

On the other hand, I would like to have your comments in regard to this committee's suggestion to eliminate the washing of our cars with gasoline at the refineries. While I, myself, do not exactly concur in this suggestion, we must view this subject with an open mind, securing and recognizing the consensus of opinion of all parties concerned.

In reviewing the reasons for flushing out cars at refineries as originally set up back in 1926 when we first went into bulk operation, I believe, there were three essential reasons on which our present procedure was predicated:

(1) In accordance with our Medical Department's views, before disconnecting the swing line in the bulk installation at the refinery from the valve on the dome of the tank car, gasoline was used in order to eliminate any open exposure to the operator of concentrated fluid fumes, and secondly, to avoid possible spillage on the tank car of the concentrated material.

(2) To permit the consignee to salvage completely the valuable contents of the car.

(3) To enable as much as possible accumulations of sludge in our tank cars by reasonably efficient washings with gasoline upon each unloading.

Our experience has proven that our procedures certainly brought about the desired three results and an elimination of this procedure may result in difficulties which may prove more hazardous than the one that the Area Committee wishes to avoid. I say this advantage and in particular connection to the first item enumerated above. The disconnecting of swing lines from tank cars at the refineries certainly constitutes a hazard, particularly, if concentrated fluid is

KE

0000744

N 5560

Copy: Mr. A. E. Wittnacht
Dr. Graham Edgar
Dr. R. A. Kehoe
Mr. J. L. Stecher

ETHYL GASOLINE CORPORATION

MANUFACTURING DEPARTMENT

INTER-OFFICE
CORRESPONDENCE

MAIL ADDRESS: BOX 688, WILMINGTON, DEL.
FREIGHT ADDRESS: CARNEY'S POINT N. J.
TELEPHONE: PENNS GROVE, N. J. 280, EXTENSION 213

March 1, 1934

Mr. E. M. Walter

Attached hereto is copy of recommendations made by the Tetra Ethyl Lead Area Committee on process hazards regarding the handling of our tank cars returned with gasoline residues.

I sent you yesterday also a copy of my letter to Mr. J. B. Middleton of Standard of Ohio Inc. concerning the return of 4400 pounds of gasoline in car MAX-800, and in this letter I also asked him advice as to his experience in procedure of loading and unloading gasoline tank cars as well as their procedure in sweeping out our tank cars with gasoline at their refineries. This anticipated the report received today from the Lead Area Committee, and probably Mr. Middleton's reply may give us a satisfactory safety procedure which will be agreeable to du Pont Dye Works safety practices.

hazard of handling gasoline here, but on the other hand, handled on so many occasions in tank cars and present procedure than to eliminate our present procedure on EHYL and modify existing practices at the plant to correspond to those observed elsewhere with the result that no mishaps

As to the possibility of connecting a nit line, rather than to allow the unloading of the car air displacement, I do not believe this would improve. In the first place, when the car is returned there saturated with gasoline in it and the introduction from displacement of the volume of the fluid would be by a small amount and would not, as implied in Lead blanket of nitrogen. Moreover in investigating the and vapors, the U. S. Department of Commerce, Bureau No. 279 that the limits of inflammability of gasoline 1.45 to 6% gasoline vapor by volume. Furthermore, of gasoline:

70°Baume (0.7 Specific Gravity) vapor pressure			
70°Baume (0.7	"	"	"
60°Baume (0.68	"	"	"
60°Baume (0.68	"	"	"

This figures out by partial pressures of 23.7%, 10.5%, and 6.6% respectively. The usual rule more closely, I believe, to the 70°Baume gasoline volume, assuming the air mixture to be completely homogeneous of magnitude of 20%, well above the inflammable limit be incurring no potential fire or explosion hazard.

You might develop from your various contacts practices in this connection, in view of improving the meantime, I would appreciate your full views on convenience.

You

J.

JHS:S

KE 00007

EXPLOSION HAZARDS IN CONNECTION
REMOVAL OF GASOLINE FROM ETHYL
TANKS.

The Tetra Ethyl Lead Area Committee on pre on February 23 to discuss a hazard which is belie blender plant.

At the present time ethyl fluid tank cars amounts of gasoline are being returned to the op is removed from the cars by suction. The commit constitutes a definite hazard in that when the c sucked into the car and lines thus forming a gaso Such a mixture is definitely an explosion hazard.

The use of air in connection with any infl contrary to DuPont safety practice and in no case blowing any such material. The committee feels t gives rise to a hazard equally as serious as the in blowing such material.

The committee recognizes the fact that the with nitrogen to replace the gasoline as it is di The committee, however, feels that the use of nit expensive and suggest that tank cars no longer be in the refineries but that the refineries depend suction for complete removal of ethyl fluid from

The committee respectfully request that yo to the attention of the Ethyl Gasoline Corp., ask action.

A. E.

KE 0000