Lead Safe Practices and Compliance

Purpose:

The purpose of the Lead Policy is to ensure that activities (e.g. renovations, painting, demo, etc.) that could potentially involve disturbing or removal of lead based paint be conducted in accordance with the Occupational Safety & Health Administration (OSHA) Lead Standard 29 CFR 1926.62 and the appropriate sections of this policy to maintain employee or occupant exposures below established permissible exposure limits.

Activities Which Emit Lead

Employees performing maintenance activities not associated with construction (1926.62) work are covered by the general industry standard for lead, 29 CFR 1910.1025. Maintenance activities covered by the general industry standard are those which involve making or keeping a structure, fixture or foundation in proper condition in a routine, scheduled, or anticipated fashion.

Child Occupied Facilities/Residential Rental Properties

Child Care Centers, and Washington University in St. Louis residents, housing children six and under are considered child occupied facilities and all operations and maintenance activities shall be conducted in accordance with the Lead Renovation, Repair and Painting Rule (RRP).

Residential Rental Properties, built before 1978, excluding zero-bedroom dwellings (studio apartments, dormitories, etc.) shall have all operations and maintenance activities conducted in accordance with the RRP Rule as well.

Please see Appendix C for more information regarding the RRP Rule. A list of RRP Lead certified contractors can be found on the EPA website or Environmental Health & Safety can be contacted if confirmation is needed. Note: a contractor must carry both RRP “Firm” and “Individual” licenses to be in compliance with the RRP Rule.
Work Procedures for Lead Based Paint

1. Any general work activities that have the potential to generate lead contaminated dust and debris, conducted in buildings or with materials constructed prior to 1978, shall be handled in accordance to the work procedures outlined in Appendix A – “Good Work Practices For Working With Lead Based Paint”.

2. Any construction work activities (e.g., demolition activities, removal of known lead) that have the potential to generate significant quantities of lead contaminated dust and debris will be handled by a state-certified lead contractor. Note: This work shall be conducted by a state-certified lead contractor with arrangements made by a representative from department for which the work applies. Department managers/project managers will need to test prior to the project beginning to determine if lead-based paint is present.

3. Window replacement work activities and work procedures can be identified in Appendix B – “Window Removal Procedures”;

4. Renovation, Repair and Painting (RRP) Rule applies to anyone who is paid to perform a service that disturbs paint in housing and child-occupied facilities built prior to 1978. This may include, but is not limited to: Residential rental property owners/managers; General contractors; Special trade contractors, including painters, plumbers, carpenters, and electricians. See Appendix C – “Renovation, Repair and Painting (RRP) Rule”;

5. Welding operation activities and work procedures can be identified in Appendix D – “Welding Exterior Surfaces”;

Unknown Presence of Lead

All work conducted on/in buildings and with materials (built/manufactured prior to 1978) where the presence of lead is unknown shall be conducted in accordance as if they are lead.
Air Monitoring

An initial exposure assessment will be conducted as necessary to determine if any employee could be exposed to lead at or above the OSHA 35 µg/m³ action level. Exposure monitoring shall be coordinated by an University approved environmental contractor prior to beginning work that could potentially cause exposures. **Note:** Historical data can be used as a guideline for similar jobs with the same scope of work.

Medical Surveillance

Prior to each job where employee exposure exceeds the Action Level of 30 µg/m³ as an 8-hour TWA, 30 calendar days per year, the employer shall establish medical surveillance requirements based on the OSHA lead standard, 29 CFR 1910.1030. Medical surveillance includes an initial surveillance, on-going surveillance (e.g., biological monitoring, six-part medical exam, medical exam and consultation) medical treatment and medical removal.

Compliance Program

Where any employee is exposed to lead above the Permissible Exposure Limit (PEL) of 50 µg/m³ for more than 30 days per year, the employer shall establish and implement a written compliance program to reduce employee exposure to the PEL or below.

Washington University in St. Louis shall implement engineering and/or work practice controls including administrative controls to reduce and maintain employee exposure to lead at or below the PEL to the extent that such controls are feasible. Whenever all feasible engineering and work practices controls that can be instituted are not sufficient to reduce employee exposure at or below the PEL, Washington University shall use them nonetheless to reduce employee exposure to the lowest feasible level and shall supplement them by the use of respiratory protection.

Training, Recordkeeping, and Signage

**Training**

Washington University in St. Louis employees are prohibited from working in environments where airborne lead concentrations are above the action level of 30 µg/m³. A state-approved lead contractor shall be used in these situations. However University employees that may come into contact with lead-based products will receive training from Environmental Health & Safety. The training will include the following information:
1. The content of the standard and its appendices;

2. The specific nature of the operations that could result in exposure to lead above the Action Level;

3. The purpose, proper selection, fitting, use and limitations of respirators;

4. The purpose and description of the medical surveillance program and the medical removal protection program;

5. The engineering controls and work practices associated with the employee’s job assignments;

6. The contents of the compliance program in effect;

7. Instructions to employees that special drugs (e.g., chelating agents) shall not be used routinely to remove lead from their bodies and when necessary used only under medical supervision; and

8. The right to access employee records.

**Recordkeeping**

Environmental Health & Safety will maintain accurate records of the following:

1. All monitoring and other data used in conducting employee exposure assessments;

2. Training records;

3. Each employee subject to medical surveillance; and

4. Medical removal records.

All records including exposure monitoring, medical removal and medical records are available upon request to affected employees, former employees and their designated representatives and shall be maintained for at least thirty years.
Signage

The following warning signs shall be posted at each entrance where activities are taking place that could potentially disturb lead-based paint.

WARNING

LEAD WORK AREA

POISON

NO SMOKING OR EATING

These signs shall be illuminated and cleaned as necessary so that the legend is readily visible. Signs that contradict or detract from the meaning of the sign are prohibited.

Authority and Responsibility

The implementation of this program shall be the responsibility of the various departments to which it applies, particularly Facilities Operations and Maintenance and Facilities Engineering including the Paint shop, Carpentry Shop, Sheet Metal Shop, Electricians, Engineering Groups, Real Estate Operations, Residence Halls and Commons, Project management and outside contractors.

Departments are responsible for:

1. Responding to sampling requests or employee inquiries within 48 hours;

2. Performing frequent and regular inspections of job sites, materials, and equipment;

3. Obtaining training for Washington University employees exposed above the action level; and

4. Procuring services of state-licensed lead certified contractors for construction jobs with known lead paint hazards.

5. Disclosing to Environmental Health & Safety when lead paint based hazards are discovered and made known.
Supervisors are responsible for:

1. