

(FIRST COVER)

MEN SHOULD NOT ENTER TANKS THAT HAVE CONTAINED LEADED GASOLINE
UNLESS A SAFETY ENGINEER OF THE ETHYL GASOLINE CORPORATION IS
PRESENT

(SECOND COVER)

TANK CLEANING

(Ethyl decal)

Presented to

with compliments

of

ETHYL GASOLINE CORPORATION

NEW YORK CITY

Safety Engineer

Gasoline tanks are entered for a variety of reasons. Because petroleum product tanks are always a source of hazard to the men entering them for any purpose, work of this sort should not be done unnecessarily. The nature of these hazards is quite well understood by the petroleum industry generally. Instructions for preventing accidents to men working in or around tanks are obtainable from the American Petroleum Institute and through many petroleum companies.

Any tank that has contained leaded fuel may offer serious danger of exposure. This danger is due to volatile organic lead compounds in the sludge, and to the presence of these compounds in the scale as well. A further danger exists from the inorganic lead compounds in the water bottoms and sludge resulting from treating operations other than tetraethyl lead.

IT IS APPARENT, THEREFORE, THAT NO TANK USED FOR LEADED GASOLINE MAY BE ASSUMED TO BE FREE FROM A LEAD HAZARD. (This applies with equal force in the case of refinery, terminal, bulk, trackside or any other tank which is entered for cleaning or repair.)

If hazards are to be avoided, the following precautions must be taken whenever tanks that have contained leaded gasoline are entered for any purpose:

(1) A blower-type or positive-pressure airline hosemask should be worn by any person who enters a leaded gasoline tank that has not been thoroughly cleaned.

This applies not only to tank cleaners but to all others who go into the tank for any purpose.

(2) Hoselines for air masks have a limited life and must be kept clean. If a workman notices any odor, as of gasoline, while wearing his mask, he must leave the tank at once and find the cause or get a new hoseline.

(3) All workmen must wear clean outer clothing preferably coveralls, shirts, underwear (in cold weather) and socks; also acid-proof gloves and rubber boots of good quality and in perfect condition.

(4) Clothing must be changed (and laundered) and a bath must be taken every day, either at the end of the day's work or when the job is finished. If at any time clothing gets soaked with sludge, the workman must bathe at once and put on clean clothes. At the end of each day, and after the job is completed, respirators, boots, gloves and tools must be cleaned.

(5) Sludge is dangerous to handle even after it has been taken out of the tank. It should be kept wet and buried at once, in a place where it will not be uncovered later.

Precautions for repairmen:

Repairmen engaged in any type of work in tanks that have not been thoroughly cleaned must follow the instructions given above. If possible, all cold work should be done only after the tanks have been thoroughly cleaned. Welding and other hot work should never be done until the tanks have been cleaned and all areas that may get hot are down to clean metal.

Dismantling of tanks that have contained leaded gasoline is a special problem. The following procedures designed to eliminate the hazards from lead compounds are recommended whenever there are heavy deposits of scale, and are to be used in addition to the precautions usually taken:

(1) Tanks should be cleaned thoroughly and the sludge should be disposed of in accordance with the foregoing instructions.

(2) If the tank is to be dismantled, the roof should be removed together with such other plates as are necessary to secure adequate ventilation.

(3) All metal surfaces, including those of parts and plates that have been

removed, and that carry a heavy deposit of scale ^{or have} been in actual contact with sludge should be covered with a coating of light oil to eliminate dust.

(4) The side plates and then the bottom are dismantled. (If the tank has been thoroughly cleaned, special precautions are not necessary for the actual dismantling operation.)

(5) Parts and plates, the surfaces of which carry a heavy deposit of scale or have been in actual contact with sludge should be wire-brushed, sand-blasted or burned, depending upon which procedure can be carried out the most easily. Airline respirators should be used if the plates are cleaned by burning off. Lead dust respirators are adequate in case scraping or brushing is done. After any of these types of cleaning, the material can be handled without special precautions.

~~(6)~~ A tank can be considered thoroughly clean when: 1; All sludge and bottom sediment have been removed and buried. 2; All surfaces within the tank have been cleaned of scale and deposits. 3; The bottom has been cleaned of all water or other liquids which might conceal a hazard.

The Ethyl Gasoline Corporation is anxious to cooperate to the fullest extent in making tank cleaning operations safe.

Its Safety Engineers will be glad to discuss any problem which may arise.

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