go ahead with its projects, but will need about 90 days additional time. Mr. Milliken therefore recommended that an extension of time to June 1, 1967 be granted for the city to complete its financing.

It was MOVED by Mr. Harms, seconded by Mr. Wheeler and carried that the extension of time to June 1, 1967 be granted.

The meeting was then adjourned for noon recess and was reconvened at 1:35 p.m.

WIGWAM BURNER REGULATIONS

Mr. McKenzie read a report he had prepared on wigwam waste burners. This report has been made a part of the Authority's permanent files in this matter.

Mr. Wendel asked how much reason there was to believe that the proposed schedule for installation of alternative methods could be attained to which Mr. McKenzie replied he believed it could be attained. Mr. Wendel then said he thought it would be interesting to hear from industry.

Mr. Robert Olinger, representing Associated Oregon Industries, gave a little background on what industry was attempting to do and said he hoped a solution could eventually be worked out. He mentioned H.B. 1376 introduced in the 1967 Oregon Legislature by Representatives Leiken and Ouderkirk which would increase the severance tax on timber for the sole purpose of financing wood waste disposal research studies at Oregon State University in an attempt to find solutions to air and water pollution problems. He said they had a meeting with representatives of the various associations, including Western Forest Industries Association, Western Wood Products Association, and the American Plywood Association. The representatives all voiced approval of the bill. Mr. Olinger stated they had to look at alternate ways of disposing of wood waste. He said that the staff of Forest Products Laboratory at Oregon State University has indicated they want to study various ways of disposing not only by burning but being able to get rid of it some other way. He stated there would be funds available in the neighborhood of \$245,000 for this particular study. They hope with this kind of financing to get some real good looks at ways and means of getting rid of this wood waste. It will be a completely new study and they do not even know if there are proper people available to conduct such a study. Mr. Olinger requested that the regulations be continued for another two years to allow time for the studies and also that the Authority extend variances with the idea that those mills that do not comply with the regulations be subject to immediate citation.

Mr. Harms asked Mr. Olinger if he had been present at the previous meeting of the Authority and seen the movies of the wigwam burners in the Medford area that were shown to which he said he had not seen the pictures.

Mr. Harms said that one of the problems that the staff has in enforcing the regulations is that burners which are complying with the construction requirements emit as much, if not more, air pollution than the ones which are not in compliance because of fuel variables and this type of thing. He said the Authority certainly is not interested in prosecuting somebody just from the standpoint of enforcing compliance with regulations if it isn't going to improve the air pollution situation.

Mr. Wheeler said from his reading of H.B. 1376 it could mean that water pollution could spend as much or more of the fund that was available than air pollution and that it was being directed to water, not air.

Mr. Wendel stated this program apparently would drag on for several years. He said it was his understanding there is a remedy right now that will do the trick and that is by the increase of temperatures, bottom and top, which industry claims is prohibitively expensive. He wanted to know just what the cost would be.

Mr. Olinger stated that was an unknown factor. He thought it would have to get into the area of auxiliary fuels and he did not know of any operation at the present time that has auxiliary fuels as part of the burner to maintain a temperature of 600 degrees.

Mr. Wendel then asked how they could say it would be prohibitively expensive if it has never been done.

Mr. Olinger replied that he was an association man, not a production man, and therefore could not answer that question, but he was sure that many of them have had estimates made of what the cost would be.

Mr. Meierjurgen asked if the proposed termination date would be for phasing out of the wigwam waste burners, to which Mr. McKenzie answered

that was correct and the September 30, 1967 date was for industry to present a program and time schedule for the development, demonstration and installation of alternative methods.

Mr. Wendel asked if there would be any real honest-to-goodness hope that they can come forth with a plan for alternative methods by September, and Mr. McKenzie stated that he thought they could come up with a program and schedule by that time.

Mr. McPhillips stated that since adopting the policy on December 18, 1963, it appeared very little had been done in those three years and now we are talking about another two-year program just on research, with no assurance that anything is going to come up. That will be five years since we started this with no assurance at this time that we are going to be any farther along than we are now.

After considerable discussion by the members of the Authority, Mr. Wendel asked what the desire of the Authority would be.

It was MOVED by Mr. Harms, seconded by Mr. McPhillips, and carried that the Secretary advise the timber products industry of the Authority's intention to adopt a policy in the alternative which would either (1) add regulations providing for improved operation of wigwam waste burners, including providing minimum exit temperatures, recording pyrometers, use of auxiliary fuel, exit gas treatment devices and such other regulations as may be necessary to provide efficient combustion under varying rates of fuel feed without intermittent or batch loading, or (2) prohibit use of wigwam burners in accordance with staff recommendations of January 30, 1967.

Mr. Harms stated that industry should be called to a hearing on this so that they can express their view and see what they think and what can be done in the way of these regulations.

It was MOVED by Mr. Meierjurgen, seconded by Mr. Wheeler, and carried that the hearing date be set some time in the third week of April of this year.

WAH CHANG CORPORATION, Albany

An engineering report dated February 21, 1967, which has been made a part of the permanent files in this matter, was presented by Mr. Lloyd Cox, Assistant Sanitary Engineer.

Mr. Ralph Nielsen, Chief Process Engineer for Wah Chang Corporation, stated that following the visit of the Sanitary Authority staff with the Wah Chang Corporation last May, the Company began a program of trying to determine what material in their waste is toxic. He said they have been trying to find someone to help them in this problem, but have been unable to do so and are, therefore, having to solve the problem themselves.

Mr. Nielsen said that he had given to Mr. Cox a list of 1h different process streams with the chemical analysis which emanate from various parts of the plant. Each stream has been tested with guppies and the firm now has what they consider to be a satisfactory system for treating each of these streams and combining them so that the effluent discharged will not be toxic. At least this testing has worked in their laboratory. He said they are now prepared to lay out an engineering plan which they will present to the staff for approval in two to three months, but could not meet the April 1 deadline as requested.

In response to a question from the Secretary, Mr. Nielsen said they could have the required facilities installed and in operation in eight months.

It was MOVED by Mr. Wheeler, seconded by Mr. Meierjurgen, and carried that the adoption of the staff's recommendations as follows be approved:

- 1. The Wah Chang Corporation immediately retain a qualified consulting firm to approach its waste disposal problem on a systematic basis with definite objectives and a specific timetable for the various phases of study, design and construction of the necessary treatment or control facilities.
- 2. The program objectives be developed around the requirements outlined in the Sanitary Authority's letter of January 19, 1967, to Wah Chang.
- 3. That the above program be submitted to the Sanitary Authority for approval by not later than April 1, 1967, and that the control, treatment and disposal facilities be constructed and in operation by not later than June 1, 1967.
- 4. In the event Wah Chang does not satisfactorily comply with any of the above requirements, that a hearing be authorized and Wah Chang be directed to appear and show cause why an order should not be entered directing it to permanently cease and desist in polluting the public waters of Truax and Murder Creeks and the Willamette River.

WESTERN KRAFT

The Chairman requested a brief report on Western Kraft due to the fact that the staff has received so many complaints about this Company's pulp mill at Albany, and also due to the fact that there had recently been so much in the newspapers about it.

Mr. Patterson said Western Kraft has an expansion modification program under way and has installed an additional recovery furnace to reduce the loading on the furnaces that they previously had. The firm is also checking

out the oxidation towers to prevent more effectively the escapement of sulphur compound that cause the odor. He said the Company has proceeded along this line and in their last monthly report the recovery furnace was in 100% operation. Previous to that their efficiency was very low based on their test results on the oxidation tower. He stated that the Company had recently installed a connection from their boiler stack to their recovery stack in an attempt to heat up the emissions from the recovery furnace so that they would extend to the high cloud area.

It was MOVED by Mr. McPhillips, seconded by Mr. Wheeler and carried that those kraft mills who have not responded by the next meeting to the letter that was sent out be cited to a hearing.

DATE FOR WATER QUALITY STANDARDS HEARING

The Secretary stated that a date should be set for a final hearing on water quality standards for interstate waters and that the date should be set at this meeting.

It was MOVED by Mr. Harms, seconded by Mr. Meierjurgen and carried that the date for the water quality standards hearing be set for May 16, 1967.

(Note: The date was later changed to May 23.)

