



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

DIRECTOR
National Technical Engineering Center
3700 Columbia Parkway
Cincinnati 30, Ohio

Att: Joseph E. Flanagan, Jr.

September 5, 1957

Mr. John D. Keane
Director of Research
Steel Structures Painting Council
1400 Fifth Avenue
Pittsburgh 13, Pa.

Dear Mr. Keane:

Reference is made to your inquiry of July 30, 1957, regarding the use of red lead paints on interior surfaces of potable water tanks. We feel that red lead is undesirable for such use because of the possible increase in the lead content of the water.

An extensive study (still unpublished) was made by Mr. Fraser and Dr. Fairhall of the Public Health Service several years ago. They studied three types of lead paints; an oil base, a phenolic resin base, and a vinylresin base. They also sampled water from a number of tanks which had been painted with lead paints. The oil base paints give rise to much higher lead concentrations in the water than the other two types of paint.

Obviously, a number of variables such as the nature of the water, the storage time in the tank, and the ratio of painted surface to water volume will influence the degree to which such paints will increase the lead concentration in the water. In many instances, the lead content of the water may not be appreciably increased, but in some tanks the concentration would exceed the 0.1 mg. per liter maximum of the Public Health Service Drinking Water Standards.

For this reason and because other suitable coatings for potable water tanks are available, we would prefer to have less toxic materials than lead pigment paints

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Mr. John D. Keane

- 2 -

September 5, 1957

used. You are probably acquainted with Military Specification Mil-P-15145 A covering a zinc dust pigmented paint for the interior of potable water tanks.

Your letter also inquires about taste and odor problems due to tank coatings. We have no information on this subject.

Very truly yours,

Joseph E. Flanagan, Jr.
Assistant Director

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