

HEADQUARTERS
UNITED STATES ARMY, ALASKA
APO 949, Seattle, Washington
Office of the Surgeon

AWARD 270/

9 June 1959 .

John J Phair, M.D.
College of Medicine
Eden and Bethesda
Cincinnati 19, Ohio

Dear Doctor Phair:

The United States Army, Alaska operates a petroleum pipeline that transports diesel oil, jet fuel, motor gasoline and aviation gasoline from Haines, Alaska to Fairbanks, Alaska, a distance of 626 miles. The system has five tank farms, five pumping stations and two take-off stations. The storage tanks have to be cleaned periodically, and since the gasolines are leaded the workers who clean the tanks are exposed to the hazard of tetraethyl lead poisoning.

Until recently there has been little or no consideration of this hazard from a safety or preventive medicine viewpoint. Workers have (according to the foremen) used rubber boots, rubber gloves, coveralls and forced air respirators while working in the tanks, but there is no actual knowledge of the hazards involved. It is therefore my desire to prepare an information pamphlet for use by workers, foremen and physicians who may be required to treat possible tetraethyl lead poisoning cases.

I recall that a considerable amount of time was devoted to tetraethyl lead poisoning at the course on occupational medicine that I attended at the Taft Sanitary Engineering Center in February 1956. I find, however, that my memory isn't dependable enough to write any factual material and the libraries in the Alaska area are so limited in their scope that source material is not available.

I should like to impose upon you, or someone at the Taft Sanitary Engineering Center, to the extent of asking for some information on tetraethyl lead poisoning. Some of the specific information I desire is:

1. The extent of danger of tetraethyl lead poisoning to a person working on a pipeline and having only casual exposure to leaded gasoline.
2. The extent of danger of tetraethyl lead poisoning to a person who is required to enter a storage tank for the purpose of cleaning sludge out of it.

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3. The types of protective clothing and equipment recommended for personnel cleaning gasoline storage tanks.

4. Instruments that may be used to determine the amount of gasoline vapors remaining in a tank after it has been drained, washed down with water and forced draft ventilated. In other words, when is it safe for a worker to enter a tank?

5. Instruments, if any, that may be used to determine the amount of (tetraethyl) lead dust in the air inside the tank. (After the tank has been drained and dried out a fine dust is present on the walls and any projections on the walls of the tank. Air currents cause this fine dust to circulate in the tank and settle on the workers.)

6. Signs and symptoms of tetraethyl lead poisoning, and methods of treatment.

7. Any other material that may assist me in preparing an information pamphlet on the subject.

I realize that I am asking for information that could cover a large field. If there is no readily available material, please do not hesitate to tell me so. If, on the other hand, you do have some material that you can send to me I will appreciate it very much.

Sincerely yours,

Donald S. Myers

DONALD S. MYERS
Lt Colonel, MC
Preventive Medicine Officer
(FACPM)

P.S. Since writing this I learned the personnel at the people responsible for operating the pipeline and from that source the statements I made in the second paragraph are not completely true. They are aware of the danger but had the opinion that it was not a serious one. The more I write the more I realize that this is not a correct assumption. The question that I have asked and the information that I have received are therefore still pertinent.