There being no further business, the meeting adjourned at 3:30 p.m.

Respectfully submitted,

Kenneth H. Spies, Secretary State Sanitary Authority

MOTIONS at Feb. 21 San. Auth. Meeting

Item

- A. Minutes of meeting of Dec. 20, 1966 and Jan. 13, 1967
- It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler, and carried that the minutes of the Dec. 20, 1966 and Jan. 13, 1967 meetings be approved as prepared.
- B. Project Plans
 It was MOVED by Mr. Wheeler, seconded by Mr. McPhillips, and carried that the action taken on the following 39 water quality control projects and 6 air quality control projects be approved.
- E. Harvey Aluminum, The Dalles

Weyerhaeuser Co., Springfield

- It was MOVED by Dr. Wilcox, seconded by Mr. Wheeler, and carried that the adoption of the staff recommendation as follows be approved, with the exception of recommendation No. 1, deleting the year 1967. (attacked)
- and carried

 It was MOVED by Mr. Harms, seconded by Mr. Wheeler/that the request that was contained in the staff recommendations be sent to the other pulp mills that have not replied and remind them that we would like to have a reply from them if this would apply to them.

 It was MOVED by Dr. Wilcox, seconded by Mr. Mr. Wheeler, and carried that the secretary

be directed to seek calrification of Item 2, Subsection 4 in the Weyerhaeuser Company

G City of Troutdale sewage disposal

letter of February 9, 1967.

It was MOVED by Mr. Wheeler, seconded by Mr. McPhillips, and carried that we adopt the staff's recommendation and authorize citation of the city of Troutdale, Hollinshead Estate, Robert Dix, and Mr. Art Bunting and any others who may be directly contributing to this problem to appear and show cause, if any exists, why an order should not be issued.

It was MOVED by Mr. Harms, seconded by Mr. Wheeler, and carried that the hearing should be conducted before a Hearings Officer.

H Cascade Locks

It was MOVED by Mr. Harms, seconded by Mr. Wheeler, and carried that the extension of time as recommended by the staff be granted to June 1, 1967.

D Wigwam Waste Burner regulations and control

It was MOVED by Mr. Harms, seconded by Mr. McPhillips, and carried that we advise the Fimber Products Industry of our intention to adopt a policy in the alternative which will either (1) add regulations providing for improved operation of wigwam waste burners, including providing minimum exit temperatures, recording pyrometers, use of auxiliary fuel, exit gas treatment devices and such other regulations as may be necessary to provide efficient combustion under varying rates of fuel feed without prohibition intermittent or batch loading or (2)/permaps in accordance with staff recommendations of January 30, 1967.

It was MOVED by Mr. Meierjurgen, seconded by Mr. Wheeler, and carried that the hearing date be set some time in the third week of April of this year.

It was MOVED by Mr. McPhillips, seconded by Mr. Wheeler, and carried that those mills who have not responded to the letter that was sent out by the next meeting should be cited to come in.

ZI No action taken.

F It was MOVED by Mr. Wheeler, seconded by Mr. Meierjurgen, and carried that we adopt the staff's recommendation regarding Wah Chang.

Recommendations attached.

J Date for water quality standards hearing

It was MOVED by Mr. Harms, seconded by Mr. Meierjurgen, and carried that May 16, 1967, be set as the date for the water quality standards hearing.

Project Plans

During the month of January 1967 the following 28 sets of project plans and engineering reports were received and the action taken as indicated by the Water Pollution Control Section:

Date	Location	Project	Action
1-4-67	Gresham	Kelley Creek trunk	Prov. app.
1-5-67	Medford	Meadowcrest View Subd.	Prov. app.
1. m 5 m 67	Laurelwood Academy	Sewage treatment plant improvemen	ts Prov. app.
1.a.J.a.G.	St. Helens	Port industrial sever	Prov. app.
1-6-67	Central Point	Pine Crest Subd.	Prov. app.
1.06-67	Lake Oswego	Redwood Add.	Prov. app.
1-6-67	Pendleton	S.W. Isaac Ave.	Prov. app.
1-6-67	La Grande	Century Estates	Prov. app.
1-10-67	Ashland	Green Springs Subd. Ext. //1	Prov. app.
1-11-67	Washington County	Oak Hills Units 3 & 5, Rock Creek, Somerset West	Frov. app.
1-12-67	Oak Lodge S.D. I	Concord Terrace #4 and 5	Prov. app.
1-12-67	Bunker Hill S.D.	Lateral B-3-1	Prov. app.
1-213-67	Gresham	Green Acres Subd.	Prov. app.
1-13-67	Metager San. Dist.	Lateral AO-7-1	Prov. app.
116-67	Sunset Valley S.D.	Revision of Pioneer pump sta.	Prov. app.
1-16-67	Multnomah County	Prestige Park Subd. sewers and temporary septic tank	Prov. app.
l=10=67	Multnomah County	Fanno Creek plant chlorine contact tank	Prov. app.
1-18-67	Roseburg	Sewer extensions	Prov. app.
1-19-67	Wood Village	Shamrock Terrace Subd.	Frov. app.
1-19-67	Lake Oswego	LID #102	Prov. app.
1 mi 23 mi 67	La Grande	Oro Dell Blvd. SID 1-25, Highway Avenue	Prov. app.

Project Plans (Cont.)

Date	Location	Project	Action
1-23-67	Oak Lodge S.D. I	Lateral F-0-6-a	Prov. app.
1-23-67	Springfield	S-63 (South LOth Street)	Prov. app.
1=25=67	West Slope S.D.	West Slope Drainage Basin Report	Approved
1-25-67	Pendleton	Blue Mt. Heights Subd.	Prov. app.
1-30-67	Springfield	S-69, Sequoia Park Subd.	Prov. app.
 1-31-67	Winston	Brantley Drive lift station	Prov. app.
13167	South Suburban S.D.	Mazama Gardens Subd.	Prov. app.

During the month of December, 1966, the following 11 sets of project plans and engineering reports were received and the action taken as indicated by the Water Pollution Control Section:

DA & C		Pto Jest	Action
12/5/66	Josephine County	Harbeck Fruitdale Engrig. Report	Approved
12/6/66	Ĵosepĥ.	Sewerage system	Prove appa
12/8/66	Albeny	Reliei sewer	270v
12/9/66	Cape Perpetus, USFS	Sevage treatment	Prov. app.
12/9/66	Salen	Phase I, S. Salem relief sever	Prov. app.
12/11/66	Paraica.	Engineering report	Approved
12/16/66	Multnomen County	Fanno Creek Plant improvements	Prov. app.
12/20/66	Central Point	West Pine Villa Subd. sewers	Prov. app.
12/22/66	Coos County	Package plant for Day Notel	Pio Cijo
12/27/66	Beaverton	S.P. Co. Service	Prove appe
12/29/66	Beaverton	Sewer-Cressmoor Drive	Prov. app.

PROJECT PLANS AND REPORTS

The following plans or reports were received and processed by the Air Quality Control staff during the month of January 1967:

Date			ACCONTACTO
2 v.	Salen	Dept. of Agriculture Pathological Treinerator	Not approved
] \$ <u>]</u>	Detroit	Detroit High School Incinerator	Action rending

PROJECT PLANS AND REPORTS

The following plans or reports were received and processed by the Air Quality Control staff during the month of December 1966:

Dig Co	location	PLO JEC E	The second secon
21	Boardman	Riverside High School Incinerator	Comments submitted
2 mg	Salem	Whitaker School Incinerator	Comments submitted
23	Central Point	Central Point Jr. High School - Incinerator	Comments submitted
29	Salem	State Department of Agriculture - Patho- logical Incinerator	Not approved

STATE REPORT

Weyerhaeuser Company, Springfield Status Report on Air Pollution Investigations January 10, 1967

In September 1964 the Sanitary Authority granted conditional approval to air and water pollution control procedures and facilities proposed by Weyerhaeuser Co. in connection with expansion of its kraft pulp and paper mill at Springfield from 400 ADT/day to 1150 ADT/day of Kraft pulp and paper board.

The Weyerhaeuser Co. proposal incorporated all known techniques and equipment to keep air polluting emissions to the lowest possible levels. Sanitary Authority staff opinion was that some increase in area air pollution would occur as a result of the expansion but the extent of the increased air pollution and the resultant effects on the community could not be accurately predicted.

