

ELEVENTH MEETING
OF THE
OREGON AIR POLLUTION AUTHORITY

July 14, 1954

The eleventh meeting of the Oregon State Air Pollution Authority was called to order by the Chairman at 2:00 P.M., Wednesday, July 14, 1954, in Room 36, State Office Building, 1400 S. W. 5th Avenue, Portland, Oregon. Those present were Carl E. Green, Chairman, Mr. R. P. Dixon, Vice Chairman, Dr. Harold M. Frickson, Harold F. Wendel, Merle S. West, Members and Curtiss M. Everts, Jr., Secretary, Charles D. Burt, Legal Advisor, R. E. Hatchard, Chief of the Air Pollution Control Section, W. J. Whitsell, Associate Engineer and Frank P. Terraglio, Chemist.

MOTION RE: MINUTES OF PREVIOUS MEETING

The Secretary summarized the minutes of the tenth meeting of the Authority which was held in Portland on December 16, 1953.

The Chairman then declared that if there were no corrections or additions the minutes would stand approved as prepared by the Secretary.

PORTLAND RE: PETITION FROM KENTON DISTRICT

The Secretary read a letter from D. W. Carter, 8206 N. Fenwick Ave., Portland, Oregon, transmitting petitions signed by approximately 200 residents in the Kenton District alleging that cinders, ash and smoke from the M & M Woodworking Company, Nicolai Door Mfg., and Portland Shingle Company were causing nuisance conditions.

The Chairman advised that no field investigation had been made since the complaint had been received only a few days ago.

MOTION RE: PETITION FROM KENTON DISTRICT

It was MOVED by Mr. Wendel and seconded by Mr. West and carried that this complaint be referred to the staff for investigation and that a report be made to the Authority at the next meeting.

NORTH BEND RE: STATUS OF THE CINDER AND FLYASH CONTROL MEASURES.

The Chairman requested the staff to report on the efforts of industries in North Bend to reduce the cinder and flyash deposition.

Mr. Whitsell stated that the area sampling has continued uninterrupted in the North Bend area. The directional particle fallout collector was removed from the Roosevelt School to the Sherman Apartments. He explained that we intend to continue the area sampling as a check upon the improvements effected and also to show whether or not additional control measures will be needed at the Mt. States Power Company's steam generation plant.

Mr. Whitsell also reported that the Menasha Plywood Corporation had submitted its stack emission report in January and in March the Authority advised the company by letter that the report together with our area studies showed that the plant was adversely affecting the area north of Montana Ave., and that it was recommended that the company proceed with appropriate plans to reduce the stack emissions. The company has secured proposals from three engineering or contracting firms regarding the installation of cinder and flyash collecting equipment and the cost for this work was from approximately \$23,000 to \$27,000. Mr. Whitsell stated that a proposal was received from the F. E. Balden Company involving certain changes to the combustion chamber at an approximate cost of \$7,000.

Mr. Whitsell explained further that there has been considerable correspondence between the plant, F. E. Balden Company and the Authority involving the guarantee for cinder reduction. Unfortunately it developed that the proposed boiler changes would not accomplish the degree of cinder reduction required in order to remove nuisance conditions in the area effected by the plant. Mr. Whitsell reported that the Menasha Plywood Corporation has been constructing a wood flour plant which utilizes the sander dust that previously was burned in the boiler and that it is hoped by the plant management that the removal of this fine material will improve the combustion conditions. In their letter of July 12, the company advised that the wood flour plant would be in operation by August 1, 1954.

Mr. Whitsell advised the Authority that the management of Irwin-Lyons Lumber Company had taken no specific action on plant cinder and smoke control since the Western Precipitation Corporation completed the study of the stack discharges and the Authority's staff has conferred with the management several times since the last Authority meeting but as yet no new activity has developed.

Mr. Whitsell stated that the installation of cinder collectors at the Weyerhaeuser Timber Company's mill in North Bend was expected to have begun by July 1, 1954; however, the lumber strike had caused postponement. Mr. A. O. Karlen advised the Authority in his letter of July 9, 1954 that all the equipment and materials for the cinder control system are at the plant site and that the installation will be completed about six weeks after the end of the lumber strike.

Mr. West asked about the status of Mt. States Power Company's cinder and flyash control situation.

Mr. Whitsell explained that Mt. States Power Company had previously installed cinder collectors and after the improvements are completed at the mills, it will then be determined whether the present collection system at the power plant is satisfactory.

Mr. Wendel asked if the Menasha Plywood Corporation was making adequate progress.

