

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING

New York, January 24, 1938
Circular Letter No. W-267

COPY FOR MR. *Dr. Machle*

TO ALL DIVISION MANAGERS

Gentlemen:

As you know, the Medical Department has been having considerable difficulty in correlating the results obtained from analyzing the sludge samples which our safety engineers have been sending in for over a year.

Chuck Colvin has followed the matter as closely as he could and has apparently made some observations which may help to solve the difficulties surrounding tank cleaning accidents. Very briefly, there seems to be a possibility that the Tetraethyl lead in gasoline remaining in a tank at the time the tank is steamed or left open for ventilation may in some manner concentrate in the remaining water and sludge.

In order to test this theory, we wish to take a number of samples before and after steaming or airing operations. This may mean the safety men will have to spend a little more time at each location or make two trips to a location in order to get samples indicative of the condition in the tank at the time it is opened and also the condition in the tank after the steaming or airing operation is completed, but before the sludge has been removed. If there is any refluxing action, it would appear the higher concentrations of tetraethyl lead would appear immediately adjacent to the walls of the tank. For that reason I believe samples should be taken around the edges of the tank. Also, as an additional check against the wide discrepancies which are apparent in samples, you might take some samples from the center parts of the tank. Label all samples taken carefully of course.

It appears you might also give the information, if you can secure it, as to whether or not there actually was any gasoline left in the tank at the time the tank was opened; if so, the amount, and the approximate lead concentration of such gasoline.

If any of our safety men or division managers can make contributions to this work, it may be helpful in finally solving the problem. Will you please have our safety men inaugurate this new sampling program at once.

Very truly yours,

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