Sanitary Authority approval was finally given subject to the condition that if proposed methods for controlling air and water pollution were not entirely successful as represented by the company, such further control, disposal or treatment of air and water polluting wastes would be provided as required to prevent or eliminate validly objectionable air or water pollution.

It was further clearly stated in the letter of conditional approval that it was the intention of the Sanitary Authority that no increases in air or water pollution shall occur, after a reasonable period of adjustment, as a result of the company's expanded operation.

Weyerhasuser Company had experience some air pollution problems at the time production was initiated at its Springfield plant in 1949 at a production capacity of 150 ADT/day. Through company efforts, these problems were

brought under satisfactory control. Between 1949 and 1964 production was gradually increased to and operated at a nominal capacity of 460 ADT/day with very few complaints of air pollution. After Weyerhaeuser announced its proposed expansion to 1150 ADT/day, complaints of air pollution received by the Samitary Authority increased markedly and have continued on an intermittent basis with the numbers of complaints being generally related to adverse weather conditions and possibly aggravated by start-up problems and breakdowns of air pollution control equipment at the mill.

Complaints of alleged air pollution resulting from the Weyerbasuser,

Springfield Kraft mill have included: reduced visibility, malodors, excessive particle fallout, accelerated corresion, and impairment of health
and well being.

STAFF INVESTIGATIONS

The Sanitary Authority staff has attempted, within the limits of its resources, to evaluate the nature and extent of the air pollution problem associated with the Weyerhaeuser, Springfield mill. These efforts have included: odor surveys, reduced visibility surveys, collections of particle fallout and suspended particulates, sampling for hydrogen sulfide and mercaptans, corresion surveys, meteorological studies, and complaint follow-up.

SURVEY RESULES

Staff findings are summarized as follows:

1. Reduced Visibility

Visibility effects have been evaluated by visual inspections and recorded by pictures. Staff observations indicate that stack emissions generally exceed Sanitary Authority opacity regulations and that these emissions contribute significantly, along with numerous other sources, to reduced visibility in the area during periods of inversion and low wind speeds.

2. Particle Fallout

Particle fallout stations have been operated continuously at selected locations around the Weyerhaeuser Mill since July 1964, prior to start-up of the expanded production facilities in July 1965. Suspended particulate matter has been collected periodically by means of high volume air samplers. Visual observations of apparent saltceles fallout have been noted. It was concluded in the Sanitary Staff Report of April 14, 1966, based upon particle fallout data collected up to that time, that a significant area fallout problem attributed to Weyerhaeuser Company could not be demonstrated.

Particle fallout and suspended particulate data collected since April 14, 1965, appear to support the conclusion of the April 14, 1966 report.

However, since the fallout and suspended particulate data do not correlate well with abnormal fallout of light-weight material actually observed for short periods, it now appears that long-term particulate sampling and reporting on a weight basis may not be an accurate and meaningful measure of the actual fallout situation.

Additionally, chemical analyses of particle fallout samples collected in the area show concentrations of sodium and sulfate which are significantly higher than background levels. Sodium and sulfate concentrations also are higher at stations located near the Veyerhacuser Will and west of the mill in the directions of generally lower wind velocities. Most of the complaints of excessive corrosion have been received from an area near the fall-out stations (#14 & #29) where high concentrations of sodium and sulfates have been found.

Stack emission data submitted by Weyerhaouser Company show that total solids currently being emitted are within the range of total solid emissions reported prior to start-up of the expanded facilities.

Current hydrogen sulfide and mercaptan emissions are reported to be lower than levels submitted for the partial prior to the mill expansion.

3. Accelerated Corrosion

Several complaints of accelerated corresion alleged to have been caused by fallout from the Woyerhaeusor mill have been investigated by the Sanitary Authority staff. Automobile finishes, exposed metals and particularly trailer houses examined showed signs of excessive corrosion. These observed conditions, in general, appear to be related circumstantially, by virtue of their locations, to the Weyerhaeuser emissions. White fallout material in high concentrations was observed during several investigations of corrosion complaints. Laboratory analyses of samples of this material showed sodium concentrations in excess of 10% by weight. The high sodium concentrations are significant evidence that the fallout material is definitely from an unnatural source in the area. We do not as yet, however, have sufficient information to conclusively link the fallout material or the observed corrosion with any particular source or effect.

4. Clora

Odor surveys have been conducted by several methods including odor intensity observations at fixed stations, odor surveys to determine odor intensity patterns for conditions existing at the time of survey and tabulation and follow-up of odor complaints.

It was concluded in the April 14, 1955, staff report that kraft-type odors were observed at such intensities and frequencies to constitute a widespread area odor nuisance in the Eugene-Springfield area. It was further concluded that higher intensity kraft-type odors were observed with greater frequency after expansion than were observed before the expansion.

Odor surveys made at eleven fixed stations subsequent to April 14, 1966, up to September 2, 1966, confirm that existence of an area odor nuisence resulting from kraft-type odors and the increased frequency of higher intensity odors after expansion than before expansion. Recent surveys have indicated that the waste water ponds have intermittently contributed to a localized odor problem.

AISI lead-acetate tape samplers were operated continuously at strategic locations for the purpose of measuring hydrogen sulfide levels. In addition, on three different occasions, samples were collected downwind in the visibile plume by means of gas impingers and analyzed for H_oS and total mercaptans.

H₂S, measured by ATSI samplers, was detected at all stations and at levels above the odor threshold (>1 ppb) at most all stations. Highest intensities of H₂S were measured with greatest frequency in areas of most numerous complaints of odor. The maximum H₂S concentration measured was less than 10 ppb. Cas impinger samples collected under the plume in areas of distinct odor showed H₂S concentrations ranging from 0 to 1.9 ppb and total mercaptans concentrations ranging from 0 to 219 ppb. The threshold odor concentrations for total mercaptans is considered to be approximately 0.3 ppb.

5. Health Implications

A number of complaints have been received alleging adverse health effects resulting from Wayerhacuser emissions. The Sunitary Authority staff is not qualified to evaluate health effects, and especially long-time chronic effects; however, measured concentrations of H₂S and mercaptams have been well below toxic levels reported in the literature.

0534-AQC 1/13/67-40

CONCLUSIONS

- 1. Reduced visibility frequently occurs in the Eugene Springfield area as a result of emissions from multiple sources and adverse weather and topographic conditions.
- 2. Particle fallout of a white precipitate has been observed coincident with odors from the Weyerhaouser emissions. This fallout is sporadic and therefore does not show large amounts on mentaly particle fallout measurements.
- 3. Reported instances of metal and paint corrosion that were investigated by the staff could not be pin-pointed for cause although the occurrences are in general located under the Voyenhaeuser odor plume.
- 4. Kraft type odors at intensities and frequencies that constitute a widespread nuisance exist in the Eugene-Springfield area during all seasons
 of the year. The direction of the odor "plume" is determined by the action
 of wind and topography.
- 5. Mercaptans and H₂S can be measured at or above threshold intensities coincident with odors.
- 6. Compassints of Kraft type odors lie in the same general ereas-as those indicated by Samitary Authority staff odor surveys.
- 7. Alleged health problems that have been attributed to the Weyerhaeuser emissions by complainants can not be evaluated or correlated with measured emissions by the Sanitary Authority staff.

RECOMMENDATIONS

It is recognized by the Sanitary Authority staff that the Wayerhaeuser Kraft mill at Springfield utilizes assentially all known, proven techniques and facilities to control and minimize its air polluting emissions.

It is generally conceded that it is doing as good a job or better than any other known Kraft mill in this regard.

The air pollution problem, primarily an odor nuisance problem, in the Ergene-Springfield area results from the residual odorous emissions from the production of 1150 ADT/day of Kraft pulp and paperboard in close proximity to a densely populated area which unfortunately has meteorological conditions unfavorable to dispersing air polluting emissions.

The Sanitary Authority staff does not know of any presently available control equipment or reasonable modifications of the Kraft process which will solve the characteristic Kraft odor problem.