Mr. Hatchard explained that it was the hope of the management that substantial cinder reduction would occur by removing the sander dust from the combustion chamber and using it as a by-product. Mr. Hatchard advised the Authority that the change ought to considerably improve the smoke problem but it was doubtful if there would be a considerable reduction in the cinder fallout in the area affected by the plant and that it would be about the end of October before any changes in the fallout could be determined from our sample stations. Mr. Hatchard stated that the management was making some progress and that if the present change did not accomplish sufficient reduction then other measures would have to be considered.

Mr. Wendel asked if the complaints were seasonal in North Bend.

Mr. Hatchard replied that during the fall and winter the prevailing wind is from the mills towards town and that is the time of year complaints are made.

Mr. West wished to know if Irwin-Lyons promised to do anything to overcome the fallout of cinders from their plant.

Mr. Hatchard informed the members that Irwin-Lyons Company had contacted the engineering department of Western Precipitation Corporation and the Seattle Boiler works. The company has taken no action, however.

Mr. Dixon suggested that the Secretary write the Irwin-Lyons Company and advise them that the Authority is still awaiting a solution to this matter.

The Chairman urged that this matter not be delayed and agreed that the Secretary should advise the company that more satisfactory progress should be made.

REPORT ASSOCIATED FOREST INDUSTRIES OF OREGON AIR POLLUTION COMMITTEE.

Mr. Charles M. Sanford, assistant to Mr. Charles E. Ogle, represented Associated Forest Industries of Oregon. He explained that the association is not an operating company but is made up of lumber, plywood and pulp companies throughout the State of Oregon and that they do not have the membership of all such mill owners but they do represent 30 to 40% of the operators. There are a number of committees within the association, one of which is the Air Pollution Committee. Mr. Sanford informed the Authority that representatives of the Committee recently met with the technical staff of the Authority to orient itself as to the procedure before the Authority and to give assistance where possible through its organization to its members. As a result of the meeting a few days ago it was decided that Mr. Ogle should learn from the manufacturers of wood burning equipment and others regarding the cinder and flyash reduction features and have this data available for the benefit of the engineering staff of the Authority and the committee. Mr. Ogle has corresponded with the manufacturers of waste wood burners and has secured 4 or 5 replies.

Mr. Sanford stated that when all the correspondence on this subject is received he will submit it to the Authority's staff for their use. At that time the committee will be in a position to cooperate with the Authority.

The Chairman asked if this meeting was the first one and Mr. Sanford replied that it was the first meeting held with the Authority's staff but that the committee had held other meetings previously.

Mr. Sanford further explained to the Chairman that it is the intention of the committee to search out such situations as exist in the North Bend community and give assistance to the operators. He stated, that as he saw it, the Association would urge the operators to take action on their own volition.

The Chairman stated that it is the Authority's policy that industries who create an air pollution problem should find the solution for it.

Dr. Erickson suggested that a considerable saving in time and cost would be affected if the problem were solved by industry-wide measures rather than by individual mill operators.

Mr. Sanford stated he hoped to submit a progress report at the next meeting of the Authority.

Mr. C. Russel Rees, Rees Blower Pipe Manufacturing Company of San Francisco, California, stated that his company had 40 years experience with the design and construction of waste burners and that while the problem of cinder and flyash carry-over is not entirely solved, they do have the answers to many situations. Mr. Rees explained that very frequently the waste burner is overloaded since the expenditure to the mill owner is not a productive item, and there is a tendency to install units which are too small.

Mr. Larry Supove, member of the City of Portland Air Pollution Committee, and a registered mechanical engineer, stated that he felt this was a problem that an association of mill operators could take care of on the basis of what is known.

Mr. Hatchard said this problem has been before the Authority several times since many

complaints are based on cinder emissions, etc., from waste burners and the staff has observed a number of experimental attempts to correct the smoke and cinder discharge. However, Mr. Hatchard pointed out that technical information regarding the operational nature of the many types of burners is not available upon which changes can be made to improve smoke and cinder discharges. He stated that the Authority's staff was not acquainted with the Rees Company's waste burners and would appreciate securing pertinent description.

Mr. West reminded the Authority that G. W. Gleeson, Dean of Engineering, Oregon State College had advised the Authority that the waste burners are a problem but that it was not insoluble.

OS-REGO FF: REPORT OF OREGON-PORTLAND CEMENT COMPANY

The Chairman stated that at the last meeting the Authority requested the Oregon-Portland Cement Company to make a progress report on their efforts to reduce the cement dust discharge.

