October 27, 1948

Dr. Morley Morgana,
Ethyl Corporation,
1600 W. Eight Mile Road,
Ferndale 20, Detroit, Michigan.

Dear Doctor Morgana:

In a recent conversation with Mr. Van Hartesveldt of Thompson Products Company I told him of the results obtained in your Laboratory, both on the matter of the evaporation and selective absorption of tetraethyl lead by suspended material. I also showed him some of the data, and he asked me to communicate with you and to say that he would like to have copies of your data or any reports on your investigations at your convenience. I do not feel that I could properly supply him with any of this material, but told him that I would pass his request on. It might be very useful if you would do so, but I leave it entirely to you as to what you will send him.

I might make a few comments concerning the information supplied.

With reference to the separation of the corrosion inhibitor from the "Vitol" fluid, Mr. Van Hartesveldt told me that the problem of stabilization of this liquid has been solved and that your observations were made on a product which was certainly not satisfactory in comparison with the present product. He has assured me that there is no further problem of separation, since the material cannot even be thrown out by high speed centrifugation. I pass this along for what it is worth, recognizing that the matter is subject to investigation and proof.

With reference to your data on the air evaporation of "Vitol", there is one aspect of the situation that in my judgment requires additional investigation in order to get a practical answer to our problem. The facts thus far available from the experiments are of the utmost importance, and I am very greatly concerned by the implications of your results. On the other hand, it is entirely possible that the total evaporation of the alcohol mixture and the lead is so little under ordinary conditions as to be negligible. By that I mean that no matter what the ratio between lead and alcohol, if the total vaporization is slight, the quantities of lead given off to the atmosphere will be slight as well, and may be negligible. I am not prepared to suggest the means of investigating this point, but I do believe that it will be necessary to simulate the conditions associated with open containers of "Vitol" fluid, comparable to the small tank or to a gasoline tank, when the tank and its contents are at ordinary ambient temperatures. Air is not being bubbled through the liquid nor is much air passing over its surface. Vaporization then will be comparatively slight. What I want to know is how the vaporization of

"Vitol" containing lead, under these conditions, will compare with the vaporization of gasoline and lead under comparable conditions. Here we have a problem of the filling station attendant or ~~of~~ the gasoline handler, at other times, when either is engaged in filling tanks and is standing over them, to some degree, during the process. Our experience demonstrates that this is safe when leaded gasoline is being handled. How can we find out, without going through the process, whether this will be safe for the person who handles "Vitol"? I have some ideas on how to get at this, but I believe that the ideas of your people at Detroit will probably be an improvement on any of mine.

Very truly yours,

Robert A. Kehoe, M. D.

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