With the above qualifications in mind, methods and procedures to obtain reductions in air polluting emissions to acceptable levels are recommended as follows:

- 1. That the Sanitary Authority be immediately notified of equipment breakdown or malfunction that is likely to result in increased emission of air pollutents.
- That a program of production curtailment or shut down be followed as
 necessary to prevent excessive air pollution during periods of equipment
 breakdown or malfunction.
- 3. That the use of continuous gas emission analyzers be investigated as a means of insuring maximum efficiency of operation and emission control.
- 4. That construction of a conventional primary clarifier with continuous sludge removal be considered as a substitute for the existing primary sedimentation pond.
- 5. That a qualified independent consultant or group of consultants be retained to study the Weyerhaeuser Company's odor problem, in depth, with the objectives of evaluating emission effects, present profedures and controls, and suggesting possible improvements and/or specific research approaches to solution of the characteristic Kraft odor problem.

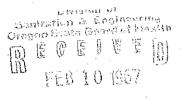
It is generally conceded that it is doing as good a job or botter than any other known Kraft mill in this regard.

The air pollution problem, primarily an odor nuisance problem, in the Eugene-Springfield area results from the residual edorous emissions from the production of 1150 ADT/day of Kraft pulp and paperboard in close proximity to a densely populated Grant which which which that netoprological conditions unfavorable to dispersing air polluting emissions.

The Sanitary Authority staff does not know of any presently available control equipment or reasonable modifications of the Kraft process which will solve the characteristic Kraft odor problem.

With the above qualifications in mind, methods and procedures to obtain reductions in air polluting emissions to acceptable levels are recommended as follows:

- 1. That the Sanitary Authority be immediately notified of equipment breakdown or malfunction that is likely to result in increased emission of air pollutants.
- 2. That a program of production curtailment or shut down be followed as necessary to prevent excessive air pollution during periods of equipment breakdown or malfunction.
- 3. That the use of continuous gas emission analyzers be investigated as a means of insuring maximum efficiency of operation and emission control.
- 4. That construction of a conventional primary clarifier with continuous sludgo removal be considered as a substitute for the existing primary sedimentation pond.
- That a qualified independent consultant or group of consultants be retained to study the Weyerhacuser Company's odor problem, in depth, with the objectives of evaluating emission offects, present procedures and controls, and suggesting possible improvements and/or specific research approaches to solution of the characteristic Kraft odor problem.





Weyerhaeuser Company

ONF TEMP PERM

P.O. Box 275 Springfield, Oregon 97477 Telephone: A/C 503 • 746-2511

February 9, 1967

Mr. Kenneth H. Spies Director and Chief Engineer Oregon State Sanitary Authority P.O. Box 231 Portland, Oregon 97207

Dear Mr. Spies:

Reference is made to your letter of January 16, 1967 and the report made by your staff to the Authority at its meeting on January 13, 1967. The section titled "RECOMMENDATIONS" on pages 7 - 8 of the staff report contains five recommendations which were made "with the qualifications in mind" stated in that section of the report. Our following response is similarly conditioned.

- l. The Company will immediately notify the Authority of any equipment breakdown or malfunction that is likely to result in an appreciable increase in the emission of air pollutants.
- 2. We are in agreement with the second staff recommendation. We believe that such a program should be based upon (1) the notice which will be given under Recommendation 1; (2) consultation with you or your designated representative;
- (3) a consideration of the facts and circumstances involved on a case-by-case basis; and (4) agreement between the Authority and the Company as to any appropriate and necessary curtailment or closure.
- 3. We have investigated and will further investigate the use of continuous gas emission analyzers as a means of insuring maximum efficiency of operation and emission control, and will report to you the results and conclusions that we reach.
- 4. We will continue to give consideration to the possible use of a conventional primary clarifier. We are also studying other equipment which may provide acceptable control of odor from the primary sedimentation pond.

Mr. Kenneth H. Spies February 9, 1967 Page 2

5. We are in agreement with the general purposes and objectives of Recommendation No. 5, but believe it necessary that we meet with you at a mutually convenient time to discuss and agree upon the selection and retention of a qualified consultant not connected with the Authority or the Company to make such a study and report.

In response to the request of the Authority at its January 13 meeting, we attach a list of 29 current and recently completed kraft mill air protection research projects. This includes eight projects of the National Council for Stream Improvement, four projects of the Northwest Pulp and Paper Association, five projects of the United States Public Health Service, and twelve Weyerhaeuser Company projects.

IN A THE PROPERTY HE READ

Yours very truly,

J. M. McEwen Area Manager

JMMcE: bh Attach.

RESEARCH PROJECTS

National Council for Stream Improvement

Analytical Techniques for Ambient Air
Analytical Techniques for Stack Analysis
Black Liquor Oxidation
Condensate Treatment
Wet Scrubbers

Thermal Oxidation of Malodors

Chemical Absorbents and Oxidants

Sponsors Conferences such as the 1966 Sanibel

Conference Co-sponsored with U.S.P.H.S. and

University of Florida

Northwest Pulp and Paper Association

Formation of Malodors
Condensate Study
Analytical Techniques
Sponsor's Seminars

United States Public Health Service

Identification of Kraft Combustion Products
Formation of Malodors in Digestion Process
Reactions of Sulfurous Compounds
Chromatography
Odor Thresholds of Kraft Mill Emissions

Weyerhaeuser Company

Wet Scrubbers

Bag Filters for Removal of Suspended

Particulate '

Thermal Oxidation of Malodors

Catalytical Combustion of Malodors

Chemical Conversion of Odorous Material

Plume Vapor Condensation

Stack Effluent Dilution

Condensate Treatment

Stack Design and Location

Vent Collection Systems

Analytical Technique

Ambient Air Surveys

February 14, 1967

Mr. John M. McEwen Area Manager Weyerhaeuser Company P. O. Box 275 Springfield, Oregon 97477

Dear Mr. McEwen:

This will thank you for your letter of February 9, 1967, in which you respond to the five recommendations made by the Sanitary Authority staff at the meeting on January 13, 1967.

Copies of your letter have been forwarded to the members of the Authority and will be considered by them at their next meeting on February 21.

In connection with Recommendation No. 5, we are most anxious to confer with you regarding the selection and retention of a qualified consultant. Thus far we do not have any more leads than we did when we last discussed this with you in your office on January 9, but we are hoping to make some contacts shortly which might prove helpful.

In the meantime we respectfully request that you furnish us with more detailed information regarding the research projects that you listed with your letter. We would like to know, for example, where each project is being conducted, the names of the researchers, the purpose, scope and status of each project, and any other details which would permit a full evaluation of the research currently under way.

Very truly yours,

Kenneth H. Spies Secretary and Chief Engineer State Samitary Authority

KHS Avt

February 17, 1967

Karl Dittmer, Dean Division of Science Portland State College Portland, Oregon

Dear Dean Dittmer:

We are seeking expert advice and assistance for solution of an extremely complex air pollution problem that exists in the vicinity of the two cities of Eugene and Springfield located in the upper Willamette Valley of Oregon.

16 million and appear

This particular problem is caused by the odorous emissions resulting from the production of unbleached kraft pulp by the Weyerhaeuser Company at its 1150 tons/day pulp and paperboard mill located at Springfield. The problem is primarily one of objectionable odors; however, some saltcake fallout and accelerated corrosion have been noted.

It is believed that at this mill, the Weyerhaeuser Company at the present time is utilizing essentially all known and proven techniques and facilities for controlling and minimizing air polluting emissions. It is generally conceded that this mill is doing as good a job or better than any other known kraft mill in this regard. In spite of all the efforts that have been made thus far, objectionable odor nuisance conditions are still being caused which prompt large numbers of residents in the area to complain and to petition to the State Sanitary Authority for relief.

The Weyerhaeuser Company has indicated its willingness and desire to solve this problem provided a feasible and practical solution can be found. It has been proposed that a qualified independent consultant or group of consultants be retained to study in depth this particular problem with the objectives of evaluating emission effects as well as the procedures and controls presently being utilized by Weyerhaeuser Company and of suggesting possible improvements or specific research approaches to solutions of the characteristic kraft odor problem.

