

## **Containment and Posting Requirements for Paint Removal Operations**

The purpose of providing containment during paint removal operations is to protect human health and the environment from releases of lead and other particulate matter. Containment is required regardless of whether the paint contains lead or not. All abrasive paint removal operations conducted on MnDOT projects must use negative air pressure for containment.

### **Posting Requirement**

The name and phone number of the contractor performing the lead paint and/or PCB paint removal operations 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 Guidelines**

#### **Wind Speed Limitation**

Paint removal operations must stop whenever wind speeds render the containment ineffective in containing the blasting residue.

#### **Ground Protection**

Use impermeable tarps to prevent deposition of blasting residue on soil and vegetation. Overlap tarps at least 1-1/2 feet and weigh 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 in-place 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.

**Enclosure negative air pressure**

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

**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.

**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.