

# ETHYL GASOLINE CORPORATION

CHRYSLER BUILDING  
405 LEXINGTON AVENUE

NEW YORK August 24th 1940.

INTER-OFFICE  
CORRESPONDENCE

To: Mr. E.C. Murphy

Dear Sir:

In answer to your circular letter NYD-275 ,  
you will find attached to this letter a list of questions  
on Dr. Machle's paper, " A Study of the Hazards of Cleaning  
Gasoline Storage Tanks."

Yours Truly



F. Don Williams

KE 0022363

NY 22489

Questions on the pape titled

"A STUDY OF THE HAZARDS OF CLEANING GASOLINE STORAGE TANKS."

- (1) What is thw Chemical composition of sludge other than lead?
- (2) What causes the scale in the tanks?
- (3) What is the cause of lead decomposition?
- (4) What effect does gum in gasoline have on lead if any ?
- (5) Are the tanks treated in any way to pervent corrosion?
- (6) Does lead have an affinity for water?
- (7) ~~XXXXX~~ Is air kept away from stored fuel, or, are the tanks allowed to breathe ?
- (8) Are some men more susceptible to lead poising than others?
- (9) Is fresh air circulated in the tanks during the cleaning provess?
- (10) If a person perspires will more;or less, lead be absorbed?
- (11) How does lead poisonang effect the human body?
- (12) Is there a remedy for lead poison?
- (13) Is there any electrolytic action ~~XXXXXX~~ taking place while the leaded fuel is in storage?
- (14) Is there any chance of the lead becoming partialy radio active during the process of manufacture, or in storage?

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## Questions on Report on

### "A Study of The Hazards of Cleaning Gasoline Storage Tanks"

1. Was it anticipated that climatic and geographical conditions might have some effect on the hazard of tank cleaning? (page 1)
2. How does refinery practises and handling procedure effect the hazard of tank cleaning? (page 5)
3. Why shouldn't difference in lead concentration in gasoline have an effect on the concentration of lead in the sludge? (page 7)
4. Please explain the reasoning on pages 8 and 9 and the conclusion that the hazard is equally spread (page 9).
5. Why should sludge with high total lead be low in organic lead and vice versa? (page 9)
6. Why does organic lead increase as gasoline gets farther from the refinery? What hazard exists in work on tank trucks? Automobile gas tanks? Carburetor servicing? Combustion chamber deposits?
7. What is spectrographic method of determining lead content? (page 1)
8. Why would litharge be added directly to a gasoline tank?(page 13)
9. Since the cleaning period seems to be so variable, what determines when a tank should be cleaned?
10. Describe steaming as a cleaning practise. (page 22)
11. The report stated that steaming has little effect on lead in sludge but table shows quite a discrepency. Why?
12. Is there any poisonous effect from the inorganic lead found in tanks?
13. Is tetra ethyl lead the source of any inorganic lead?

By:

  
Guy B. Donchue