February 17, 1967 Dean Dittmer If you know of anyone who might be interested in and qualified to undertake or assist with such an assignment, we would be most grateful if you would refer them to us. Any other suggestions or comments which you might have that would assist in solving this problem would also be greatly appreciated. Very truly yours, Kenneth H. Spies Secretary and Chief Engineer State Sanitary Authority KHS:ph

KRAFT PULP MILL INQUIRY LIST

Karl Dittmer, Dean Division of Science Portland State College Portland, Oregon

Dr. Amos Turk Consulting Chemist Tarrywile Lake Road Danbury, Conn.

C. I. Harding, Ph.D. Air Pollution Laboratory University of Florida Gainesville, Florida

F. E. Murray, Head Division of Applied Chemistry British Columbia Research Council Vancouver 8, Canada

C. R. Walbridge
Manufacturing Chemists' Association
246 Woodward Building
15th and H Streets, N.W.
Washington 5, D.C.

Dr. John H. Ludwig, Associate Director Control Technology Research & Development 4676 Columbia Parkway Cincinnati, Ohio

Professor Irwin Douglas University of Maine Orono, Maine

Louisiana State University Baton Rouge, Louisiana

U. S. Forest Products Laboratory Madison, Wisconsin

Stanford Research Institute Menlo Park, California 94025

Dr. J. L. McCarthy Dean Graduate School University of Washington Seattle, Washington Austin N. Heller, Chairman Resolutions Committee Sanibel Conference Dept. of Health, Education & Welfare Robt. A. Taft San. Eng. Center 4676 Columbia Parkway Cincinnati, Ohio

Dr. Arthur S. Flemming, President University of Oregon Eugene, Oregon

Dr. James H. Jensen, President Oregon State University Corvallis, Oregon

D. F. Williamson, Vice President Sandwell International Inc. 1500 Standard Plaza Portland, Oregon 97204

Ralph Roderick*
Cornell, Howland, Hayes & Merrfield
1600 Western Avenue
Albany, Oregon

* Revised letter sent to these two.

STAFF REPORT VAH CHANG CORPORATION, ALBANY, OREGON WATER POLLUTION CONTROL SANITARY AUTHORITY MEETING

February 21, 1967

History of Problems

The Wah Chang Corporation constructed facilities for zirconium production in Albany in the spring of 1957. Prior to this time, pilot plant operations were carried out at the Albany Bureau of Mines facilities.

Shortly after startup of the zirconium plant in early summer of 1957, plans were formulated to add a new zirconium-hafnium separation process, which had been operating at the Bureau of Mines facility.

On September 13, 1957, plans for waste treatment facilities at Wah Chang were submitted to the Oregon State Sanitary Authority by Cornell, Howland, Hayes and Merryfield (CH₂M) of Corvallis. These plans were "reviewed and granted approval with the provision that if at any time the proposed waste treatment and disposal facilities are found to be inadequate to prevent pollution of the receiving waters, the company upon instruction from the Sanitary Authority will immediately provide such additional facilities as are necessary to abate said pollution".

The initial plans provided for (1) the addition of lime for neutralization of pH, (2) the impoundment of the overflow from the lime pit in an open lagoon, and (3) the discharge of the overflow from the latter into an adjacent creek which flows into the lower portion of Second Lake. Second Lake overflows to Third and Fourth Lakes and thence into the Willamette River.

The first reported incidence of deviation from approved waste treatment practices was noted by Mr. Spies and Mr. Carter of the Oregon State Sanitary Authority on February 21, 1958. An on-site inspection revealed that because of high river flow the weir logs had been removed from the overflow box of the lagoon, and the westes were flowing directly through the lagoon. Because of this, there was some loss of sludge from the settling ponds to the slough. Mr. Ralph Nielsen of Wah Chang reported that the overflow was being moved and a second lagoon would soon be put into operation to provide alternate ponds to facilitate sludge removal. In April of 1958, Wah Chang notified the Authority by letter that the new pond had been constructed and was in operation.

On April 26, 1960, a complaint was received by the Authority regarding a fish kill in the vicinity of Wah Chang, and specifically in Second Lake. The complaint arose from an investigation of this area by the Oregon State Came Commission.

On May 19, 1960, Mr. Glen D. Carter, aquatic biologist on the Sanitary Authority staff, surveyed the slough carrying waste effluents from Wah Chang to the lakes. His findings revealed that the stream was completely devoid of aquatic life. Also, it was observed that much settleable material was on the stream bottom below the pond overflow.

By letter of June 7, 1960, the Wah Chang Corporation was informed of field observations made by the Authority staff. Also, chemical analyses of grab samples taken at the pond's effluent weir revealed a pH of 3.8 and an estimated ammonium concentration of 200 mg/L. It has been demonstrated that the harmful concentration of ammonia for various species of fish range from 0.3 to 17.1 mg/L.

Recommendations were made to (1) separate all non-polluted waters and route them around the detention ponds, (2) provide separate overflow weirs for each pond to avoid disturbances during sludge removal operations,

and (3) increase frequency of sludge removal and/or provide a pre-sedimentation unit to avoid spillage of toxic wastes. It was also recommended that a registered professional engineer be retained to assist in the development of an acceptable solution. To the best of our knowledge, recommendation No. two (2) was the only one complied with by Wah Chang.

On September 9, 1960, Mr. Don Benson, also of the Authority staff, surveyed the aforementioned area and reported similar findings, i.e., absence of aquatic life, grey brown bottom slime, slight odor characteristic of this type waste, and apparent absence of dissolved oxygen.

Sporadic complaints and subsequent investigation revealed no noticeable change in stream conditions following the correspondence in 1960.

Meetings to discuss air and water pollution problems were held on December 14, 1964, and January 18, 1965, with Wah Chang personnel. As a result of these meetings, Wah Chang agreed to conduct a series of tests to determine, if possible, what toxic components, if any, were being discharged to Truax Creek. All information obtained was to be forwarded to the Sanitary Authority at monthly intervals. For the next several months, Wah Chang did perform some tests on their effluent; but because of lack of confidence by the company in their results, this information was not released.

On May 4, 1966, Mr. Glen Carter and Mr. Bryan Johnson of the Sanitary Authority staff conducted field bicassays on streams receiving wastes from Wah Chang's operations. The three bicassays performed produced 100% fish mortality in 5 minutes, which demonstrates the toxic effects of the wastes discharged (for details see attached memo of 5/16/66 from Mr. Carter to members of the Sanitary Authority staff—Appendix A). Live fish were observed in the log pond and in Truax Creek and Murder Creek above the Wah Chang plant.

By letter of May 27, 1966, Mr. Bryan Johnson informed Wah Chang of the bioassay results previously mentioned. It was requested that monthly progress reports be submitted to the Sanitary Authority and that May 1, 1967, be established as a deadline for final solution. The only progress report was received on July 8, 1966.

On December 12, 1966, a letter was received from the Corporation indicating that they were proceeding with engineering and layout to accomplish adequate waste treatment and that plans would be submitted to the Sanitary Authority by January 8, 1967. Our last correspondence from Wah Chang was their letter of January 13, 1967, which was in part a progress report and stated that engineering and layout plans were not being submitted at that time. The letter stated that they would try to have a workable procedure developed by the end of the month and would keep us informed of their progress.

On January 19, 1967, a letter was directed to Mr. Ralph Nielsen, Chief Process Engineer, informing him of the staff's disappointment that a former commitment to submit plans by January 8, 1967, could not be met. The letter requested submission of a detailed progress and timetable prior to this meeting; and if such was not received, this matter would be brought before the Sanitary Authority at this meeting.

Sunmary

The Wah Chang operations in Albany have created serious pollution conditions in Murder Creek and Truax Creek since startup of their facilities in the summer of 1957. Repeated investigations by the Sanitary Authority staff have revealed that there is a complete absence of aquatic life below the company's waste outfall. The personnel of Wah Chang have been made

aware of the toxicity problem from the beginning but have not successfully abated their pollution problem. The Sanitary Authority has repeatedly contacted the company and asked for a pollution abatement program to no avail (see Appendix B). A deadline of May 1, 1967, was set for a final solution to the problem.