Mr. Frederic Yerke, Attorney representing Oregon-Portland Cement Company reported on the activities of the company since the last meeting of the Authority and also reviewed some of the information transmitted to them by the Authority's staff and presented his interpretation of what the information meant.

The operation of the cement plant commenced about 38 years ago and one kiln was in operation from 1916 to 1947, Mr. Yerke explained. In 1947 the second kiln was placed in operation. However, he pointed out that prior to the installation of the second kiln no dust control equipment had been installed. In 1947 the company consulted with the Western Precipitation Corporation regarding installation of dust control equipment for the kilns and the electrostatic precipitator unit was installed when the second kiln was placed in operation.

He advised that at the same time other means of eliminating the dust emissions were also considered; that there are presently installed six bag-collectors which prevent dust from various parts of the plant from escaping into the atmosphere. Mr. Yerke explained that the first unit was placed in operation in 1946 in the raw-grind department and that the gas

volume for this unit was 10,000 cubic feet per minute. Two similar units were installed in 1947 to serve the crusher and cement-grind operations. In 1951 another bag collector was installed in the cement grind department with a gas volume capacity of 11,000 cubic feet per minute.

Since the last Authority meeting Mr. Yerke advised that the company has been installing two additional bag-collectors which have greater capacity than those previously installed. One of these collectors will serve the klinker storage department with a capacity of 12,500 cubic feet per minute and the other bag collector will serve the packing department with a capacity of 12,500 cubic feet per minute. The cost of each unit is about \$12,000. In addition to these fume collection devices he said that a multiclone unit is in operation on the effluent from the rotary kiln.

The raw lime is delivered in railroad cars, ground and then burned, Mr. Yerke explained, and that the company endeavors to wet the lime with water so the raw dust will not escape and be carried away by the winds and that the rock is also wetted down in the railroad cars and is dumped wet.

Mr. Yerke said he understood that the work of the Authority's staff commenced in the early part of 1953 and that the Oregon-Portland Cement Company had been furnished with records indicating particulate fallout found in the city of Oswego at eight stations. Fallout for the February 9, 1953 to March 26, 1953 period ranged from 15 to 60 tons per square mile per month. For the period March 26, 1953 to June 1953 it was 17 to 48 tons per square mile per month, and for the period June 3, 1953 to October 19, 1953 it was 30 to 59 tons per square mile/month. Mr. Yerke stated that the lime concentrations found in the fallout samples was from 17 to 37% compared with lime contents of less than 5% in areas where there is no industrial lime discharge. He concluded that the Oregon-Portland Cement Plant is obviously one source of industrial effluents. However, there are effluents coming from sources other than the Oregon-Portland Cement Company. He stated that the Oregon-Portland Cement Company alone, in terms of calcium oxide, is not producing a nuisance condition and if the plant were to shut down there would still be a fallout most of the time in excess of 25 tons per square mile per month.

Sometime ago the company had contacted the Western Precipitation Corporation of Los Angeles and they were to send a representative to run tests to determine if the dust control equipment was functioning properly, Mr. Yerke explained. Two days after the last Authority meeting Mr. McCaslin, President of Oregon-Portland Cement Company, wrote the company again requesting this study, however, it was two months later before the Western Precipitation Corporation could start the study. Mr. Yerke stated that on March 26, 1954, Mr. Leche wrote Western Precipitation Corporation and asked for their recommendations and proposals concerning installation and additional equipment and the Western Precipitation Corporation replied that the information could not be provided until May 1954. He replied that this report from Western Precipitation Corporation arrived on May 17, 1954, and included preliminary sketches and proposals, however, additional information is needed.

Mr. Yerke stated that Mr. Leche had a representative of the Koppers Company, Inc., visit the plant and reviewed the data available concerning the operation of the plant and control equipment. On May 27, 1954, Mr. Leche wrote the Koppers Company to learn when their proposals would be received. This information arrived on June 23, 1954 and indicated the need for a meeting with the Koppers representative from San Francisco. Mr. Leche has now been advised that a San Francisco representative will not be able to come to Oswego until about August 1, 1954. Mr. Yerke stated that on August 1, 1954, they will confer with a representative of Koppers Company Inc., to consider the proposals together with the plant limitations such as physical lay-out, area available, cost of operating, etc. Mr. Yerke said it would help considerably if the members of the Authority would indicate what standards would be applied in Oswego.

