

7025.0230 IDENTIFICATION OF LEAD IN PAINT.

Subpart 1. **Testing required.** An owner, or representative of the owner, shall test a coating for total lead concentration, using the methods required by this part, before the owner or contractor removes the coating from the exterior of a steel structure, except as provided in subpart 2, items A and C, unless removal is to be conducted inside a building. The owner of a steel structure shall retain paint test records for a minimum of three years.

Subp. 2. **Sampling procedure and analysis.** The samples collected or measured as required by this subpart shall be representative of the coatings to be removed. Each collected sample shall include equal surface areas and the entire thickness of each coating. The lead concentration of a surface sample measured by an XRF analyzer shall be the mean value of a minimum of three different measurements of that surface. If parts of the steel structure have been painted at different times or with different paints, a sample of each coating from each of these parts must also be collected or measured.

A. Bridges. Prior to paint removal, the owner of a bridge shall determine the concentration of lead in paint on the bridge either by review of painting records or by XRF analysis or acid digestion analysis of a minimum of one paint sample from a girder bridge or one paint sample from the trusses and one from the girders of a truss bridge.

B. Storage structures. Prior to paint removal, the owner of a water tank, fuel tank, grain storage bin, or other storage structure shall determine the concentration of lead in paint on the structure by either XRF analysis or acid digestion analysis of each sample of paint.

(1) Multileg water tank. The owner shall collect or measure, at a minimum, one paint sample from the legs, one sample from the center column, and one sample from the reservoir, for a total of three samples.

(2) Other water tower. The owner shall collect or measure, at a minimum, one paint sample from the base of the column and one sample from the top of the column or the reservoir, for a total of two samples.

(3) Ground storage tank, standpipe, or grain storage bin. The owner shall collect or measure, at a minimum, one paint sample from the wall and one sample from the roof of a ground storage tank where the same paint will be removed from one or more identical structures and, for standpipes and grain storage bins, one sample from the bottom half and one from the top half of the wall, for a total of two samples.

(4) Small storage tank. The owner shall collect or measure, at a minimum, one paint sample from a fixed storage tank with less than 1,000 square feet surface area and one paint sample from a portable storage tank where the same paint will be removed from one or more identical tanks.

C. Other steel structures. Prior to paint removal, the owner of a steel structure, other than a bridge or a storage structure, or the owner of a painting facility shall determine the concentration of lead in paint on the structure either by review of painting records or by XRF analysis or acid digestion analysis of a minimum of one sample of paint.

Subp. 3. **Calculation of lead concentration.** Where samples are analyzed from different parts of one structure, the calculation of lead concentration for the structure is the sum of the following product for each of the samples:

surface area of part represented by sample as a		Pb concentration of sample (%)
percent of total surface area of structure	x	or mg/cm ²)

such that:

$$(\text{area}_A \times \text{Pb}_A) + (\text{area}_B \times \text{Pb}_B) + \dots + (\text{area}_N \times \text{Pb}_N) = \text{lead concentration (\% or mg/cm}^2\text{)}$$

where "A," "B," "N" are sample areas; "area" is the surface area of the part of the structure expressed in whole percent of total surface area, so that the sum of all surface areas is equal to 100 percent; and "Pb" is the concentration of total lead expressed in percent as a decimal or the weight of lead per surface area expressed in mg/cm² divided by 100.

Statutory Authority: *MS s 115.03; 116.07; 144.9508*

History: *21 SR 202; 23 SR 2224*

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