

I. Medical Problems of the Ethyl Gasoline Corporation

1. Serious and Varied

Since the beginning the Ethyl Gasoline Corporation has had to face a variety of hygienic problems arising from the fact that they undertook to manufacture and distribute a dangerous chemical. The Ethyl Gasoline Corporation does not control the final distribution but must interest itself sufficiently to insure safety in the handling of the product. Its position is somewhat different than that of a paint manufacturer (though poisonous properties of various lead compounds are not greatly different) in that much more stringent precautions are necessary in the handling of T.E.L. As you know this is an oily liquid, is volatile and can be absorbed through the skin, making the problem of control of hazard quite different from that of the inorganic lead compounds where the hazard is limited to swallowing and dust.

2. History

(a) manufacture - naturally localized - Medical control - equipment and engineering.

(b) transportation - equipment and supervision.

(c) blending - segregation, engineering and medical control.

Blending which was at first widespread offered at first a problem not unlike that now faced in T.C., but could be localized. This was largely controlled by the above methods, but their success depended to considerable degree on education of the petroleum industry to the necessity of methods and practices that were recommended. At the outset the industry in part was no more willing to cooperate in observance of the precautions that we recommended than appear to be

the case in some instances today in so far as precautions and notifications in tank cleaning are concerned.

(d) tank cleaning - only recently have realized scope though in existence since 1932. Previous approaches little help in existing problem. Problem that of organization and men, until such time as petroleum industry may be relied upon to deal effectively with situation.

3. Tank Cleaning Study

(a) Carried out to:

- 1' Determine status
- 2' Throw light on reasons and factors influencing

(b) Method used

- 1' Taking sample to apply to whole
- 2' Usefulness of method to engineer
- 3' All knowledge in hands of the field representative

(c) Essential conclusions

- 1' Hazard due to organic lead
- 2' Non-predictability
- 3' Significance of air studies

(d) Practical Qualifications

- 1' Size and location of tanks
- 2' Mobile equipment
- 3' Tankers and barges

4. Potential Hazards

(a) Pump repairs

(b) Dismantling tanks