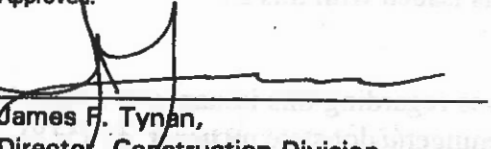


To: Superseded By EI 12-013 Effective 9/6/12		New York State Department of Transportation ENGINEERING INSTRUCTION	EI 05-008
Title: TYPICAL HAZARDOUS PAINT WASTE INFORMATION			
Distribution: ☐ Manufacturers (18) ☐ Local Govt. (31) ☒ Agencies (32) ☐ Surveyors (33) ☒ Consultants (34) ☒ Contractors (39) ☐ _____ ()		Approved:  James F. Tynan, Director, Construction Division 3-15-05 Date	

ADMINISTRATIVE INFORMATION:

- This Engineering Instruction (EI) is effective immediately.
- The EI supersedes contract shelf note 02050_66.
- This EI does not supersede and other issuances.
- The contents of this EI will eventually reside in the Environmental Procedures Manual.

PURPOSE:

The purpose of this EI is to issue two Special Notes with typical hazardous paint waste information.

TECHNICAL INFORMATION:

- The information in the Typical Paint Waste Composition Note currently inserted into contract proposals is outdated and not acceptable for characterization, shipping and disposal by NYSDEC and USDOT regulation.
- The revised paint waste information should be used to replace existing information regarding paint waste contained in contract proposals.
- The paint waste information is recorded on container markings, disposal documents, and shipping manifests.

IMPLEMENTATION:

- Engineers-in-Charge of ongoing contracts, including those submitted for lettings prior to 09/08/05, should file a copy of this EI in the contract records as documentation of the change in accordance with the Contract Administration Manual (CAM) §104-03.
- Main Office Design Quality Assurance Bureau will insert the shelf note *Typical Lead-Based Paint Waste Information* for all projects containing 571 items with the exception of 571.98----18 beginning with projects submitted for the letting of 09/08/05.
- Main Office Design Quality Assurance Bureau will insert the shelf note *Typical Lead-Based Paint Containing Asbestos Waste Information* for all projects containing items 571.98----18 beginning with projects submitted for the letting of 09/08/05.

TRANSMITTED MATERIALS:

This EI transmits shelf notes for *Typical Lead-Based Paint Waste Information* and *Typical Lead-Based Paint Containing Asbestos Waste Information*

BACKGROUND:

The Department, as the generator of waste, has the best knowledge of its composition, which is necessary to determine most appropriate handling, transportation and disposal by the Contractor. The current waste composition note dates from 1991, and is not acceptable under current waste handling, transport and disposal regulations. Subsequent to 1991, a separate note for paint waste containing asbestos was required, and is issued with this EI.

CONTACT:

Direct questions regarding this issuance to Laura Greninger of the Environmental Analysis Bureau via e-mail at LGreninger@dot.state.ny.us or at (518) 485-5316 or to Brian DeWald of the Construction Division via e-mail at BDeWald@dot.state.ny.us or at (518) 457-6472.

TYPICAL LEAD-BASED PAINT WASTE INFORMATION

A. Lead-Based Paint Waste Profile: Lead-based paint waste generated by the removal of paint consists of a mixture of abrasive blast media such as boiler slag or steel grit and paint chips. This Special Note provides supplemental information about the waste in accordance with Resource Conservation and Recovery Act (RCRA) regulations. This composition profile does not include waste resulting from removal by chemical strippers for which the resulting waste will contain components of the stripper. Based on the knowledge of the process and the resulting waste material, and on previous testing of typical waste by independent laboratories approved by the NYS Department of Health, the following waste material information has been developed for typical lead-based paint waste.

B. Process Generating Waste: The waste results from removal of lead-based coatings from painted structures, typically steel bridges, by abrasive blasting, manual, shrouded mechanical, or high-pressure (hp) water methods. The North American Industry Classification System Code (NAICS) typically assigned for the site is: 23731- Highway, Street, and Bridge Construction.

