



FACT SHEET – Disposal of Lead-Based Paint Contaminated Demolition Debris

Lead-based paint (LBP) was widely used on buildings until 1978, when it was banned on residential structures by the Consumer Products Safety Commission. Prior to the 1950s, paints for residential uses may have contained up to 50% lead by weight. Today, some commercial and military paints still contain lead and are used on non-residential structures.

Renovation, remodeling, demolition, and surface preparation for painting, in addition to specified lead abatement, are all activities that have the potential to produce hazardous wastes if the property involved was painted with LBP. The only sure way to tell if a property was painted with LBP is to test the paint for lead. The hazardous waste criterion for lead wastes is established under the federal Resource Conservation and Recovery Act (RCRA), Subtitle C, as 5.0 mg/L measured with the Toxicity Characteristic Leaching Procedure (TCLP).

Disposal of LBP-containing construction debris is very costly if it must be managed as a regulated hazardous waste. This fact sheet provides guidance on how waste generators can determine whether hazardous waste rules apply, and how to reduce the volume, and thereby the cost, of the hazardous waste component of the debris.

Residential Structures - Household Hazardous Waste Exemption

In order to facilitate the removal of LBP from residential structures, where it may pose a significant health threat to children, on June 18, 2003 the USEPA published a rule under solid waste regulations that streamlines disposal of LBP debris from residential structures. Under the new rule LBP debris from households, whether generated by a do-it-yourselfer or a contractor, may be disposed of at a municipal waste landfill or a construction & demolition (C&D) waste landfill, as defined in 40 CFR §257.2.

Non-residential Structures - Waste Determination & Management

LBP debris that comes from commercial or industrial sources, as opposed to households, may be subject to state and federal hazardous waste rules. In this case the generator must determine whether the debris fails, or is likely to fail, the toxicity characteristic for lead. Two scenarios are outlined below for making the waste determination and then managing the LBP debris in accordance with applicable standards: 1) whole-building demolition, and 2) renovation/abatement.

Whole-Building Demolition

The US EPA has stated that solid architectural components coated with LBP are less likely to be hazardous because of the small ratio of lead paint to total waste mass¹. The US Army conducted a study which concluded that whole-building demolition debris is not likely to exceed the toxicity characteristic standard for lead if it is handled as a single, whole waste stream and disposed of all together². Whole-building demolition debris is therefore considered a non-hazardous waste with regard to lead. No sampling/analysis of painted

components for lead is required for disposal as non-hazardous waste.

Note: Constituents other than LBP, i.e. PCBs from light ballasts or asbestos containing materials, may require special handling, and these should be removed before demolition.

Renovation/Abatement

Small-scale debris that is generated during renovation, maintenance, or abatement activities such as paint chips, vacuum debris and dust, waste wash water and sludge from chemical paint stripping is more likely to exceed the lead toxicity characteristic. Sampling may also be appropriate for intermediate-volume renovation wastes such as window moldings, doors, etc.

Core or sectional samples can be taken of representative waste items to determine whether each type (eg. doors) is hazardous. Alternatively, the number of samples needed could be reduced by taking one or more core samples, compiling ratios of waste material surface area to mass for each type, and then comparing these to the surface area/mass ratio of the sample(s). A sampling protocol should be used for each site. Individual waste materials such as those described above should either be sampled/analyzed by TCLP and then handled/disposed accordingly, or segregated from other large-scale debris and then managed as hazardous waste. Records of sampling procedures and analytical results must be kept for at least 3 years.

1 US EPA. 1993. Applicability of RCRA disposal requirements to lead-based paint abatement wastes. Final Report.

EPA 747-R-93-006 Technical Programs Branch, Office of Pollution Prevention and Toxics. March 1993.

2 US Dept. of the Army. US Army Environmental Hygiene Agency. Interim Final Report. Lead-based paint contaminated debris waste characterization study No. 27-26-JK44-92. May 1993.

Contact

For more information on the EPA lead paint rule visit:

<http://www.epa.gov/wastes/non-haz/municipal/landfill/pb-paint.htm>

For information on LBP debris management in Nevada call the:

Nevada Division of Environmental Protection, Solid Waste Branch at (775) 687-9462

In Clark and Washoe Counties contact:

- [Southern Nevada Health District](#) at (702) 759-0600
- [Washoe County District Health Department](#) at (775) 328-2434