

## Lead Industries Association, Inc.

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September 27, 1966

Dr. Allan D. Brandt, Chairman  
Air Pollution Commission  
Commonwealth of Pennsylvania  
Department of Health  
c/o Bethlehem Steel Company  
Bethlehem, Pennsylvania

### LEAD IN THE ATMOSPHERE

Dear Dr. Brandt:

In late June or early July the Lead Industries Association learned that your Commission was considering action which might involve the establishment of a standard to control lead in the atmosphere throughout the State of Pennsylvania. Under date of July 14, Mr. D.O. Fowler, Director of Health and Safety for the Lead Industries Association, wrote to your Commission concerning a series of experiments at Lettering Laboratories in Cincinnati which, as they progressed, would contribute specific data toward that standard.

It has come to our attention that your Commission may now act toward the adoption of a standard which will say in effect, "no more than 5 micrograms of lead per cubic meter of air average during any one-month period."

We believe there is inadequate data to permit a broad and accurate definition of lead in the ambient atmosphere of the State but that there is data which suggests that there are urban and/or industrial locations where any contamination of industrial origin could result in local conditions where the 5 micrograms average would be exceeded. At the same time we have seen no evidence to indicate that there would be any general health hazard as a result.

For these reasons you might wish to examine three additional points to supplement those in the earlier letter from Mr. Fowler. These are briefly:

1. From the June Hearings of the Muskie Subcommittee on Air Pollution, it seems definite that neither the Surgeon General of the United States nor his Associate, the Chief of the Division of Public Health Methods, believes that evidence exists today to justify the definition of safe standards. (See Appendix Item 1)



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2. A recent publication, "Survey of Lead in the Atmosphere of Three Urban Communities," demonstrates that 5 micrograms per cubic meter of air max. in a given month could seriously threaten industrial operations unnecessarily. (See Appendix Item 2)
3. A report of the World Health Organization to be presented in November at San Francisco meeting of APHA will include a statement of the fact that aboriginal people in the highlands of New Guinea have as much body content of lead (as measured in the blood) as do residents of California, Italy, or New York City. This would suggest that lead in the atmosphere is not creating a hazard for the general population and that ingestion beyond anyone's control is the primary source of those small amounts of lead in the average normal and healthy body. (See Appendix Item 3)

The Lead Industries Association will be pleased to confer with you or any members of your Commission or Advisory Group in any way that may seem required. We would also be happy to report in greater detail on any aspect of the points made or on the very substantial research program concerning the influences of lead on health and safety with which we are involved.

You might wish copies of this statement to be sent to the other members of your Commission or to your Area Air Quality Criteria Advisors. Mr. Bordini or Mr. Fowler will call in a day or two to determine your wishes on this point.

Sincerely,

*J. L. Kimberley*  
J. L. Kimberley  
Executive Vice President

JLK:vp  
Att: Appendix

APPENDIX

- To letter from J.L. Kimberley to Dr. Allen D. Brandt, dated September 27, 1966 -- Subject: Lead in the Atmosphere

Item 1. The pertinent quotes offered below are from a transcript of hearings under the heading AIR POLLUTION-1966 -- Hearings before a Subcommittee of Air and Water Pollution, Committee on Public Works, United States Senate, Eighty-Ninth Congress, Second Session, on S. 3112 and S. 3400. The meetings were held on June 7, 8, 9, 14 and 15, and the report was printed for the use of the Committee on Public Works and obtained from the U.S. Government Printing Office. Starting on page 122, Senator Muskie questions the Hon. William H. Stewart, Surgeon General of the United States, and subsequently Dr. Richard Prindle, chief of the Division of Public Health Methods, Public Health Service, U.S. Department of Health, Education, and Welfare, in part and as follows:

"Senator Muskie: I would like to turn immediately to the question of the lead problem in order to establish continuity between your prepared testimony and this discussion. Now the easiest way to eliminate the lead problem would be to eliminate the use of lead in gasoline and elsewhere. Is that a recommendation that you would be prepared to make at this time?

"Dr. Stewart: Not at this time. Your question was the total elimination of lead from gasoline?

"Senator Muskie: Yes.

"Dr. Stewart: I do not think that we have evidence which would justify that procedure at this time.

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"Dr. Prindle: The principal lesson I learned from the symposium is that we simply do not have the data we need to determine to what extent control action may be necessary to curb human exposure to lead in the urban environment.

. . . For example, we need to know more specifically which people in the urban population have body accumulations of lead that can be considered hazardous and precisely who these people are in terms of occupation, smoking habits, and so forth.

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"Dr. Prindle: I think, Mr. Chairman, perhaps with respect to the specific problem of lead we could give you a general picture of the timetable. I think with respect to many of these other problems we have been discussing and such things as the point you raised about the interaction of these with other contaminants and so forth, this becomes a much more difficult type of thing. As a result of our symposium and as a result of our other activities, we have been trying to develop a program that would cover a specific program on lead.

Appendix to letter from J.L. Kimberley  
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... Is it really going up? We have to take some time to see if it is going up. We need to take some time to see what is happening to these people as a follow up to exposure. I should think at the end of a period of 5 years we might well have sufficient information on which at least to make much better judgments than we can do today."

Item 2. Certain data of significance which exists in a booklet on air pollution, in an "Environmental Health Series" published by the U.S. Department of Health, Education and Welfare -- Public Health Service, entitled "Survey of Lead in the Atmosphere of Three Urban Communities" (these being Cincinnati, Los Angeles and Philadelphia). On pp. 16, 17, 18, 29, 30, 31 and 36, facts are given concerning annual, seasonal and monthly mean concentrations of lead on weekdays between June 1961 and May 1962, in micrograms per cubic meter of air. These references define the lead concentrations in the atmospheres by monthly averages (weekends excluded) and by specific locations within the respective cities. (We have noted values of 4.0 micrograms per cubic meter and over as particularly pertinent to the present Pennsylvania deliberation.)

In Cincinnati -- no month averaged as much as 4.0 micrograms per cubic meter of air at any of 4 locations.

In Los Angeles -- at one of 8 locations in November, the concentration averaged 6.0. In December, the average concentration was 4.6, varying 4.9, 8.4, 5.1, 4.2, and 4.9 for that month at other specific locations. In January, the situation was much the same, with 4.6, 4.5, 4.3, and 5.3 being reported at various spots.

(and perhaps of special interest to the Pennsylvania Commission)

In Philadelphia -- at 15th and Market, concentrations of 4.8, 4.2, and 4.0 were recorded for October, December and February in that order.

Item 3. The statement below is based on a paper to be presented by Prof. L. J. Goldwater, Professor of Occupational Medicine, School of Public Health & Administrative Medicine, Columbia University, New York, and a member of the World Health Organization. Dr. Goldwater included the following paragraph in a personal communication to the Editor of the New York Times in June 1966:

"Recently completed studies on more than a thousand humans from 16 countries have not shown any increase in lead absorption over the past 20 or 30 years. Lead in the blood of aboriginal people in the highlands of New Guinea is no greater than that found in California, Italy or New York City. If leaded gasoline were an important factor, one would have expected to find a difference between New Guinea and New York."