Our letter of Jamuary 19, 1967, outlined the following requests:

- 1. That a permanent over-all solution to the problem be accomplished and included the following requirements:
 - A. Reduction of toxicity to the point where no mortalities to fish will occur during 96-hour bioassays.
 - B. Removal of settleable solids.
 - C. Removal or reduction of waste characteristics that will otherwise cause physical, chemical or biological pollution of the receiving waters.
 - D. Adequate controls, monitoring systems, testing, and reporting procedures to ensure doing and demonstrating an effective job on a continuous basis.
- 2. It was also requested that Wah Chang submit a program and timetable for meeting within a reasonable time, the requirements listed under No. 1 above prior to this meeting.

We have received no response from Wah Chang to our January 19, 1967, letter.

Recommendations

The Sanitary Authority staff submits the following recommendations for your consideration and approval:

- 1. The Wah Chang Corporation immediately retain a qualified consulting firm to approach its waste disposal problem on a systematic basis with definite objectives and a specific timetable for the various phases of study, design and construction of the necessary treatment or control facilities.
- 2. The program objectives be developed around the requirements cutlined in the Sanitary Authority's letter of January 19, 1967, to Wah Chang.
- 3. That the above program be submitted to the Sanitary Authority for approval by not later than April 1, 1967, and that the control, treatment and disposal facilities be constructed and in operation by not later than June 1, 1967.
- 4. In the event Wah Chang does not satisfactorily comply with any of the above requirements, that a hearing be authorized and Wah Chang be directed to appear and show cause why an order should not be entered directing it to permanently cease and desist in polluting the public waters of Truax and Murder Creeks and the Willamette River.

Office Memorandum • OREGON STATE BOARD OF HEALTH

To: KHS, EJW, HEM, BMJ Date: May 16, 1966

From : GDC

Subject: IW 4-0 Wah Chang, Albany

In order to get final proof of toxic wastes in Truax and Murder Creeks from the Wah Chang Corporation, Bryan Johnson and I went to the streams on May 4, 1966, and conducted three field bioassays. These were carried out by holding juvenile squawfish (two inches long) in screened cages and merely allowing the creek's water to run through.

Murder Creek, Truax Creek, and the log pond feeding Truax Creek below Wah Chang all had living fishes in good numbers and variety above the point of waste influx. Thus, we saw no reason to put in a livebox for control.

In the creeks below Wah Chang's waste dumping point we made the following observations:

Data_	Truax Creek at Western Kraft pump —road culvert		Murder Creek 50 feet above con- fluence with Truax Creek		Murder Creek at 3rd Lake con- fluence with Willamette R.	
Time		11:20		12:30		1:10 ,
Creek flow (estimate)		3 cfs		2 cfs		5 cfs
Temp. °C		19		19	٠	21
pH		6.8		7.4		7.3
DO		5.3		3.1		3.5
No. fish in cage		14		20		15
Time lapse to first mortality	:	3 min.		2 min.		l min.
Time lapse to total mortality		5 min.		5 min.		5 min.

Murder Creek above the Wah Chang IW influx had a DO of 8.7, pH of 7.0, and temperature of 18.

Our fish supply came from a shallow shore water in the Willamette River where the water temperature was 14° C.

No further comment is needed beyond the above data to show that we are in need of treating Wah Chang's wastes to a point of having no lethality in a 96-hour bloassay upon leaving their premises.

Appendix B

Chronology of SANITARY AUTHORITY Files re: Water Pollution - Wah Chang
IW 14-0 Metals - Wah Chang, Albany Division

- 1. Jameary 19, 1967 letter from Mr. Spies to Ralph Nielsen expression of disappointment regarding no submission of plans and outline of Sanitary Authority requirements of Wah Chang.
- 2. January 13, 1967 letter from Ralph H. Nielsen, Chief Process

 Engineer "will try to have a workable procedure developed by the end of this month and will keep you informed of our progress."
- 3. December 10, 1966 letter from Mr. Nielsen "will submit plans by January 8, 1967."
- 4. November 30, 1966 letter from Bryan Johnson to J. H. McClain, requesting letter of intent by not later than December 12, 1966, and also projected timetable.
- 5. July 25, 1966 letter from Bryan Johnson to J. H. McClain in answer to Wah Chang letter of July 7, 1966, and specifying no mortalities to fish in 96-hour bioassay; no direct discharge to Willamette River.
- 6. July 7, 1966 letter from J. H. McClain, Assistant to General Manager,
 Wah Chang Corporation "first progress report."
- 7. May 27, 1966 letter re: meeting with Oregon State Sanitary Authority staff and Wah Chang representatives on May 20, 1966. Letter pointed out fish mortalities, suggested deadline for final correction of problem by May 1, 1967, and requested monthly progress reports.
- 8. May 20, 1966 meeting of Oregon State Sanitary Authority staff and Wah Chang representatives (see letter May 27, 1966).
- 9. May 4, 1966 field bioassays by Glen Carter and Bryan Johnson on Truax Creek and Murder Creek. (See memo of May 16, 1966, OSSA files.)
- 10. April 5. 1966 field investigation by Glen Carter; "extremely toxic conditions evident."
- 11. April 19, 1965 conference between Bryan Johnson, Oregon State
 Sanitary Authority, and Ralph Nielsen, John Gobb, and Carl
 Ludwig, Wah Chang Corporation. (See memo April 26, 1965.)
- 12. January 25, 1965 letter from Bryan Johnson to Mr. Stephen Yih, Wah
 Chang General Manager, requesting effluent testing and reporting. Referred to meeting on January 18, 1965.

- 13. January 18. 1965 discussion Bryan Johnson and Er. Yih (see letter January 25, 1965).
- 14. December 21. 1964 Letter from Bryan Johnson to Mr. Stephen Yih, requesting Wah Chang to conduct effluent analysis and continuous effluent sampling program.
- May 29. 1964 field investigation by Glen Carter and Ed Cuan;
 "creek was void of aquatic life, both plant and animal,"
 "sludge from company's industrial waste lagoon lined the shores."
- 16. June 9, 1960 letter from Mr. Nielsen; answer to recommendations by Samitary Authority, see letter of 6-7-60, installation of separate overflow weirs and inlets for each of 2 ponds.
- 17. June 7, 1960 letter from Mr. Spies; "at the time of inspection dead fish were observed for more than a mile below your outfall," "much settleable material, similar to that contained in the settling pends, was observed on the stream bottom below the pend overflow."
- 18. February 2h, 1958 letter from Mr. Everts; "at the time of inspection (2-21-58) the wastes were flowing straight through the basin because the water level had been lowered by removing all stop logs from the overflow structure."

Western Kraft Complex Fourth . Lake WAH CHANG CORPORATION Albany , Oregon February, 1967 Creek FABRICATION Murder FACILITIES BLDG Willamette TANTALUM É COLUMBIUM PROD. SETTLINER ZIECONIUM PROD.

"APPENDIX C"

Before The Samitary Authority Of The State of Oregon

In the Matter of Raw Sewage)
Discharge by Individuals in)
The City of Troutdale into)
the Public Waters of the Sandy)

River, State of Oregon

ENGINGERING REPORT

Based on investigations made by and files of the Sanitary Authority, the following information is presented in the matter of discharge of raw sewage to the Sandy River by homes and businesses connected to an old private sewer in the City of Troutdale.

While working on a pollution registry in November 1965, Sanitary Authority staff discovered an 8 inch tile sewer outfall to the Sandy River at a point about 100 yards downstream from Bissinger Company's wool pullery. It was noted for subsequent follow up, but staff limitations did not allow this until September 1965 when it was reported that the City of Troutdale had a sewer outfall to the Sandy River.

Investigation by District Staff produced information that the sewer in question had been constructed by the Blitz Weighard Beer Company around 1907 to serve buildings in Troutdale which were owned by them at that time. Dye testing showed that the entire business block between Dora and Harlow Streets, except one store plus several homes on Harlow Street, contribute to the flow in this old sewer. Those connected to the sewer include a hotel, case, barber shop, rummage shop, liquor store, food lockers, three vacant buildings, and two homes, all of which are part of the Hollinshead Estate, of which Mr. C.W. Parrish is trustee. Also connected to the sewer is a two unit apartment house owned by a Mr. Robert Dix and a home owned by a Mr. Art Bunting.

