Lead Paint Removal Containment and Posting Requirements

The purpose of providing containment is to prevent release of lead and other particulate matter into the environment. Containment protects human health and the environment and is required regardless of whether the paint contains lead or not. All abrasive paint removal operations require some measure of containment.

Posting Requirement

The name and phone number of the contractor performing the lead paint removal operation must be posted in letters and numbers at least four inches high on a vehicle or sign at the site of operation from beginning to completion of paint removal operation. Posting is not required for non-lead paint removal operations.

Containment Methods for Lead Paint Removal

Containment required for removing lead paint from structures is based on the following factors:

• Proximity of surface water

Distance from work area to sensitive properties – residences, child care facility, school, playground, public use facility, commercial facility, natural protected area, industrial facility and agricultural facility. Only that part of the bridge undergoing paint removal must be considered when determining the distance from sensitive properties. See Containment Classification Form for definitions of sensitive properties.

These factors are used to determine the containment classification from Class I (least restrictive) to Class IV (most restrictive). Containment requirements must be included in the project contract or special provisions. Use the <u>Containment Classification Form</u> to determine the required containment for abrasive blasting paint removal operations.

Wind Speed Limitation

Regardless of the containment class being used, the paint removal operation must stop whenever wind speeds render the containment ineffective in containing the blasting residue.

Containment Guidelines

Following is guidance on methods used to attain dry abrasive blasting containment requirements for the various classes.

Class I Containment Requirements

Application

Methods presented in this section apply to lead paint removal by abrasive blasting with Class I Containment. Bridges meeting <u>Class I Containment criteria</u> are not located within the threshold distances for surface water or sensitive properties. For portions of the bridge where curtains and ground protection are not feasible because of woody vegetation or other factors, a Class II suspended containment method shall be used.

Ground Protection

Use impermeable tarps to prevent deposition of blasting residue on soil and vegetation. Overlap tarps at least 1-1/2 feet and weight them down to prevent separation, except on woody vegetation. The tarps must cover the surface of all bare soil and vegetated areas inside the

curtains (see paragraph below about curtain placement) and shall extend a minimum of 30 feet in all directions outside the curtains. Hard-paved surfaces such as bituminous and concrete paving may be left uncovered as long as the pavement is unbroken.

Curtains

Use 100% impermeable curtains that are in good condition (no rips or holes) to contain blasting residue and lead paint particles generated from beams, trusses and girders. The curtains must overlap at least three feet unless the edges can be completely fastened together.

- Girders and undertrusses. Suspend curtains from the bridge deck so that the work area is contained on all sides. The curtains must extend to the ground tarp and be anchored inplace or to the platform if suspended above the ground.
- Overtrusses. Suspend curtains on both sides of each truss beginning from a height greater than the point of paint removal and extending down inside of the curtain containment area suspended from the bridge deck.

Following is another method that can be used if the bridge is closed to traffic:

Suspend curtains around the entire outside perimeter of the trusses beginning from a height greater than the point of paint removal and extending down to the roadway pavement or, if present, inside of the curtain containment area suspended from the bridge deck.

Class II Containment Requirements

Application

Methods presented in this section apply to lead paint removal by abrasive blasting with Class II Containment. Bridges meeting <u>Class II Containment criteria</u> are located within the threshold distance for surface water but not within the threshold distance for sensitive properties. This containment class requires use of the Class I Containment methods and the following additional requirements to protect surface water:

Protection of any Surface Water

One of the following options must be applied to prevent blasting residue or other particulate matter from entering any surface water:

- Suspend impervious tarps horizontally beneath the bridge deck or suspend nets lined with impermeable tarps horizontally beneath the bridge deck;
- Suspend scaffolding beneath the bridge deck that supports a platform lined with impervious materials;
- Secure a barge or a raft covered with impervious materials beneath the bridge and use impervious materials as curtains to direct blasting residue onto the raft or barge; or
- Collect blasting residue from a frozen water surface with ground tarps as required in Class I Containment, except that the ground tarps must extend beyond the bridge deck in a downwind direction to a distance greater than the highest point of paint removal.

Curtains

The curtains used to contain the girders and trusses shall be suspended outside the painted surfaces beginning from a height greater than the point of paint removal and extending down to the horizontally suspended tarps, platform, raft or frozen water tarp or inside of the barge. Blasting residue must not escape from between the curtains and horizontal impervious material.

Protection of Narrow Bodies of Water

These methods may be applied as an alternative for protection of narrow surface water bodies. It is assumed that ground tarps will be placed beneath portions of bridge overlying soil.

- Suspend an impermeable tarp across the underside of the bridge deck at a point more than halfway across the water body with the bottom edge anchored at the farther bank so that it overlaps the ground covers, seal the spaces between the beams above the tarpaulin and perform paint removal operation on contained portion of the bridge. Repeat containment procedure on opposite side of bridge and perform remaining paint removal.
- Place a platform above and across the water surface and cover the platform with impermeable tarps. The platform should overlap the ground tarps. The curtains used to contain the girders and trusses as described in Class I Containment shall be suspended outside the painted surfaces beginning from a height greater than the point of paint removal and extend down to the ground tarp or platform. Blasting residue must not escape from between the curtains and ground tarp or platform.

Class III Containment Requirements

Application

Methods presented in this section apply to lead paint removal by abrasive blasting with Class III Containment. Bridges meeting <u>Class III Containment criteria</u> are located within the threshold distance for sensitive properties but not within the threshold distance for surface water. This containment class requires use of the Class I Containment methods and use of negative air pressure to protect sensitive properties.

Abrasive blasting in total enclosure with negative air pressure

Conduct abrasive blasting inside a totally enclosed workspace while maintaining less-thanatmospheric air pressure inside the enclosure and use a dust collector with filtration of exhaust air to eliminate dust emissions.

Class IV Containment Requirements

Application

Methods presented in this section apply to lead paint removal by abrasive blasting with Class IV Containment. Bridges meeting <u>Class IV Containment criteria</u> are located within the threshold distance for surface water and for sensitive properties. Class IV Containment must meet the following requirements to protect surface water and sensitive properties:

- Class I Containment
- Class II Containment tarps suspended beneath work area to protect the waterway
- Class III Containment dust collection system and negative air pressure to protect sensitive properties