The Chairman asked if a representative of the City of Oswego was present and would like to make any comments.

Mr. Lee Stidd, member City Council, Oswego, stated that he was present as an observer interested in Mr. Yerke's report and the dust report of the Authority's staff. He stated

that it appeared that Mr. McCaslin has made a very sincere effort to alleviate conditions.

The Chairman called on Mr. Hatchard to make some comments regarding the interpretation of particle fallout limits, etc.

Mr. Hatchard said that the Authority's staff was pleased to learn that an additional collection system had been installed since the last meeting. He pointed out that unfortunately there is not enough experience of our own or in other areas of the country to consider a standard for area fallout of lime, but that the important fact is that nuisance conditions are present in Oswego; that it is causing a real disturbance to the residents and causes loss to business, particularly the automobile sales agencies. Many complaints originate with the owners of apartment houses who are unfortunately in the prevailing wind direction during certain seasons.

A series of samples were collected from the roof of the Elementary School at Church and State Streets in Oswego during the period April 29, to May 20, 1954. This station is located approximately 1200 feet southwest of the cement plant. A high volume sampler with an accordion pleated filter and the electrostatic precipitator sampler were used. Total particulate matter found at this station varied from 83 to 530 micrograms per cubic meter, and the amount of the particulate material that was lime (calcium oxide) varied from 11 to 28%. Portland type cement in this area contains about 62% lime (calcium oxide).

Mr. Wendel asked if we were receiving many complaints at the present time.

Mr. Hatchard stated that the City of Oswego received most of the complaints but that the Authority also was receiving a few complaints.

Mr. Lee Stidd stated that the City of Oswego was receiving complaints spasmodically depending upon weather conditions and that these complaints have been received for several years. The problem has been before the City Council many times and the Council is interested in the status of the dust control measures and what is going to be done to remove the nuisance

conditions.

The Chairman wanted to know if the area fallout of cement dust was caused by over-loading the dust control system.

Attorney Yerke stated it was not and that the situation is no different now than when the second kiln and the electrostatic precipitator was installed.

The Chairman asked if further reduction of the cement dust discharge could be obtained.

Mr. Yerke replied that the question was how much improvement could be made in view of the cost and space limitations at the plant.

Mr. Wendel stated that he believed that the company is making a sincere effort to meet the problem and would do everything that could be done to improve the conditions.

MOTION RE: REPORT OF OREGON-PORTLAND CEMENT COMPANY

It was MOVED by Mr. Wendel and seconded by Dr. Erickson and carried that the matter be continued and that the company submit a report at the next Authority meeting.

PORTLAND RE: MUNICIPAL AIR POLLUTION ORDINANCES.

Mr. A. M. Westling, League of Oregon Cities, Eugene, Oregon, reviewed the relationships between the Air Pollution Authority and the League of Oregon Cities. He stated that in January C. M. Everts, Jr., and R. E. Hatchard attended a League's Director's meeting and discussed some of the air pollution problems and the Authority's policies regarding air pollution problems within cities. He realized that it was the hope of the Authority that the cities would assume more responsibility for carrying on air pollution control problems within their boundaries. In order to assist cities in getting ideas in mind as individual communities the League requested the Authority's staff to prepare a report describing the relationship of the Authority to cities and also to give them some idea what is involved in air pollution control and how it may be handled. The Authority's staff has prepared a preliminary draft of a report and Mr. Westling hoped the Authority would publish this

information so it would be available to the cities. Mr. Westling asked if it would be possible for the League and the Authority to cooperate on the preparation of a model air pollution ordinance. He explained that he excluded the City of Portland since they could have sufficient personnel to carry on their own projects and was thinking what could be done to assist the smaller Oregon cities so they could care for air pollution problems within the municipal boundaries.

The Secretary stated that the relationship of the Authority to Oregon cities has been discussed to quite an extent and that it was his impression that it was the policy of the Air Pollution Authority that many problems involving air pollution on the local level should be handled by municipalities within their limitations of staff, technical advice and personnel. He stated that it was on that basis that we met with the Board of Directors of the League of Oregon Cities to determine their opinion regarding this approach. The Secretary stated his impression was that those League officers present believed that the local city officials would prefer to receive complaints on air pollution and make efforts to handle those within their boundaries. Then, if additional technical advice was needed perhaps the cities could depend on the Air Pollution Authority for such assistance. The Board of Directors indicated that they wished to discuss this proposed arrangement with the officials of other cities not represented at their meeting.

