

**REVISION OF SECTION 509  
PAINT EXISTING STRUCTURE**

Section 509 of the Standard Specifications is hereby revised to include the following:

**DESCRIPTION**

This work consists of treating surfaces coated with lead-based paint with a cover coating that chemically reacts with the lead in the paint to render it non-leachable and non-hazardous. The structure on which this treatment is performed either shall be repaired or left in place, removed and disposed of as solid waste, or removed and recycled, as shown in the plans. The cover coating cannot be painted over, and shall be removed completely from portions of structures which are to be repainted. In addition, this work includes the proper removal, containment and disposal of lead based paint that already may have previously flaked off from the structure, or that may flake off from these surfaces during treatment operations.

In addition, this work includes painting the structural steel after lead paint has been removed.

**MATERIALS**

The coating shall be Ecobond LBP, as supplied by Metals Treatment Technologies LLC (MT2), 12241 West 49<sup>th</sup> Ave, Suite 3, Wheat Ridge CO 80033, telephone: 1-888-435-6645.

Painting of structural steel will be performed per Section 708 of the CDOT Standard Specifications for Road and Bridge Construction.

**CONSTRUCTION REQUIREMENTS**

A minimum of two weeks prior to the start of work, the Contractor shall submit a written method statement for approval. This statement shall describe in detail the work and material that the Contractor intends to use to achieve the following:

- (1) Contain loose visible paint chips on soil or pavement and treat with Ecobond or other lead-fixating agent such as Portland cement, using an application rate that will render the leachable lead concentrations below the threshold limit designating the paint material a solid waste.
- (2) Contain overspray of Ecobond. Spraying in conditions where wind speeds exceed 20 mph will not be permitted.
- (3) Contain Ecobond overspray, flaked-off paint material, paint dust, and other materials that may be generated during the application of Ecobond, painting of structures, or the removal of structures, and prevent them from entering state waters in accordance with subsection 107.25 pr dispersing onto and away from the project area.
- (4) Apply Ecobond no earlier than 2 months prior to removal of and/or work to lead-painted structures.

Work shall not begin until written approval of the method statement has been received.

If not already done by CDOT staff, the Contractor shall obtain a sample of paint from the surface of each structure to which Ecobond is to be applied. Samples shall be tested to determine the concentration of leachable lead (TCLP lead) in the paint using the Toxicity Characteristic Leachate Procedure EPA Method SW-846.

Ecobond shall be thoroughly sprayed on to each structure that is to be treated in accordance with manufacturer's recommendations. TCLP lead concentrations between 5.1 milligrams per liter (mg/l) to 60 mg/l require an Ecobond application reate of 10 to 15 millimeters thickness of product. For TCLP lead concentrations greater than 60 mg/l, the Ecobond application rate will be determined be a qualified representative of the manufacturer.

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After the Ecobond has been allowed to dry and set in accordance with manufacturer's recommendations, another sample of paint shall be obtained from each of the structures and tested for TCLP lead using EPA Method SW846, following the protocol in Specification 250.06 of the CDOT Standard Specifications for Road and Bridge Construction. If the test shows that the concentration of TCLP lead is less than 5mg/l work shall commence on removing or painting the structures, as shown on the plans. If the sample results indicate the material exceeds the threshold of 5 mg/l TCLP lead, the Ecobond shall be reapplied and the surfaces shall be retested. All paint which does not exceed the 5 mg/l TCLP lead threshold can be handled and disposed as solid waste, and/or considered part of recyclable material if intact.

Where flaked paint chips are visible on the ground, Ecobond or other lead fixating agent such as Portland cement shall be applied to the flakes and immediate area, at a rate sufficient to render the TCLP lead below 5 mg/l, and allowed to cure if necessary. The paint chips and applied agent shall then be vacuumed, the residue sampled and disposed as solid waste within 7 days of receipt of sample data.

Painting of structural steel will be performed per Section 708 of the CDOT Standard Specifications for Road and Bridge Construction.

**METHOD OF MEASUREMENT**

Paint Existing Structure will be measured by lump sum.

**BASIS OF PAYMENT**

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Paint Structural Steel	Lump Sum

Surface preparation as called for in the manufacture's recommendations will not be measured and paid for separately, but shall be included in the cost of the work.

Payment will be full compensation for work, materials and equipment required to safely and properly coat each structure with Ecobond.

Containment and disposal of flaked off paint material and other debris will not be measured and paid for separately but shall be included in the work.

All costs associated with the manufacture's representative will not be measured and paid for separately, but shall be included in the work.

Lead based paint testing will not be measured and paid for separately, but shall be included in the work.

All work, materials and equipment associated with preventing material from off-site dispersal and entering state waters will not be paid for separately, but shall be included in the work.

Payment will be full compensation for work, materials and equipment required to safely and properly coat each structure member structural steel bridge paint per the plans.