C. Composition: To the Department's knowledge, the waste does not contain PCBs, pesticides, cyanides, organic TCLP constituents, dioxins, asbestos, ozone depleting substances, volatile organics or greater than 1000 ppm halogenated organic compounds. The waste is not a RCRA reactive, corrosive or ignitable, or source-listed or chemical product-listed waste. It is not radiological, etiologically, explosive, water reactive, or shock sensitive. The specific composition will vary based on the removal method used, abrasive used, the proportion of paint chips to abrasives and other variables determined by the Contractor's operation. For wastes resulting from any chemical stripping of paint, the Contractor shall consider the components and properties of the stripper and the resulting waste mixture to characterize the waste.

The waste typically contains the following:

Removal Method:	Approximate %	
	Abrasive	Paint Chips
Boiler Slag (an amorphous mixture of Fe, Al, and Ca silicates)	90-95%	5 - 10%
Steel grit (% varies by degree of grit recycling)	40-90%	10 - 60 %
No abrasive (manual, shrouded mechanical or water methods)	0%	100%

Paint Chips:

Paint chips contain basic lead silico chromate, titanium dioxide, chromium dioxide, magnesium silicate, linseed oil, alkyd resin, fillers, driers, and other miscellaneous materials.

Other Components: Water may be present from water used during removal. Iron oxide (rust, mill scale), animal waste (for example, feces, guano, nesting materials) and dirt/miscellaneous debris potentially present.

RCRA Metals: The waste is presumed to contain lead at levels exceeding regulatory limit of 5 milligrams per liter (approximately 5 ppm) by the Toxicity Characteristic Leaching Procedure (TCLP) test for lead (unless contract documents provided for testing to determine lead toxicity characteristic). Chromium is considered present as an underlying characteristic.

TYPICAL LEAD-BASED PAINT WASTE INFORMATION

D. Typical Physical Characteristics:

Physical State: Solid

Color:

Black for boiler slag component, or metallic grey/black for steel grit component.
Color varies for paint chips.

Odor: None

pH: Not applicable

Liquid Flash Point: Not applicable

Specific Gravity:

Approx 2.7 (boiler slag)

Approx. 7.5 (steel grit)

Bulk Density:

Approx. 1.2 kg/l (75 lb/cu. ft) (boiler slag)

Approx. 3.6 kg/l (225 lb/cu. ft.) (steel grit)

Free Liquids:

None (moisture may be present from water added during removal)

E. Consolidated Hazardous Waste Information: The following consolidated information for hazardous lead-based paint waste can be used in completing the required items needed for its proper shipment and disposal:

- USDOT Shipping Description: RQ Hazardous waste, solid, n.o.s. (D008); 9; NA3077; PG III
n.o.s. = Not Otherwise Specified, PG = Packing Group
- Hazard Label on containers: Class 9
- Placard for shipments exceeding 455 kg (1001 lbs) or bulk - Class 9
- Hazardous Waste due to the Characteristic Lead Toxicity, Waste Code D008
- Constituents of Concern: Lead and Chromium
- Treatability Group: Nonwastewater
- Treatment Standard: 0.75 mg/L Lead and 0.60 mg/L Chromium by TCLP test
- Reportable Quantity: 4.54 kg (10 lbs) or greater
- Markings on container:
 - Hazardous waste, solid, n.o.s. (D008); NA3077
 - HAZARDOUS WASTE -Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the US Environmental Protection Agency.
 - Generator's Name: NYSDOT Region
 - EPA ID # ()
 - Manifest Document Number ()
 - Accumulation Start Date ()
- USDOT Emergency Response Guidebook Guide: 171, Substances (Low to Moderate Hazard)

TYPICAL LEAD-BASED PAINT CONTAINING ASBESTOS WASTE INFORMATION

A. Lead-Based Paint Containing Asbestos Waste Profile: Lead-based paint containing asbestos waste generated by the removal of paint consists of a mixture of abrasive blast media such as boiler slag and paint chips. This Special Note provides supplemental information about the waste in accordance with Resource Conservation and Recovery Act (RCRA) regulations. This composition profile does not include waste resulting from removal by chemical strippers for which the resulting waste will contain components of the stripper. Based on the knowledge of the process and the resulting waste material, and on previous testing of typical waste by independent laboratories approved by the NYS Department of Health, the following waste material information has been developed for typical lead-based paint containing asbestos waste.

