

January 18, 1960

Mr. Henry Doyle  
Occupational Health Program  
Division of Special Health Services  
Department of Health, Education and Welfare  
Washington 25, D.C.

Dear Mr. Doyle:

I send you herewith three (3) copies of a letter prepared at my request by Mr. R. K. Scales and certain of his associates in the Research Laboratories of Ethyl Corporation in Detroit, in an effort to supply technical information pertinent to the nature and extent of the potential hazard involved in the substitution of tetramethyl lead for tetraethyl lead in antiknock fluids.

Certain additional questions concerning details of this matter could be raised, no doubt, and certain statements in the letter could be qualified. For example, the statement that all of the gasoline that may be spilled will evaporate eventually, and that the total amount of the lead compound that will be released into the air will be independent of the initial and ultimate rates of vaporization, is true only if all of the gasoline is permitted to evaporate. If some of it is washed away promptly, or if it penetrates soil or other absorbent material, the initial rate of evaporation is then important, speaking in relative terms. This and other comments raise only minor points, however, and in my view the discussion is straightforward, pertinent and unbiased.

This information is provided informally, of course, but I have established the fact that it is accepted, as correct by the technical people in the industries concerned. It is submitted to you for what it may be worth for present purposes. The physical properties of TEL and TML are precise. The expectations based in part on theoretical considerations and pertinent facts must be tested in practice. The report which I have supplied to you provides some useful information along this line. (Final copies of this report will be made available to you within the next few days. They are in process of reproduction now and are nearly complete. When they have been received, I would appreciate your returning or destroying the preliminary report which I handed to you.) It is my view that the facts presented in this report cannot be extended to apply to the general distribution and use of gasoline containing tetramethyl lead over prolonged periods of time. That is, the facts established are satisfactory as applied to a specific place and a specific time; both space and time must be varied to yield the true facts. I anticipate no great difficulty beyond the performance of a lot of hard work over some considerable period of time, and I consider the risk to people in the interim to be insignificant.

Mr. Henry Doyle

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Let me repeat in writing what I said to you directly, that I shall be greatly pleased to share the responsibilities for the professional interpretation of the results of these investigations with the Public Health Service. I have established to my own satisfaction that executives of the industries concerned share this view.

I have made the request that any statement issued on this matter that contains any reference to the position or attitude of the Public Health Service be referred to you for consideration and have found a complete willingness on the part of Ethyl Corporation and du Pont to comply with this request.

I shall be most grateful to you for any advice you can give me, at the earliest possible time, as to the conclusion arrived at by the Service as to its present action. There are several reasons why this undertaking should get under way promptly if the industries concerned are to follow their own devices. I am sure that you are fully aware of their readiness to comply with the wish of the Service to be kept informed of all matters relating to industrial and public health as this commercial activity progresses.

Sincerely yours,

Robert A. Kehoe, M. D.

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Enclosure: 3 copies of letter from Detroit

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