January 31, 1957

Mr. Donald W. Hood, President
Industrial Waste Disposal Corporation
P. O. Box 272
La Porte, Texas

Dear Mr. Hood:

I regret my inability to reply to your letter of January 7th earlier, and I trust that the delay will not have discommoded you.

The disposal of sedimentary material taken from gasoline storage tanks by dumping it in the sea is, I believe, entirely feasible. You are on sound ground, however, in examining the effects of such a procedure on various marine organisms, since little or no precise information on this subject has been obtained by experience.

I shall attempt to answer your questions as well as I can, although I am not sure just what certain of them really mean. In your first question, for example, I cannot be sure that you are questioning the safety of the drummed material, or the hazard of getting the sludge out of the tank into the drum. I assume that you mean the latter, since the tightly sealed drum is not much of a problem, so long as it remains sealed.

1. The answer to my interpretation of the question is that the men who handle the sludge must be provided with satisfactory respiratory protection while they are doing this job, unless you devise some equipment for handling the material so as to preclude human exposure. Certainly the job can be done safely if the men are protected adequately.

2. The same group of men can do the entire job if they are protected during any period of exposure to hazard. The protection can be provided by ventilation to maintain a safe level of lead concentration (and a safe concentration of petroleum hydrocarbons). It is not always possible to do this in all of the parts of a large storage tank, and therefore we have relied on the use of positive-pressure air line equipment. In other words, you will have to meet the same precautionary specifications that are required of tank-cleaning crews generally, until the sludge is tightly enclosed within the drums. If your men are given proper protection (and supervision), they will not absorb significant quantities of lead, and they will be able to work on every working day without incurring the risk of accumulating lead in their bodies. Certainly they can be made every bit as safe as our men who work continuously for many years in the

manufacture of tetraethyl lead. However, this means that their exposure to lead must be known to be controlled, and not just hoped for. It might well be desirable to have the men checked from time to time by analyses of their urine for its lead content, so as to be sure of the adequacy of the control measures.

3. I am sure that your company could develop mechanized methods of cleaning tanks, and I am also certain that some of our people could give you the benefit of our own experience in this direction. You may or may not wish to follow the procedure indicated, for you may be able to improve on it or simplify it, or to approach the job by some altogether different means.

4. As to the commercial future of your operations in this category, I cannot give you the slightest hint. This is not my field of knowledge, either directly or indirectly. Some of our people in the field or in the headquarters office should be able to advise you in such matters. My general impression is that if you can compete cost-wise with other groups who do the same type of work, you would find yourself in a very favorable position, especially if you were to contract for the disposal of the sludge. This factor is a sore spot in a number of instances, and I would guess that many of the refineries would be very glad to have it dealt with satisfactorily by someone outside their own organization. However, a number of persons in Ethyl Corporation know much more about this than I do.

Very truly yours,

Robert A. Kehoe, M. D.

RAK:jw

C.C.: Mr. Kenneth Jost

Dictated but not read