The Secretary asked Mr. Westling if there were discussions about air pollution control at the annual regional conferences with the League of Oregon Cities staff and city officials which were held this spring.

Mr. Westling stated there was not considerable discussion of the subject but felt that cities would be willing to assume more responsibility if there was available a procedure, which the city officials could adapt to the local situation. He advised that if this information was available the city concerned would have to develop a program that one of their regular employees could carry on the extra activities since the size of Oregon

cities, except for Portland, would prevent employing a specialized air pollution control staff.

The Secretary explained that the Authority has been generally referring the complaints received involving air pollution within the city boundaries to the City Council concerned and then if assistance was requested the Authority tried to provide it.

DUST CONTROL: ASPHALT PAVING PLANTS

Mr. Hatchard stated that the Authority had received written complaints involving the dust and asphalt vapor discharges from approximately nine paving plants in the state. He explained that the location and status of the complaints are as follows:

<u>LOCATION</u>	<u>PAVING PLANTS</u>	<u>STATUS</u>
<u>Portland</u> Vicinity of NE Cully & Columbia Blvd.	Warren Northwest Parker Schram Porter Yett	Dust control system improved. Dust control system improved. No change but not established that plant causing nuisance condition.
<u>Salem</u> Keiser District	Central Paving Company	Plant moved. Damage to orchard settled out of court - \$7,500.
<u>Tigard</u> Forest Hills District	Pacific Asphalt Paving Plant	Plant moved.
<u>Eugene</u>	Central Heating Company	Improved dust control system, Air samples show improvement not adequate.
<u>Eugene</u> Glenwood Vicinity	T.M. Wildish Paving Plant	Considering improvements to dust control system.
<u>Gold Hill</u>	Central Heating Company Eugene and F. L. Sommers, Klamath Falls.	Temporary improvements to control system, plant moved.

Mr. Hatchard further explained that informal complaints have been received regarding paving in Portland (SW)Canby and Cornelius. He stated that the staff had made studies to determine the range of nuisance conditions and recommended that more attention be given to the pre-

vention of this problem rather than waiting until a condition was created that must be corrected.

Mr. Porter W. Yett, representing Portland Chapter Associated General Contractors advised the members there are many reasons for the nuisance conditions such as wind direction and change of material standards. He pointed out that materials often specified by the Oregon State Highway Commission affected this problem, and that it would take some engineering study to determine control methods. In some locations the plants are permanent installations while others are only portable. The problem of dust control, he felt, was a simple matter if water was available, however, it is impossible to do anything with the dust without water. It was his feeling that the Highway Commission's plants were not as well protected as the private contractors.

Mr. Yett stated that he operates a permanent plant near N.E. Cully and Columbia Blvd., and that corrections can be made if needed. He explained that the plant had been operated there for 25 years, and that they own 20 acres and believe that very little dust gets off their own property. He remarked that other plants have moved into the area and at present only two companies are operating on the area, Parker-Schram and Porter-Yett since Warren Northwest had recently moved.

Mr. Yett stated that in their own plants they investigated various dust control systems and have consulted the manufacturers of paving plants which have been built with a dust control of some type for many years. He added that in the case of the Tigard plant the material which the contractor was forced to use in that area was considerably over-graded into a type of dust which was almost impossible to collect. Porter-Yett is still working on collectors and have contacted manufacturers in the Los Angeles area regarding this. Mr. Yett felt this equipment must be at least within 80 or 85% efficient, however, in the permanent plants he felt even higher dust collection efficiencies could be provided.

Mr. Carl Schram, member of Associated General Contractors, stated he felt Mr. Yett covered

this subject well and added that it was their sincere desire to cooperate in every way possible to eliminate this nuisance.

The Chairman added that the problem was not really solved by moving a plant from a specific location to another site unless the new site was far enough from other land uses so that no new nuisance was created.

Mr. West commended Messrs. Yett and Schram for their fine spirit of cooperation.

Mr. Ray L. Beeler, safety man, Associated General Contractors, stated he attended as an observer but wanted the Authority to know that he had visited a number of construction plants throughout the state of Oregon and assured the Authority the contractors are working on the problems discussed today, especially the owners of permanent paving plants.

WASHINGTON STATE COLLEGE AND OREGON STATE COLLEGE REPORT OF FLUORINE.

