

December 5, 1950

Mr. Cecil J. Geraghty,
Executive Secretary,
Assembly Pollution Committee,
2129 Grove Street,
Oakland 12, California.

Dear Mr. Geraghty:

I am pleased to have an opportunity to comment briefly on your letter of November 15 and its enclosure of a copy of the letter to Surgeon General Scheele. For obvious reasons I shall not undertake to put any words in Surgeon General Scheele's mouth nor to interpret in advance anything he may say. Therefore, my comments are based on our own experiences with this problem.

As you are probably well aware, this Laboratory in the University of Cincinnati, has been carrying on extensive investigations on the general problem of the lead exposure to the American community as well as the occupational lead exposure existent in American industries in general. We have also, of course, under the financial sponsorship of Ethyl Corporation, carried on rather extensive general investigations and industrial hygiene services, in connection with the problem of leaded gasoline, including the hazards of the manufacture of tetraethyl lead, the hazards of its mixture with gasoline, and the potential hazards associated with any aspect of this industry in this country and abroad. I think it is fair to say that most of the information on this subject, insofar as it has been gathered in the last fifteen years, has been done in this Laboratory and has gone through our hands. Unfortunately, a large proportion of our experimental studies, our observations in the community and in industrial establishments, including those of Ethyl Corporation and the petroleum refineries, have not been made available through publication. From time to time somewhat fragmentary information has been put together for publication, and some rather extensive pieces of investigative work have been published in detail. Our problem has been, however, that we have not had the time, in the course of busy days, to gather together these data, and to make them available through the ordinary avenues of scientific publication. As a matter of fact, I am planning to free myself of many of my other duties, both in consultation and more particularly in connection with the routine work of the Laboratory, so as to be able to gather together these data, study them carefully, and write a general monograph on the subject. The data are voluminous, many of the problems have been studied with minute care, and very important matters of fact have been well established. I think it is fair to say, that in part, at least, through our efforts, we have been able to safeguard both industrial employees and the public, in relation to occupational and

Mr. Cecil J. Geraghty - (2) - December 5, 1950

health hazards arising out of this industry. The evidence in proof of this, however, has not been made available to scientific and medical people. I feel that this must be done, and it is for this reason that I expect to devote a very considerable portion of my time to this effort within the next year. This documentary evidence will not be available in time to be of much service to your committee. On the other hand, I am quite prepared to promise, and I shall be glad, to reply as well as I can to specific questions that may be raised by the committee and to submit at least some documentary evidence in support of my statements. For example, we have been engaged in the study of the City of Cincinnati over a period of more than two years with respect to the overall problem and the sources of contamination of the air with lead compounds. Some of the data on these investigations have been presented briefly, but for the most part they have not been published, and it has not been our intention to publish them until some time to come. However, the information that is already available can be utilized for what it is worth to your committee. We are now engaged in a systematic and long term study of the problem of lead absorption from inhalation of lead compounds in the air. Much has been written on this subject in the past, but there have not been precise and crucial experiments to test the hypotheses that have been developed in these matters. We are studying a human subject and we expect to study a series of human subjects in this manner, in order to clarify these problems. Our purpose is to establish, by the study of atmospheric contamination, what are the facts concerning the exposure of the American population to lead from this source. You are probably aware that lead in the exhaust gas of automobiles is only one of the factors that enters into this picture, and, in fact, it is not the most important one. On the other hand, we are attempting to establish what level of general exposure in the population is to be regarded as hazardous. The problem here is not only that of lead in the air, but it includes also lead in all the food and drink which we take in. The question of risk to the public from lead absorption is the question of the composite exposure of individuals to lead compounds, in all of the variety of ways in which individuals inevitably come in contact with lead compounds in the course of their daily life. I believe I may say quite realistically, without any suggestion of boasting, that we have more information in this Laboratory on this subject than is available elsewhere. We shall be glad, at an appropriate time, to make available all of the information that we have. Unfortunately, as I indicated above, this cannot be done immediately, because of the necessity of subjecting our huge mass of information to careful correlation and study.

I shall be glad to send you, on your request, all of the published material which we have on this subject, and I shall also be pleased to answer any questions that I can concerning the specific problem of lead in motor fuels.

Very truly yours,