



Berea College

Lead-Based Paint Management Program

Environmental Health and Safety

Please contact ext. 3350 or 3246 if you have any questions concerning this program

Berea College has developed this management plan to protect the College community from exposure to lead hazards through the application of administrative and engineering controls. This plan outlines the College's procedures regarding day to day maintenance of lead hazards and the planned or accidental disturbance of lead.

Lead is a naturally occurring, highly toxic soft metal that was added to paint to make it last longer, resist moisture, speed drying, and adhere to surfaces better. Lead was a common component in paints until 1978 when it was banned for residential use because of health concerns.

All building surfaces painted before 1978 shall be assumed to contain lead-based paint, even if only a single layer of many contains lead. The presence of lead-based paint (LBP) in a building does not mean that the health of the occupants is endangered. When left undisturbed and in good condition, lead based paint does not pose a health risk.

Scope

This program establishes the responsibilities of College Staff to ensure that LBP is properly identified and managed in accordance with applicable regulations. Contractors are also expected to comply with these regulations and procedures.

Definitions

Child-Occupied Facility-A building or portions of a building constructed prior to 1978 visited regularly by the same child under the age of 6, on at least 2 different

days per week, provided that each day's visit lasts at least 3 hours and the combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours.

Target housing- Target housing is residential housing built before 1978 including private housing and public housing. The term does not include the following: housing built after 1978, zero bedroom units such as efficiencies, lofts, residence halls, housing leased for less than 100 days, housing for the elderly, and rental housing inspected by a certified inspector and found to be free of lead based paint.

Hazardous waste lead based paint material-Lead based paint waste for which a representative sample exhibits the characteristic of toxicity for lead (TCLP analytical results at or above 5 mg/l).

Lead Based Paint- LBP is defined by the EPA as paint or other surface coatings that contain lead equal to or greater than 1.0 mg/cm² by XRF testing or 0.5% by weight for chip sampling

Lead Based Paint Abatement- a set of measures designed to permanently eliminate lead-based paint Hazards in accordance with standards established by the EPA (40 CFR 745.223). This term does not include renovation and remodeling activities by contractors whose primary intent is not to permanently eliminate or reduce lead-based paint hazards, but is instead to repair, resort, or remodel a given structure or dwelling.

Lead paint activities-As it relates to target housing, it include risk assessment, inspection, and abatement. With respect to a public building the term includes identification of lead-based paint and materials containing lead based paint , de-leading and removal or lead activities where the specific purpose of the work is to abate lead-based paint or lead-based paint hazards.

Lead Based Paint Hazard-A condition that causes exposure to lead from lead-contaminated dust, lead contaminated soil, or lead contaminated paint that is deteriorated or present in accessible surfaces, friction materials, or impact surfaces (i.e. floors) that would result in adverse health effects.

Lead Hazard Evaluation-A quantitative determination of employee exposure to lead that includes full-shift personal air samples that are representative of the monitored employee's regular daily exposure to lead.

Lead hot work- Burning, cutting, or torch burning of materials that have lead containing coatings or paint.

OSHA Action Level for lead- An exposure of 30ug/m³ as averaged over the course of an eight hour workday.

OSHA Permissible Exposure Limit for lead- A time-weighted average exposure of 50ug/m³ as measured over the course of an eight hour workday.

Regulatory Requirements

The management of lead materials and products is regulated by the following agencies:

- Environmental Protection Agency (EPA)-Renovation, Remodeling, and Painting (RRP)-40 CFR 745
- Kentucky Energy and Environmental Protection –Hazardous waste Disposal
- OSHA – Lead in Construction (29 CFR 1926.62) and General Industry (29 CFR 1910.1025).

Roles and Responsibilities

Environmental Health and Safety

- Maintain the College's Lead Management Plan
- Perform air monitoring of at risk employees as requested by project managers, supervisors, or employees.
- Identify lead based paint in campus buildings that are scheduled for remodel and provide that information to college project managers and outside contractors.
- Schedule periodic training for staff designated as renovators as per the EPA RRP rule and maintain training documentation.
- Maintain exposure records including hazard assessments and sampling data.
- Maintain and implement respirator protection program and required training.
- Waste characterization and proper disposal.

Facilities Management

- Maintain records of all renovations performed in housing constructed prior to 1978.
- Maintain trained and certified RRP staff (certification must be renewed every five years)
- Use only trained and certified RRP contractors for remodel projects in target housing and buildings occupied by children under the age of six.
- Notify EHS of any renovations or maintenance projects within target housing or child-occupied facilities that may involve disturbance of painted surfaces.
- Properly collect in a designated container any and all waste materials from jobs where lead paint was removed.
- Request lead hazard evaluation of employees as needed
- Assure all Facility employees doing work that disturbs lead materials (i.e. paint sanding, lead hot work) are wearing proper personal protective equipment (PPE).
- Communicate to outside contractors any potential lead material hazards associated with their project.
- Participate in all related safety training.