Mr. Hatchard summarized the combined report published by Oregon State and Washington State Colleges after completion of their Sauvie Island fluoride project. The study period involved was from December 1951 to December 1953 and the basic purpose of the study was to determine if the aluminum reduction plant in Vancouver, Washington was impairing the health of livestock on Sauvie Island. Their study procedure was to determine by physical examination the condition of the cattle and to evaluate analyses of urine samples, teeth, bone and soft tissue. This phase of the study was handled by Washington State College. The determination of fluorine content of pasture herbage, indicator plants and grain concentrate, etc., was conducted by Oregon State. Control areas for livestock and agricultural fluoride studies were operated in locations remote from sources of fluoride.

Since the last Authority meeting Mr. Hatchard reported that the staff has operated air sampling equipment on Sauvie Island and collected seventeen samples during the period of February 24, to May 17, and air concentrations ranged from a trace less than 0.10 part per billion to 1.6 part per billion with a median of 0.4 ppb.

Mr. Wendel asked if the staff had seen the evidence accumulated by Mr. Fraser. Mr. Hatchard

stated that since the last meeting the Authority had not received additional reports from any Sauvie Island residents.

Mr. Robert Fraser, Sauvie Island, was present and informed the Authority the reason that there were no other people present was that at the last meeting they were not allowed to be heard.

The Chairman emphatically denied this statement and explained that everyone present had the opportunity to be heard at the time this matter was being discussed.

Mr. Fraser disagreed entirely with the report presented by Mr. Hatchard and stated that evidently Oregon State College and Washington State College came to Sauvie Island to tell people who lived there that their cattle were not dying from fluorine poisoning, and that at a public meeting in April 1954 at the Sauvie Island school it was asked how many people believed their cattle were dying of fluorine poisoning and all present responded to the affirmative.

Mr. Fraser stated that two dairies on Sauvie Island nearby had recently gone out of business and one that did stay in business receives a milk check for only \$25.00 from 35 cows.

Mr. Fraser reported that he has moved all his breeding stock out of the area so that not so many are dying now and there is at the present 1,000 tons of hay going to waste. He stated further that since the meeting Washington State College has admitted fluorine in two different herds on the Island.

The Chairman asked if it were not possible that some of the fluoride may be coming from other sources.

Mr. Hatchard replied that well could be, that it has never at any time been reported at zero and that there was always a trace or tenths.

The Chairman asked if any representatives of the Aluminum Company of America wished to be heard.

Mr. C. S. Thayer, Mgr. Northwest Operation, Alcoa, stated that he had nothing further to add to their statements expressed at the Authority's meeting of December 16, 1953. He felt there was some fluoride concentration everywhere and believed that even the concentrations found on Sauvie Island could be found in Portland, Eugene or Salem and other cities.

Mr. Hatchard stated the staff collected samples in Portland area and found a fluoride concentration from 1/2 to 2 parts per billion. For comparison purposes the industrial hygiene standard for 8 hour exposure of workers is 3,000 ppb.

Mr. Wendel stated he had seen the cattle and knew they are in bad shape and asked if the Authority had ever requested a veterinarian's opinion concerning the condition of the cattle.

Mr. Green suggested that we might find out from representatives of the two colleges when they could meet with us in the near future and have those concerned present to ask questions.

Mr. Wendel heartily agreed.

Mr. Green wanted the Authority to have all the facts and not over-look any source of information.

Mr. West asked if there were more accurate, scientific information than that given by the agricultural college.

Mr. Fraser replied "yes, that things at Oregon State College are not the same there as it used to be". He stated that a veterinarian from Cornell University inspected Sauvie Island cattle and claimed that it was fluorine poisoning.

The Chairman asked if he could get a statement from the Cornell veterinarian.

Mr. Fraser stated he could.

The Chairman stated that until the Authority is shown otherwise the Authority will assume that the staff and those employed by Oregon State College and Washington State College are presenting factual information.

Mr. Fraser asked if his only recourse was to go through court.

The Chairman impressed upon him if he could have evidence to substantiate all that has been said it would not be necessary to go to court.

Mr. Wendel asked if Mr. Fraser could prove what he was saying before this Board.

Mr. Fraser said he had brought material to Mr. Hatchard's office and it always ended in an argument.

Mr. Hatchard explained that the Authority had received copies of three laboratory reports of fluoride concentrations for specimens from animals and that no interpretation of the reports by a veterinarian was provided indicating whether fluorosis was present. Copies of these reports were included with the staff reports which each Authority member had received.

The Chairman said we should look to veterinarians and experts in this field to give us advice and of necessity must take that evidence until it is proven faulty and that the Authority would like a letter from the Cornell veterinarian and also would like to know if he is qualified to make such statements.

