

December 18, 1936

Mr. Robert J. Vane
Supervisor
Occupational Ratings
Metropolitan Life Insurance Company
New York City
New York

Dear Mr. Vane:

I am very glad to give you the information which you requested in your letter of December 11th.

You are quite right in saying that I gave you information as to the non-occurrence of cases of poisoning among the blenders of Ethyl Fluid with gasoline at refineries. However I did not say that there were "no recent authentic cases". What I did say was that there had been no cases at any time. That was and is the statement of fact.

The case to which you refer in your letter was not a blender. He was a refinery laborer who with several other laborers was detailed to help clean a tank which had been used for the storage of leaded gasoline. We have previously called attention to the fact that the cleaning of these tanks involves lead exposure in that over a period of months or years variable quantities of decomposition products of the tetraethyl lead in the gasoline settle to the bottom of the tank, or adhere to the sides along with rust and scale. We have issued regulations and instructions for the cleaning of these tanks in order to avoid the inhalation of lead dusts during the cleaning operations. There is reason to believe that there were some peculiarities in the situation at Savannah in connection with the cleaning of this particular tank. We have inquired into the circumstances and have tried to establish definitely what occurred, but in as much as the cleaning operations were entirely finished almost a week before this man became ill, the evidence of what had occurred were by that time largely dissipated. It is, therefore, to some degree a matter of conjecture as to what precautions were taken in cleaning operations or what unusual circumstances led to the severe exposure of lead. The man, however, did die of acute lead intoxication which was probably due to

tri-ethyl lead compounds rather than to tetraethyl lead. It is barely possible that some quantity of concentrated Fluid may have been in the bottom of this tank as a consequence of some abnormality in the blending operations. However this is pure conjecture. It is certain that he was exposed to organic lead in some form, and I repeat that it is probable that the exposure was to tri-ethyl lead decomposition products from the mixed gasolines. We were able to obtain tissues for analysis which demonstrated the presence of quite large quantities of lead. Moreover the clinical picture was that of intoxication from organic lead compounds.

We are making a rather detailed study of the whole problem of cleaning tanks which have contained leaded gasoline, and I am quite sure that the problem of exposure to lead here is one that can be eliminated by the proper organization and supervision of these cleaning activities. However, as I pointed out to you before, this is not a hazard of the group of men who are engaged in the blending operations. This case, therefore, has no relation to the group of blenders who are under our direct supervision and who were considered in the report which I supplied to you some months ago.

Very truly yours,

RAK:is

Robert A. Kehoe, M.D.

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