The City of Troutdale retained Cornell, Howland, Hayes & Merryfield, consulting engineers (CH_M), early in 1965 to make a study of the city's sewage disposal needs. The preliminary report was presented the following November, and the Sanitary Authority notified the city by letter dated November 9, 1965, of the raw sewage discharge and the necessity to abate pollution of the Sandy River. On December 20, 1965, the Sanitary Authority received a letter from the city reporting that they had authorized CH_M to go shead with the engineering study. At that time, it was expected that this pollution problem would be solved within a reasonable time, with construction of a city sever system.

In June 1966, it was found that Troutdale was encountering serious problems obtaining property for a sewage treatment plant and arranging financing. By August progress was at a standstill.

This caused the Saultary Authority staff to perform more field work to definitely identify all the contributors to the old sewer, then on October 18, 1966 the staff met with those contributors and Troutdale city officials to establish

responsibility for abating pollution of the Sandy River. It was determined at that meeting that it would be several years before the City of Troutdale could expect to provide sewage treatment. The staff felt that this would be too long to tolerate raw sewage pollution of a stream of such high recreational use as the Sandy River. Lewis & Clark State Park, a very popular beach and park in the summer is located on the opposite bank from the sever outfall. Therefore, the individual contributors to the sever, Mr. Parrish, Mr. Dix, and Mr. Bunting, were informed that they would be expected to abate this pollution on their own at the earliest possible date. C.W. Parrish, as trustee for the Hollinshead Estate, was to accept the major responsibility since the great majority of sewage comes from buildings of the Hollinshead Estate.

Mr. Parrish, on November 15, 1966, asked to have 3-4 weeks to study the problem. District office staff asked him to notify the Authority by letter around December 15, outlining his progress and including a schedule for pollution abatement. No correspondence was received, so by letter, January 26, 1967, Mr. Parrish was notified, with copies to Mr. Dix and Mr. Bunting, that a proposal must be made to the Sanitary Authority by February 15, 1967 or the matter would be brought before the Sanitary Authority at its next meeting. A letter was finally received February 9, 1967 from Arthur S. Vosburg, Attorney for the Hollinshead Estate, absolving the trust of any committments and claiming that the City of Troutdale was responsible for the sewer.

Conclusions And Recommendations

- 1. A public nuisance and pollution of the Sandy River is caused by residences and businesses connected to an old private sewer in the City of Troutdale. The Sandy River at this point is a very popular recreation spot; Lewis & Clark State Park being located directly across the river on the east bank.
- 2. It is apparent that the City of Troutdale will not be able to provide proper sewage collection and treatment within a period of time considered reasonable to allow raw sewage to continue to enter the Sandy River.
- 3. It is feasible for this pollution to be abated temporarily by individual subsurface waste disposal. It is considered logical, therefore, that the individuals benefiting from the sewer also be responsible for abating the pollution deriving from this sewer before the next recreational season. So far the major violator is not willing to accept any responsibility for such abatement.
- 4. It is recommended that the Sanitary Authority authorize citation of the trustees of the Hollinshead Estate and Kr. Robert Dix and Mr. Art Bunting to appear and show cause, if any exists, why an order should not be entered directing them to permanently abate, prior to June 1, 1967, pollution of the Sandy River resulting from raw sewage discharges from premises owned and/or controlled by them.

Chronology of Events

November 3, 1963 Sewer outfall to Sandy River discovered by Fred Bolton, Associate District Engineer, during sanitary survey. To be followed up as time permitted. September 15, 1965 Dick Angstrom, of Fish Commission, reported raw sewage outfall to Sandy River. September 21, 1965 Ernie Schmidt, Assistant District Engineer, investigated reported discharge. Dye testing determined business section and a few homes contributing. - Preliminary plan for sewerage of Troutdale received : November 3, 1965 from Cornell, Howland, Hayes & Marryfield. Fred Katzel, Associate Sanitary Engineer, and Ermie November 3, 1965 Schmidt attended meeting at Troutdele City Hall with City Council and CH.M Engineers. CH.M presented preliminary plan for sever system and sewage treatment plant for city. November 9, 1965 Letter to Troutdale, notifying city of raw sewage discharge and asking for a proposal and construction schedule by December 31, 1965 for abatement of pollution. December 1, 1965 Letter to City of Troutdale concerning review of severage plans, re-emphasizing the necessity of stream pollution abatement and suggesting looking to the City of Gresham for sewage treatment. December 20, 1965 Letter received from City of Troutdale reporting that town had authorized CH.M to go ahead with the engineering study, and that a sewage treatment plant site was being sought. June 22, 1966 Ernie Schmidt spoke with Mayor Sid Britton of Troutdale. City had run into snags and could not obtain site for sewage treatment plant. The town had cooled toward sewerage, due to high cost and rejected responsibility for raw sewage outfall. August 22, 1966 Brnie Schmidt again spoke with Mayor Sid Britton. Progress was at a standstill. It was determined to hold the individual sevage contributors responsible for the discharge. August 24, 1966 Joe Jensen, Portland District Engineer, John Dodds,

discharges discovered.

Multnoman County Sanitarian, and Ernie Schmidt made sanitary survey of the west bank of the Sandy River to determine total scope of pollution problem. No new

- September 29, 1965 Kent Ashbaker, Associate District Engineer, and Ernie Schmidt made a further dye testing study to determine definite contributors to the sewage outfall.
- October 13, 1966 Meeting between Sanitary Authority staff, City of Troutdale, C.W. Parrish. Art Bunting, and Jack Kalinoski, of Multnomah County Road Department, to inform individuals contributing to raw sewage discharge that they must abate this pollution at the earliest date possible.

 Mr. Parrish and Mr. Bunting agreed to pursue this end immediately.
- November 4, 1966 Ernie Schmidt spoke with C.W. Parrish by telephone.

 He appeared to be actively pursuing a solution to the
 problem, having contacted various agencies for help
 (CH.M. Multnoman County Health Department, Union
 Pacific Railroad)
- November 15, 1966 Ernie Schmidt again spoke to C.W. Parrish by telephone.

 Mr. Parrish asked to have 3-4 weeks to come up with a solution. Mr. Schmidt asked him to write a letter to the Sanitary Authority around December 15, 1966 outlining his progress and plans for pollution abatement.
 - December 30, 1966 Ernie Schmidt called C.W. Parrish by telephone and asked for a progress report and plan for pollution abatement.
 - January 26, 1967 Letter to C.W. Parrish, with copies to Robert Dix and
 Art Bunting, requesting proposal for abating pollution
 by February 15, 1967 or the matter would be brought
 before the State Sanitary Authority at its meeting
 February 21, 1967.
 - February 9, 1967 Letter received from Arthur S. Vosburg, Attorney for
 Hollinshead Trust (C.W. Parrish) absolving the Trust
 from any committments to the Sanitary Authority and
 maintaining that the sewage outfall was the responsibility
 of the City of Troutdale.
- February 16, 1967 Ernie Schmidt spoke with Mayor of Troutdale, Glenn Otto, regarding recent progress toward city sewerage. City is signing year's option on sewage treatment property.

 The existence of a sewer system and treatment is still a long way off.

MEMORANDUM

TO : Sanitary Authority Members

FROM : Kenneth H. Spies

Date : February 21, 1967

Subject: 1967 Legislative Bills

Air Pollution

S.B. 35 Amends ORS 449.775. Eliminates agricultural and land clearing operations as exemptions to air pollution control statutes.

Provides that Sanitary Authority may issue permits allowing agricultural operations as a variance. Introduced 1/16 at request of Interim Committee on Public Health. Hearing held 2/7 by Senate Air and Water Quality Control Committee. (Statement submitted by Sanitary Authority supporting the bill. Opposed by seed growers.)

U,

- S.B. 36 Amends ORS hh9.765. Provides for regional air quality control authorities and programs. Purpose is to provide for uniform enforcement on regional basis. Includes appropriation of \$165,000 for state aid to regions. Introduced 1/18 at request of Interim Committee on Public Health. Hearing to be held 2/21 by Senate Air and Water Quality Control Committee. (Amendments being proposed by city of Portland. Present bill contains no special provisions for local financing.)
- S.B. 271 Requires motor vehicles manufactured after 12/1/68 to be equipped with air pollution control device. Makes it duty of Sanitary Authority to set emission standards and to certify control devices. Introduced 2/8 by Senate Committee on Air and Water Quality Control. (The Federal Clean Air Act of 1965 already provides such control on the federal level beginning with the 1968 model year cars. S.B. 271 is therefore superfluous at the present time. Instead of this bill, state legislation should be enacted to provide for annual inspections of motor vehicles to insure that the air pollution control devices will be properly operated and maintained. S.B. 18 and H.B. 1089 provide for annual safety inspection, but do not include air pollution control devices. H.J.R. 20 provides for interim study.)
- S.B. 272 Provides tax benefits to industries in connection with expenditures for installation of air or water pollution control facilities.