B. Process Generating Waste: The waste results from removal of lead-based coatings containing asbestos from painted structures, typically steel bridges, by wet abrasive blasting, manual, shrouded mechanical, or high-pressure (hp) water methods. The North American Industry Classification System Code (NAICS) typically assigned for the site is: 23731- Highway, Street, and Bridge Construction.

C. Composition: To the Department's knowledge, the waste does not contain PCBs, pesticides, cyanides, organic TCLP constituents, dioxins, ozone depleting substances, volatile organics or greater than 1000 ppm halogenated organic compounds. The waste is not a RCRA reactive, corrosive or ignitable, or source-listed or chemical product-listed waste. It is not radiological, etiological, explosive, water reactive, or shock sensitive. The specific composition will vary based on the removal method used, abrasive used, the proportion of paint chips to abrasives and other variables determined by the Contractor's operation. For wastes resulting from any chemical stripping of paint, the Contractor shall consider the components and properties of the stripper and the resulting waste mixture to characterize the waste.

The waste typically contains the following:

Removal Method:	Approximate %	
	Abrasive	Paint Chips
Wetted Boiler Slag (an amorphous mixture of Fe, Al, and Ca silicates)	90-95%	5 - 10%
No abrasive (manual, shrouded mechanical or water methods)	0%	100%

Paint Chips Containing Asbestos :

Paint chips contain basic lead silico chromate, titanium dioxide, chromium dioxide, magnesium silicate, linseed oil, alkyd resin, fillers, driers, and other miscellaneous materials. Paint chips include asbestos fibers at approximately 1-20% of paint mixture.

Other Components: Water added during removal/packaging to ensure wetting of asbestos. Iron oxide (rust, mill scale), animal waste (for example; feces, guano, nesting materials) and dirt/miscellaneous debris potentially present.

RCRA Metals: The waste is presumed to contain lead at levels exceeding regulatory limit of 5 milligrams per liter (approximately 5 ppm) by the Toxicity Characteristic Leaching Procedure (TCLP) test for lead (unless contract documents provided for testing to determine lead toxicity characteristic). Chromium is considered present as an underlying characteristic.

TYPICAL LEAD-BASED PAINT CONTAINING ASBESTOS WASTE INFORMATION

D. Typical Physical Characteristics:

Physical State: Solid

Color:

Black for boiler slag component. Color varies for paint chips.

Odor: None

pH: Not applicable

Liquid Flash Point: Not applicable

Friability: Non-friable

Specific Gravity:

Approx 2.7 (boiler slag)

Bulk Density:

Approx. 1.2 kg/l (75 lb/cu. ft) (boiler slag)

Free Liquids:

None (moisture may be present from water added during removal)

E. Consolidated Hazardous Waste Information: The following consolidated information for hazardous lead-based paint containing asbestos waste can be used in completing the required items needed for its proper shipment and disposal:

- USDOT Shipping Description: RQ Hazardous waste, solid, n.o.s. (D008, asbestos); 9; NA3077; PG III
n.o.s. = Not Otherwise Specified PG = Packing Group
- Hazard Label on containers: Class 9
 - Placard for shipments exceeding 455 kg (1001 lbs) or bulk - Class 9
- Documents: Hazardous Waste Manifest AND Asbestos Waste Shipping Record
- Hazardous Waste due to the Characteristic Lead Toxicity, Waste Code D008
- Constituents of Concern: Lead and Chromium (also contains non-friable asbestos)
- Treatability Group: Nonwastewater
- Treatment Standard: 0.75 mg/L Lead and 0.60 mg/L Chromium by TCLP test
- Reportable Quantity: 4.54 kg (10 lbs) or greater
- Markings on container:
 - Hazardous waste, solid, n.o.s. (D008); NA3077
 - HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the US Environmental Protection Agency.
 - Generator's Name: NYSDOT Region.
 - EPA ID # ()
 - Manifest Document Number ()
 - Accumulation Start Date ()
 - ASBESTOS WASTE - Containers shall be labeled in accordance with 40 CFR Part 61.
- USDOT Emergency Response Guidebook Guide: 171, Substances (Low to Moderate Hazard)