Mr. Wendel suggested that the Sauvie Island residents be given the opportunity of presenting additional proof at a special meeting of the Authority if they believed the findings of the colleges are wrong and recommended that the residents be represented by counsel. He also stated that in the absence of such a presentation of facts we will assume these findings by the colleges are correct.

Mr. Green stated the Authority would hold a special hearing and wanted to know how soon the Sauvie Island residents could be prepared.

Mr. Fraser replied that they could be ready in about a month.

The Chairman stated he would instruct the Secretary to communicate with Oregon State and Washington State College and agree upon a date for the special meeting in approximately one month and that the Secretary would then contact Mr. Fraser to secure a date convenient to all concerned.

Mr. Fraser asked the Chairman what the Authority would do about it after the special meeting was held.

The Chairman informed Mr. Fraser that the Authority has a legal advisor who would advise us what could be done.

Mr. Fraser wanted to know "what could be done before I go through all this".

The Chairman replied to Mr. Fraser that he was now jumping to conclusions and that first it would have to be shown at the special meeting that fluoride was damaging livestock and agriculture.

Mr. Wendel stated that it would depend upon whether the Authority found that there was a nuisance condition, and further that the Alcoa Company was the responsible agent for the condition. If these facts were determined then the matter of the interstate agreement would be the next step and he felt certain that such an agreement could be worked out to take steps to alleviate the nuisance if such a nuisance were found to exist.

TROUTDALE-CORBETT FLUORIDE SURVEY

The Chairman requested the staff to report on the Troutdale-Corbett fluoride study. Mr. Whitsell reported on the fluoride air samples that have been collected in the area, and he informed members that the staff had operated stations at the McKay farm, Willoughby farm and Schutze residence. The fluoride air concentrations found at these stations from March 30, 1954 to April 18, 1954 ranged from a minimum of 0.4 part per billion which was common to several of the stations to a maximum of 2.1, at the Willoughby farm 2-1/4 miles west of the aluminum plant. At the present time, Mr. Whitsell stated, we have the automatic impinger operating at the Schutze residence, one mile S.E. from the plant. Nineteen samples have been collected in the current series; two samples are secured each day, one during the day and the other at night.

Dr. M. B. McKay of Troutdale, Oregon, asked if the wind direction during the sampling period affected the fluoride concentrations found.

Mr. Hatchard replied that special wind observations are made by the Troutdale Airport Weather station when the Authority's staff are collecting samples and that this data is tabulated with the fluoride concentrations found at the various stations.

The Chairman asked if there were representatives of the Reynolds Metals Company present who wished to be heard.

Mr. F. Yerke, attorney, stated that Mr. H. W. Zeh and he were representing the Reynolds Metals Company today. Mr. Yerke explained that they are continuing their test plot program with three test plots being operated this year. This work has been underway for the past 5 years and last year the Authority's staff observed the project. Mr. Yerke extended an invitation to visit their test plots again this year. He stated that the highest fluorine concentration found in gladioli foliage samples was 114 ppm on the Lampert property, but that this concentration seems high it does not affect the bulb size. Reynolds Metals Company had Dr. Lewis Massey and Dr. Zimmerman make inspections of the Lampert bulb plantings and both gentlemen believed that no damage had been done as far as the bulbs were concerned.

Mr. Hatchard explained that some time ago the staff had met with Dr. Compton and Dr. McKay to plan the future area fluoride studies. He reported that the results of the Oregon State College Agricultural Experiment Station test plot data showed that fluoride concentration in the foliage had been high at stations F-SE of the aluminum plant. Mr. Hatchard stated that the staff will again meet with Dr. Compton and Dr. McKay to plan future studies.

The Chairman asked if any studies were made of the affect on cattle in that area.

Mr. Hatchard replied that several years ago the Oregon State College Agricultural Experiment Station studied the cattle in the area but we have not seen reports of recent investigations. However, he continued the Authority has received no written complaints from residents in Troutdale-Corbett regarding fluorosis in cattle.

MOTION RE: TROUTDALE-CORBETT FLUORIDE SURVEY

It was MOVED by Dr. Erickson and seconded by Mr. Wendel and carried that the staff continue investigations of this matter and present a report at the next Authority meeting.