Property Manager

- Be knowledgeable of EPA's requirement for renovations in target housing
- Maintain a list of housing that was constructed prior to 1978
- Provide to occupants of College apartments or target housing an EPA pamphlet entitled "Protect Your Family from Lead in Your Home" and maintain occupant lead disclosure forms.
- Maintain all occupant lead paint disclosure forms

Project Oversight (primary a responsibility of Facilities Management)

Lead based Paint activities

All lead based paint activities shall be conducted by an EPA-certified abatement contractor or College certified renovators. Lead-based paint activities include inspection, risk assessment, and abatement being performed in target housing and child occupied facilities.

Renovation, Repair, and Painting Projects

Effective April 2010, the EPA Renovation, Repair and Painting (RRP) rule requires that contracts performing renovation, repair, and painting projects that disturb

LBP in homes and child occupied facilities built before 1978 be certified and must follow specific work practices. The following minor repairs or maintenance activities are not covered under the RRP rule:

- Activities that disturb 6 square feet or less of paint per room
- Activities that disturb 20 square feet or less on the exterior of the building.

Minor repairs and maintenance do not include window replacement and projects involving demolition or prohibited practices such as burning, torching, sanding, grinding, or other high speed operations.

Determination of Employee Lead Exposure

OSHA has established a permissible exposure limit (PEL) of 50 ug/m³ (50 micrograms of lead per cubic meter of air) averaged over an eight-hour period. The established action level of 30ug/m³, is the level at which compliance with the lead OSHA construction standard is required. (29 CFR 1926.62).

APPENDIX V: 3-1 LEAD-RELATED CONSTRUCTION TASKS AND THEIR PRESUMED 8-HOUR TWA EXPOSURE LEVEL

>50 TO 500 ug/m ³	> 500 ug/m ³ to 2500 ug/m ³	> 2,500 ug/m ³
Manual demolition	Using lead-containing mortar	Abrasive blasting
Dry scraping	Lead burning	Welding
Dry manual sanding	Rivet busting	Torch cutting
Heat gun use	Power tool cleaning without dust control system	Torch burning
Power tool cleaning with dust collection systems	Cleanup of dry expendable abrasive blasting jobs	
Spray painting lead paint	Abrasive blasting enclosure movement and removal	

Berea College employees who may be required to perform any of the tasks listed above, shall notify EHS so that an exposure assessment can be conducted which documents that the employee will not be exposed above the PEL. Additionally any College employee performing tasks where there a potential for exposure to lead from lead based paint must be provided appropriate training and PPE as required by OSHA regulations. EHS will provide a written report of any monitoring conducted with recommendations for implementation of engineering and administrative controls.

Berea College employees with the paint and remodeling team have the greatest potential to come in contact with lead based paint. While many of the campus buildings have been renovated since 1978, some older structures, both residential housing and public buildings have the potential to still have a lead-based paint layer. These employee will received annual training for respirator use and be required to use proper PPE when doing renovations work in the older structures. They will be required to follow the procedures listed in the next section of this program.

Procedures for Working with Lead-based Paint

Chemical Strippers- When complete stripping is required, chemical strippers that do not contain methylene chloride, shall be used to remove as much paint as possible.

Wet Scrubbing- Use a wet scrubber such as plastic or steel wool pads to remove rust or loose paint to reduce dust and aid in collecting debris.

Wet Sanding- Wet sand chemically stripped surfaces or whenever sanding is required.

Scraping-Scraping loose paint with hand tools is acceptable. Avoid creating a dust hazard.

HEPA Vacuum Equipped Power Stripping Equipment- Powered paint stripping tools must be evaluated by supervisors and Ehs prior to use.

Hydro, Sand, or Glass Bead Blasting- All projects requiring this operation to completely remove lead based paint must be conducted by a certified lead paint contractor.

Wet Cleanup-Wet wipe all sanded and surrounding surfaces after wet-sanding or sanding patching/filler.

Vacuum Cleanup-All vacuums used for lead based paint must be equipped with HEPA filters.

Tarps-Place adequate coverings over furniture, floors, ventilation, shrubs, grounds, and other surfaces so all residue is captured for proper disposal.

Saw Cutting Painted Wood Trim, Doors, etc.-Saw materials using wood or metal cutting tools. Saw dust, metal filings, and paint residue, must be HEPA vacuumed and wet cleaned either during or immediately after cutting is completed.

Hydro-washing painted surfaces-Hydro-washing equipment pressures are to be set no higher that needed to clean surfaces and remove loose paint. Total removal of paint is prohibited using this process.

Waste Disposal

EHS shall perform waste stream characterization of suspected lead-containing waste materials by laboratory analysis. EHS shall coordinate waste disposal of lead-containing materials.

Training

- ✓ Lead- based paint activities can only be conducted by an EPA certified abatement contractor in order to inspect work sites, take samples or supervise.
- ✓ Effective April 10,2010, all work in target housing or child occupied facility during which 6 Sq. ft. or more of lead based paint will be disturbed must be performed by an EPA- Certified lead contractor

Record Keeping

- EHS maintains all documents relating to lead exposure including hazard assessment, sampling data, waste disposal manifests, and correspondence.
- Project supervisors maintain all records related to project renovations and list of outside contractors certified as lead-based paint renovators.
- Property Manager-Maintain all occupant lead paint disclosure forms.

