

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

May 6, 1960

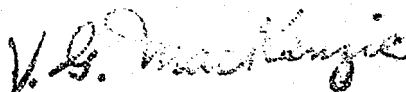
Mr. George F. Kirby
Vice President
Research and Development Department
Ethyl Corporation
P.O. Box 341
Baton Rouge 1, Louisiana

Dear Mr. Kirby:

Thank you for your letter of May 2, 1960, enclosing a copy of the press package released by the Standard Oil Company of California in relation to tetramethyl lead.

For your information, there is enclosed a copy of the material which the Public Health Service has made available to PETROLEUM WEEK in response to its inquiry.

Sincerely yours,



V. G. MacKenzie
Assistant Chief, Research and Development
Division of Engineering Services

Enclosure

cc: Dr. Robert A. Kehoe

KE 0002826

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service
Washington, D. C.

5/2/60

In response to inquiries, the Public Health Service today issued the following statement:

Early in January, the Public Health Service was requested by representatives of the petroleum industry research field to express an opinion on proposed changes in the lead content of motor gasoline. The changes contemplated involve the use of tetramethyl lead as a replacement in whole or in part for tetraethyl lead, following research that demonstrated an advantage to be gained in automobile engine performance.

Although the Public Health Service does not have any legal authority to regulate the use of such substances in gasoline, the Service's opinions were sought by industry, because both tetramethyl and tetraethyl lead are known to be potentially toxic substances. In subsequent discussions, the industry sources made available to the Public Health Service complete data on the research that they have done on the subject.

KE 0002827

In response to the industry request, the Public Health Service advised as follows:

"We believe that the decision to use TML as a substitute for TEL is one which should be made by the companies concerned after due consideration of the hazards which may result to the general public and to workers engaged in the manufacture of TML and its blending and also those engaged in the wholesale and retail marketing of these gasolines. We also believe that representatives of the companies should discuss this matter with the state health authorities in the states concerned.

"If the decision is made to use TML as a gasoline additive, we would suggest that the companies conduct studies that would demonstrate its acceptability from the public health viewpoint. Should it develop that TML cannot be manufactured and used in gasoline without undue risk to the workers or to the public, the Public Health Service would recommend that its use be discontinued.

"In the manufacture and blending of TML, it is also suggested that the same hygienic standards applicable

0002828

KF

to TEL be used.

"Should the companies concerned proceed with the substitution of TML for TEL, we suggest that liaison be established between the companies and the Public Health Service with the understanding that the Public Health Service will have access to all clinical, environmental and other pertinent data relating to any studies undertaken. We also suggest that the companies present to the Public Health Service one year after initiating the substitution, a report on the impact of TML on the contamination of the atmosphere in a major metropolitan center as well as clinical and environmental data demonstrating the safety of controls in the manufacture, use and handling of TML and of gasolines containing this compound."

In addition, the Public Health Service reviewed the following details proposed by industry in the event that the industry proceeded with the use of TML as a gasoline additive, and stated that they appeared reasonable under present circumstances:

1. The maximum concentration of tetramethyl lead

in gasoline should be limited at this time to 2.06

KE 0002829

milliliters per American gallon. This is equivalent in lead content to gasolines containing 3 milliliters of tetraethyl lead per gallon.

2. The warning sign on pumps and other containers should be changed to read "lead alkyl" rather than "lead tetraethyl". Otherwise the sign would be identical to that in present use. A sign with this terminology could then be used on gasoline pumps or containers containing either tetraethyl or tetramethyl.

3. In the case of gasolines containing a mixture of tetraethyl and tetramethyl lead, the maximum concentration of lead should not be in excess of the equivalent of 4 milliliters of tetraethyl lead per gallon and that the tetramethyl fraction be no greater than 2.06 milliliters per gallon.