

March 22, 1950

Mr. Gordon P. Larson, Director,
Air Pollution Control District,
County of Los Angeles,
5201 Santa Fe Avenue,
Los Angeles 58, California.

Dear Mr. Larson:

I send you, herewith, a memorandum which is essentially an abbreviated version of a letter which I wrote recently to Mr. P. L. McGill on the subject of the significance of lead and hydrobromic acid in the exhaust gas of automobiles.

There is more to the general problem than is indicated here. For example, the matter of the composition of the exhausts of diesel-powered vehicles is quite different. Our interest has centered, however, in the fate of lead and of carbon monoxide introduced into the atmosphere by automobiles of the more common type, using gasoline, and specifically leaded gasoline, as fuel, and it is only on these phases of the problem that we have much information.

The important thing for the investigator in this field to bear in mind, from the aspect of lead, is that lead in the atmosphere is no new or recent phenomenon, and that the increment due to the use of leaded gasoline in automobiles is difficult to isolate in view of the several known factors, as well as a number of others of poorly defined origin, that influence the concentration of lead in the air. Moreover, if one excludes occupational situations, the quantities of lead absorbed from the air by persons in our general population are small as compared to those unavoidably associated with the intake of lead in the food. It would be well to consider carefully the enormous amount of precise information now available on the normal metabolism of lead in the human organism, as well as that derived from the study of persons under the conditions of occupational exposure to lead, before undertaking to arrive at any very striking conclusions concerning the importance of minute quantities of lead in the atmosphere.

Cordially yours,

Robert A. Kehoe, M. D.

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