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ETHYL GASOLINE CORPORATION

MANUFACTURING AND TRAFFIC DEPARTMENT

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August 11, 1937

MEMORANDUM: Mr. O. B. Lewis

I acknowledge with thanks receipt of your memorandum of August 9 in connection to Ben Crane's report on the use of what he presumes to be ethyl chloride as an anti-knock agent. I do not think that we have anything to worry about from a safety standpoint if the material is actually ethyl chloride. In the operation of manufacture of this material at the Dye Works, during which annually millions of pounds are made, there has never been any case of poisoning from the material. The operators undergo no special physical medical supervision as attends lead operation, having only to submit each year for the usual annual examination which is routine for all employees regardless of specific occupation. I should say that ethyl chloride, as far as toxicity is concerned, by way of fumes is about in the same class as gasoline itself, the fumes from both under certain circumstances being fatal, which presumably is from lack of oxygen resulting in asphyxiation rather than any other factor. Ethyl chloride has been used, of course, both as a general and local anaesthetic and its continuance as a general one is probably due mainly to its highly inflammable characteristics rather than for any other reason.

Adding ethyl chloride to gasoline should therefore be of no particular significance to us from a safety standpoint, as the addition of it to gasoline would create no greater hazard than the gasoline itself.

It may possibly be, of course, that this material is not ethyl chloride as I see no reason why it would be necessary to allow it to settle out so that no harm would come to the motor, unless it contains sludge impurities which may be from aluminum chloride or other catalysts used in its preparation. Ethyl chloride itself and gasoline are very miscible and the addition one to the other would require no particular further consideration.

If we can be of any particular assistance to you by our laboratory identifying the compound in question, please let us know.

I also acknowledge with thanks receipt of your other memorandum of August 9 in reference to two fatalities in connection to the accident at West Bloomfield, New York. This emphasizes again the importance of air-line masks properly fitted and supplied with fresh air.

J. H. Schaefer

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