

## **Basis of Design**

Use this guidance when developing specification documents for lead-coated or lead-containing debris.

### **Overview**

Lead is a common component in construction debris. It is most often found in pipes, copper pipes with lead solder, and interior and exterior painted wood, siding, mortar, window frames and plaster. Lead may also contaminate soils around the perimeters of buildings where exterior lead-containing coatings have failed.

Depending on work practices, lead-containing materials have the potential to negatively impact the health of construction workers and others adjacent to the work area. The presence of lead contamination in soils can lead to costly site remediation efforts. Finally, all lead-containing debris, including materials with lead paint on them, must be disposed of according to state and federal law.

### **Building Surveys**

A lead survey must be performed for each project having the potential to impact lead-containing building materials, including lead paint. Results of the survey need to be included in the contract bid documents. Based on this information, bidders need to include costs to adequately protect workers as required by applicable regulations (i.e., exposure assessments, respirators, medical monitoring) and proper waste disposal for lead-contaminated materials even if they do not designate as hazardous waste.

### **Demolition Debris Testing**

If lead is found to be present in paints, coatings or other building materials during the initial survey, then it will be necessary to conduct representative sampling of the specific waste streams using the toxicity characteristic leachate procedure (TCLP) for lead. EH&S Environmental Programs (EP) will review analytical data and make all waste disposal determinations.

Save copies of all analytical data in the project file.

### **Contaminated Soils**

Soil sampling is neither required nor recommended prior to the start of the project. Based on prior projects, drip-line soil is expected to contain lead and will require special handling and disposal. If the project involves removal or disturbance of soils adjacent to lead-painted buildings, anticipate that soils within two feet of the building and up to two-feet deep may contain lead. Stockpile this impacted soil, conduct a TCLP, and send the analytical data to EP for a waste determination.

## Disposal

Lead-coated materials like painted concrete and painted wood cannot be recycled at an inert waste landfill or a recycling facility. Instead, all lead-coated and lead-containing materials and soils must be disposed at a [UW-approved hazardous waste disposal facility](#). EH&S signs all waste profile forms to ensure waste meets the acceptance criteria of each facility.

When lead-coated or lead-containing debris fails a TCLP, it becomes a dangerous waste and EP coordinates the disposal. EP arranges for U.S. Department of Transportation (DOT) approved containers and signs manifests before the waste leaves the site.