LA GRANDE-AMERICAN PRODUCTS COMPANY

Mr. Hatchard stated that the American Products Company operates a rendering plant in the northwest area of LaGrande and that adjacent property owners had secured an injunction in the fall of 1952 which required the plant to close from June 1, to October each year. The Authority has not taken any action in the matter since no complaints had been received from property owners. The Authority had been requested this spring by the attorney for American Products Company to make a survey of present conditions for American Products Company. Following a survey a report was prepared and the attorney was advised that the Authority would be glad to present the report to the circuit court. In the meantime, however, the Air Pollution Authority had been drawn into the action. Mr. Charles D. Burt stated that inasmuch as the Authority was not a party to the litigation he had appeared before Circuit Court Judge Hubbard in LaGrande to explain the Authority's position and at that time the court heard arguments on both sides, from Carl Keller, et al and Gibson Packing Company, owners of the American Products Company. The court continued the matter until July 1, 1954 to secure additional information. Since then an affidavit has been prepared and signed by Dist. Engineer Patterson explaining facts based upon the surveys and this was submitted to court.

Mr. Burt stated that he has had no further word from the court as to the disposition of this case so he assumed that the original injunction is still in effect, however, he stated the Authority is no longer a party litigant in this matter.

The Chairman wanted to know if this case established any precedent.

Mr. Burt replied that he thought not since the Authority could not of its own volition have taken any action without holding a hearing first and it was assumed we could not be a party of the litigation without first holding a hearing.

BEAVERTON FE: ODOR PROBLEM

The Secretary read a letter dated July 13, 1954 to the Authority from H. H. Rossi, Mayor,

City of Beaverton regarding the odors from the Pacific Adhesive Plywood Plant located in the main business district. In the letter Mayor Rossi requested an investigation of the odor and a report be submitted to the Council prior to their September 3, 1954 meeting.

The Chairman directed the staff to proceed with investigations and prepare a report prior to September 13, 1954.

BIENNIAL BUDGET -- 1955-57

The Chairman requested the Secretary to explain the 1955-57 biennial budget request.

The Secretary explained that the Authority's previous biennial budgets compared with the proposed budget were as follows.

	<u>1951-53</u>	<u>1953-55</u>	<u>1955-57</u>
Salaries and Wages	\$ 46,740.00	\$ 61,190.00	\$ 80,694.00
General operating & Maintenance	8,516.71	20,518.66	26,356.00
Capital outlay	<u>9,299.00</u>	<u>1,249.00</u>	<u>4,000.00</u>
	\$ 64,555.71	\$ 82,957.66	\$ 111,050.00

Dr. Erickson stated that Governor Patterson had requested that each department limit their request for additional personnel to an absolute minimum. However, Dr. Erickson continued if there is an urgent need the Authority must make this need known.

The Secretary explained that the additional engineer would be needed to assist with area surveys within city boundaries, particularly in the smaller cities and also the Authority expects to have more plans and specifications to review as the program develops. He pointed out that new industry is entering Oregon and the present staff will not be able to handle this additional work.

MOTION RE: BUDGET--1955-57

It was MOVED by Mr. Dixon and seconded by Dr. Erickson and carried that the Secretary prepare justifications of the biennial 1955-57 budget and submit the report to each member and that each member will submit his comments to the Secretary.

UNIVERSITY OF MICHIGAN SYMPOSIUM ON "AIR SAMPLING EQUIPMENT".

The Chairman requested Mr. Whitell to report on the University of Michigan Air Sampling

Symposium. Mr. Whitsell explained that approximately 500 public health personnel, engineers, manufacturers and educators in the industrial hygiene and air pollution fields attended the meetings. The Sessions were of a general nature but with interesting discussions concerning equipment development and use. Mr. Whitsell pointed out that it was interesting to note that others working in the air pollution control field have strikingly similar experiences to ours in Oregon. During the symposium, there was a large number of displays and it was possible to talk with equipment manufacturers' representatives and secure information on the new developments. Mr. Whitsell concluded that we are informed of latest developments and are at least keeping pace with others and are ahead of some in our thinking and planning.

MOTION RE: ELECTION OF OFFICERS

It was MOVED by Mr. Dixon and seconded by Dr. Erickson and carried that Mr. Green be re-elected Chairman.

It was MOVED by Mr. West and seconded by Mr. Wendel and carried that Mr. Dixon be continued as vice chairman.

DATE OF NEXT MEETING:

The Secretary was instructed to arrange for a special meeting in approximately one month when the Oregon State College and Washington State College representatives can attend the meeting.

ADJOURNMENT

There being no further business, the meeting adjourned at 5:20 P.M.

Respectfully submitted,

CURTISS M. EVERTS, Jr., Secretary
Oregon State Air Pollution Authority