 Directs Sanitary Authority to certify such facilities to State Tax Commission. Introduced 2/8 by Senate Committee on Air and Water Quality Control.
- H.B. 1028 Relates to open burning. Amends ORS 1178.960. Adds air pollution control to criteria for issuing fire permit during closed season (April 1 to December 31) in fire districts. Requires fire permit from county courts in areas outside of fire districts. Introduced 1/11 at request of Interim Committee on Agriculture. Hearing held

- 2/1 by House Air and Water Quality Subcommittee. (Strongly supported by seed growers and other agricultural interests who oppose any control by Sanitary Authority.)
- H.B. 1417 Adds to powers of Sanitary Authority. Amends ORS 449.785 by adding "(3) Provide by rule and regulation for the control of emissions from motor vehicles." Introduced 2/13 and referred to Natural Resources Committee.
- H.B. 1418 Amends ORS 449.775. Subjects to regulation otherwise exempted incinerators and heating equipment if in area where regional or local air quality control authority has been established.

 Introduced 2/14 and referred to Natural Resources Committee.
- H.B. 1518 Amends ORS htp.800. Authorizes Sanitary Authority to "issue orders" in air pollution matters. Introduced 2/17 and referred to Committee. (The Sanitary Authority already has such power under ORS htp.815(h). H.B. 1518 is therefore unnecessary.)
- H.B. 1519 Amends ORS 449.785. Authorize Sanitary Authority to include "emission standards" in establishment of air quality standards. Introduced 2/17 and referred to Committee.
- H.B. 1520 Amends ORS 449.760. Adds definition for "emission". Introduced 2/17 and referred to Committee.

Sanitary Authority (General)

- S.B. 26 Amends ORS 449.015. Adds Dean of School of Agriculture of Oregon State University as ex officio non-voting member of State Sanitary Authority. Introduced 1/16 at request of Interim Committee on Agriculture. Hearing held 2/13 by Senate Agriculture Committee. (Sanitary Authority did not make statement because it was not notified of hearing. Agricultural interests concerned that Sanitary Authority might adopt water quality standards that will be detrimental to their welfare.)
- S.B. 385 Requires all agencies subject to Administrative Procedure Act to appoint hearing officers who demonstrate by education, training, experience and examination knowledge of law applicable to such agency. Introduced 2/17 and referred to Committee.
- H.B. 1376 Directs State Board of Higher Education to establish through Forest Research Laboratory of Oregon State University a study of air and water pollution. Introduced 2/10 and referred to Natural Resources Committee.

Sewage Disposal

S.B. 3 Relates to sanitary districts. Amends ORS 450.045 and 450.227 pertaining to nominating petitions for board membership and to petitions for annexation of territory. Introduced 1/11 and referred

to Local Government Committee. Amended and passed Senate 1/26 by vote of 27 to 1. Sent to House and referred 1/27 to House Local Government Committee.

- S.B. 260 Relates to county service districts. Amends ORS 451.110 and 451.430. Redefines "service facilities" by deleting reference to areas outside of cities. Requires approval by resolution of city council if proposed district includes any part of a city. Introduced 2/7 and referred to Local Government Committee.
- S.B. 265 Relates to sanitary districts. Amends ORS 450.055. Increases per diem from \$5 to \$15 for members of sanitary board for attendance at meetings. Introduced 2/7 and referred to Local Government Committee.
- H.B. 1045 Relates to sanitary districts. Amends ORS 450.125, 450.130 and 450.170. Requires districts to pledge sewer revenues to payment of bonds issued for sewerage works construction. Introduced 1/18 at request of Legislative Fiscal Committee. Referred to Local Government Committee. Tabled 2/10.
- H.B. 1046 Relates to sanitary authorities (metropolitan sanitary districts).

 Amends ORS Chapter 450. Prohibits issuance of general obligation bonds unless revenue charges are sufficient to meet obligations.

 Introduced 1/19 at request of Legislative Fiscal Committee.

 Referred to Local Government Committee. Tabled 2/10.
- H.B. 1047 Relates to county service districts. Amends ORS Chapter 451.

 Permits county service districts to provide water and fire services in addition to present severage, drainage, street lighting, public parks and recreation, and diking and flood control services.

 Introduced 1/19 at request of Legislative Fiscal Committee.

 Referred to Local Government Committee. Tabled 2/7.
- H.B. 1048 Establishes local government revolving fund and appropriates \$100,000 for financing construction of local service facilities.

 Introduced 1/18 at request of Legislative Fiscal Committee.

 Referred to Local Government. Tabled 2/10.
- H.B. 1128 Relates to cities and districts. Requires that a city which annexes a part of another governmental district shall simultaneously with draw such part from the original district, obviating double taxation for similar purposes. Introduced 1/23 at request of Association of County Assessors and State Tax Commission. Referred to House Taxation Committee.
- H.B. 1263 Relates to cities and county service districts. Amends ORS 451.585.

 Directs that no part of a city shall be included within proposed boundaries of a county service district without such city's consent and authorizes withdrawal from the district of the part of a city so included. Introduced 1/31 at request of city of Portland.

 Referred to Local Government Committee. 2/17 recommended "do pass".

 2/18 failed by vote of 28 "yes" to 27 "no".

- H.B. 1338 Relates to cities. Permits a city to annex territory upon a finding of State Board of Health that sewerage or other services are needed to alleviate public health hazard. Introduced 2/16 at request of the League of Oregon Cities. Referred to Local Government Committee.
- H.B. 1350 Establishes mandatory system of certification for sewage treatment plant operators. Introduced 2/9 and referred to Public Health and Welfare Committee.
- H.B. 1372 Relates to county service districts. Amends ORS 451.010 and 451.410. Authorizes such districts to provide water supply services. Introduced 2/10 at request of Association of Oregon Counties. Referred to Local Government Committee.
- H.B. Illili Provides for creation of metropolitan districts to provide one or more services including water supply, sewerage, parks, transportation, air pollution control and land-use planning. Introduced 2/15 by Committee on Local Government and referred to same committee.

Water Pollution Control

- S.B. 39 Amends ORS Chapter 449. Defines "pollution". Prohibits waste discharge after 1/1/68 without a permit issued by Sanitary Authority. Provides Sanitary Authority with summary abatement powers. Strengthens public policy. Provides for recovery of damagescaused by pollution to fish, wildlife or habitat. Introduced 1/20 at request of Interim Committee on Public Health. Referred to Air and Water Quality Control Committee. Proposed amendments submitted by Sanitary Authority 2/15.
- S.B. 302 Amends ORS 517.990. Abolishes Rogue River Coordination Board.
 Introduced 2/10 and referred to State and Federal Affairs Committee.
- S.J.R. 11 Creates interim committee on water control and land use. Introduced 1/24 and referred to Natural Resources Committee.
- H.B. 1079 Amends 164.630 and repeals 164.440 and 149.107. Pertains to disposal of litter on public roads, public land or recreational waters.

 Introduced 1/10 at request of Interim Committee on Highways.

 Referred to Highways Committee.

Water Pollution Control Finance

S.B. 34 Requires that property tax relief be withheld from taxpayers in municipalities that do not comply with Sanitary Authority or court orders to construct sewerage facilities. Introduced 1/18 at request of Interim Committee on Public Health. Referred to Health and Welfare Committee.

- S.B. 272 (See Mir Pollution) Tax incentive for industry.
- H.B. 1226 Relates to review of assessments for local sewer improvements.

 Introduced 1/27 at request of city of Portland. Referred to Local Government Committee.
- H.B. 1322 Provides reimbursement to municipalities of up to 25% of cost of construction of sewage treatment works. Appropriates \$3,000,000.

 Introduced 2/9 at request of Governor McCall. Referred to Natural Resources.