Sally Minutes

April 27, 1967

INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION, INC.

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SUBJECT TO REVISION

LEAD ENVIRONMENTAL HEALTH COMMITTEE
MINUTES

Sheraton-Mt. Royal Hotel
Montreal, Canada

April 27, 1967

The meeting was called to order at 3:00 p.m. by the Chairman, Mr. K.W. Nelson

PRESENT	REPRESENTING
K.W. Nelson	American Smelting & Refining Company
J.O. Sevick	St. Joseph Lead Company
K. Raht	Cominco
H.E. Hesselberg	Ethyl Corporation
W.M. Pallies	ESB Inc.
S.M. Pier	Houston Chemical Company
G.J. Stopps, M.B.	E.I. du Pont de Nemours & Company
E.J. Cay	Associated Octel Company Ltd.
H.W. Malton	Broken Hill Associated Smelters, Pty., Ltd.

STAFF

D.M. Borcina, Secretary-Treasurer, L.I.A.
D.G. Fowler, Director, Health and Safety
J.C. Roumas, Assistant Director, Health and Safety

GUESTS

G. Roush, Jr., M.D.	Ethyl Corporation
R.K. Scales	Ethyl Corporation
J. Wellington	Cominco
R.L. Stubbs	LEA/ London
C. Thompson	Hill and Knowlton

Agenda Item No. 1 - The Minutes of the September 15, 1966 meeting were approved as received by mail.

Agenda Item No. 2 - Mr. J.G. Sevick of the St. Joseph Lead Company was unanimously elected the new Chairman of the Lead Environmental Health Committee. This action followed a motion by Dr. Stopps of E.I. du Pont de Nemours Company, seconded by Mr. H.E. Hesselberg of the Ethyl Corporation.

Agenda Item No. 3 - A lengthy discussion was held on (1) the Pennsylvania Air Pollution Control Commission's action taken on April 25, 1967 in adopting a tentative air quality standard for lead of 5 micrograms per cubic meter of air, (2) an open hearing to be held on May 26, 1967 by the Montana State Air Pollution Control Commission on the question of adopting, among other things, an air quality standard for lead of one microgram per cubic meter of air averaged over a twenty-four hour period*, and (3) possible similar situations which might arise in other states brought about by the passage of the proposed Federal Air Quality Act (S.780).

With regard to the Pennsylvania situation, it was pointed out that the acceptance of a tentative standard, rather than accepting the number proposed without qualifying it, reflected a degree of uncertainty on the part of the Commission members. The staff reported that it had learned that the Pennsylvania Department of Air Pollution had recalculated Dr. Kehoe's data and had come up with a figure of 8.3 micrograms instead of 18 micrograms as calculated by Dr. Kehoe. It was further reported that the Philadelphia Bulletin had taken an active interest in this situation and had published comprehensive articles on this subject, including an editorial which warned the Commission members to "live right" with regard to accepting the proposed lead standard.

The staff presented a legal opinion, obtained by the St. Joseph Lead Company prior to the hearing in Pennsylvania, that the Lead Industries Association should request a rehearing for taking additional testimony if the Commission should adopt regulations that are too severe and unreasonably obstruct the growth of the industry in Pennsylvania. Following discussion, the representatives from Ethyl, du Pont and E.P.C. volunteered to submit the above legal opinion to their legal departments for review. It was also unanimously agreed by the Committee that any recommendation by them with regard to the current Pennsylvania situation should be held in abeyance until adequate public relations and legal guidance is secured.

With regard to the Montana situation, it was noted that the Montana State Board of Health will hold a public hearing on May 26, 1967 to consider some of the lowest criteria numbers ever brought up for consideration.

Following an extensive discussion of the seriousness of the over-all current situation involving the establishment of unrealistic air quality

*later revised to 5 $\mu g/M^3$

standards for lead, the Committee agreed unanimously to recommend to the members of the Association that: (1) the Lead Health and Safety Committee be expanded to provide for broader representation covering all aspects of the lead industry, and (2) the members of the Association become more involved in activities by state administrations in states in which they are operating and to expend greater effort in keeping abreast of proposed state or federal legislation which might affect their operations.

Agenda Item No. 4 - The staff presented a summary of the results of the blood-lead comparison study conducted by the Analytical Chemistry Committee of the American Industrial Hygiene Association. It was noted that the 66 commercial, industrial and governmental laboratories which participated in this study had subaitted a wide range of analytical results on duplicate samples, indicating that some of the laboratories were grossly in error. (note: Subsequent to the meeting, it was learned that this study will be repeated.)

Agenda Item No. 5 - The staff reported that the USPHS - Lead Liaison Committee had established a Subcommittee on Surveillance of Population Lead Levels which held its first meeting on January 1[illegible], 1967. Copies of the minutes of that meeting had been forwarded to all members of the Lead Environmental Health Committee, together with a request for the Committee's comments, opinions and suggestions for use at the next meeting which was scheduled for the latter part of April but was subsequently postponed until a later date. It is expected that another meeting will be held sometime in June or July, 1967.

It was noted that the Subcommittee had decided that a study similar to the one conducted in the "Three Cities Study" should be developed and carried out. However, 6 cities will be involved in the new study, with Chicago, New York and Washington being added to the original three cities (Cincinnati, Los Angeles and Philadelphia).

The staff reported that Professor Vigliani, the Director of the Clinica del Lavoro of the University of Milan, had advised that he would be interested in doing work in Milan along the lines of the new six-cities study. Dr. Vigliani had stated that he felt that a comparison between a rather polluted European town such as Milan and the American cities would be interesting because their figures appear to be much higher than the American ones and, nevertheless, it does not appear as though the inhabitants of Milan are suffering from any degree of lead poisoning.

It is expected that the Milan study will cost approximately $5,000.00. The American Petroleum Institute has expressed an interest in co-sponsoring this project. Following discussion, it was agreed unanimously by the Committee members that support should be provided for the Milan project. It was suggested that independent support should be provided if the Public Health Service is not interested in including Milan as an additional city in the project.

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Agenda Item No. 6 - Lead Environmental Health Research Program

a. Progress Reports:

LH-75 Human Exposure to Particulate Lead Compounds in the Air Under Experimental Conditions; University of Cincinnati

Progress on this project is satisfactory. The most recent progress report from the contractor was forwarded to the Committee on March 7, 1967.

LH-79A Toxicity Testing for Organo-Lead Compounds; The Hine Laboratories, Inc.

This project involves conducting screening tests on organic lead compounds. Tests have been completed on seventeen compounds.

LH-79B Toxicity Evaluations of Triethyl, Tributyl and Triphenyl Lead Acetate; University of Exeter

Progress on this project is satisfactory.

LH-86 Lead Glazes in Dinnerware; Rutgers, the State University

Work on this project is almost completed. The contractor will prepare a manual based on the findings from this study, encompassing new concepts of formulations, structure and firing conditions of glazes for dinnerware as well as the effect of colors on lead solubility.

LH-94 Study of the Biological Basis for Lead Intoxication; Harvard Medical School

Progress on this project is satisfactory.

LH-109 Study of the Relationship between the Lead from Motor Vehicle Exhaust and that in Consumer Crops; University of California

A progress report on this project is expected from the contractor shortly.

LH-110 Rate of Uptake of Lead by Body Stores during Continuous Inhalation of Lead by Rats; University of Cincinnati

LH-111 Body Stores of Lead Following Continuous vs. Intermittent Inhalation of Lead; University of Cincinnati

Progress reports on these two projects have not as yet been received from the contractor.

LH-112 Bone Marrow Biopsy as a Measure of the Total Body Lead Burden; Contractor has not as yet been selected.

LH-113 Lead and Tumors of the Kidney in Rats; Contractor has not as yet been selected.

LH-114 Neurophysiological Effects from Lead Exposure; Contractor has not as yet been selected.

Contracts for these three projects have not been placed as yet. The staff is attempting to place all three projects with the same contractor in order to run concurrent studies and also to minimize costs.

LH-117 Effects of Lead on Tissue Cultures of the Central Nervous System; College of Physicians and Surgeons of Columbia University

This project has been completed and the final report has been issued.

LH-118 Study of Lead Burdens in Laboratory Animals; Wayne State University

The contractor for this project has not as yet submitted a progress report.

LH-119 The Use of Lead Isotope Composition as an Environmental Tracer; Isotopes, Inc.

This project is proceeding according to schedule.

It was noted that the Macaulay Institute, Aberdeen, Scotland has been doing some very interesting work in the field of lead, soils and plants. The Committee expressed interest in a recent report issued by that organization titled "The Lead Content of Pasture Herbage" which appeared in the October, 1966 issue of Journal of the Science of Food and Agriculture and requested the staff to send copies to all members.

Agenda Item No. 7 - The Committee discussed the feasibility of developing a medical expert in the field of lead environmental health who it is hoped would ultimately attain the stature of Dr. Robert A. Kehoe who is the world's leading authority in this field.

It was suggested that a university chair be funded by the lead industry for this purpose. The person secured would not be an employee of the lead industry but would be on the payroll of the university. It was felt that a

fund of $100,000 per year should be established for this chair. Since it was felt that the lead industry in Europe would also be interested in developing this type of person, it was also suggested that consideration be given to a dual university appointment, with one in Europe and one in this country.

Following extensive discussion, the Committee agreed that immediate action must be taken in building up medical expertise in the field of lead environmental health, and made the unanimous recommendation that the staff explore this matter with the Board of Directors.

Agenda Item No. 8 - Other Business

a. The staff reported that new interest has been shown in the healing properties of zinc which has been shown to be extremely important in the repair of damaged tissues resulting from burns and wound. It was noted that a noted researcher, Dr. W.H. Strain of the University of Rochester, has stated recently that zinc has also been found to promote growth and stimulate sexual development and has shown most promising signs of producing a possible effect in the treatment of atherioclerosis.

Following discussion, the Committee agreed unanimously that the staff should investigate this matter further and solicit approval, through normal procedures, for a study of zinc body burdens in normal individuals and to determine some quantitative relationships with regard to amounts that can be safely added in treatment of various disorders.

There being no further business, the meeting was adjourned at 8:45 p.m.

James C. Roumas, Recording Secretary
Health and Safety

JCR/jv
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