

March 6, 1950

Dr. Graham Edgar,
Ethyl Corporation,
Chrysler Building,
New York City 17.

Dear Graham:

Questions are coming in from the Los Angeles area on the contamination of the atmosphere with lead from the exhaust systems of automobiles, and it is certain that these will have to be answered eventually on the basis of our available data. Accordingly I need the information obtained many years ago, with addition later on; (1) the proportions of the lead in gasoline which are discharged into the atmosphere on the one hand and left in the motor and exhaust system on the other; (2) the nature of the compounds represented; (3) the influence of the halogen carrier on the nature of these compounds (whether excess of halogen is required and if so, what excess, and what is the fate of the uncombined halogen); and (4) the particle size of the lead compound discharged into the atmosphere.

Incidentally I need also to know for my own information, what has been the practice over the years, and especially recently, with respect to the composition of "ETHYL" antiknock compound as used in automobile fuels (i.e. as to chlorine and bromine and the excess over that required to convert all lead to chloride and bromide). The extent to which this is confidential should be indicated in any information transmitted to me.

In short, we need to get together, all along the line, the available information that bears on this problem. I have known for years that these questions would come, and now they have come. I doubt if we shall have serious difficulties in meeting the situation, but we must be as well prepared as possible, and we may have to bring some of this information up to date in terms of present practices and conditions in the petroleum and automotive industries.

Any suggestions you may have to make on our end of this question will be greatly appreciated.

As I told you some time ago, we are implementing our long-term plans to study the inhalation of a finely divided lead compound of known chemical composition by a human subject, and can, thereby, I think, head off any preconceptions and uncritical conclusions as to the outcome and significance of such exposure.

Sincerely yours,

Dr. Graham Edgar - (2) - March 6, 1950

P. S. My scouts tell me you have had some recent illness. I hope it has vanished into the limbo of gone, if not forgotten, things.

FAK ef

C.C.: Dr. George Calingaert
Mr. Earl Bartholomew

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