

Basis of Design

The purpose of this section is to provide guidelines for the development of specifications for proper cleanup and disposal of lead contaminated 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.

Contaminated Soils

Soil sampling is neither required nor recommended prior to the start of the project. Based on prior projects, drip-line soil will contain concentrations of lead which require special handling and disposal of that soil. If soils adjacent to the building are scheduled for disturbance or removal AND the building has leaded paint on it, then for planning purposes, anticipate that soils within two feet of the building and up to a two-foot depth may contain lead. Worker protection should be implemented whenever these soils are disturbed. Soil that will be disposed of must stockpiled and characterized using TCLP prior to disposal at a disposal facility included on the [List of UW-Approved Disposal Sites](#).

Disposal

On behalf of the University, the EH&S Environmental Programs Office (EPO) will determine appropriate disposal methods for all lead-containing waste streams. All analytical data must be provided to EPO.

Lead-containing materials and soils may qualify as hazardous waste. If so, disposal will be arranged by EPO.

Demolition debris and soil (containing lead debris from building surfaces) cannot be sent to construction debris recycling facilities even if the lead concentrations are below Hazardous Waste levels. Debris of this type must be sent to a UW-approved solid waste landfill included in the [List of UW-Approved Disposal Sites](#).

All analytical data for lead-containing waste streams must be documented in the project file.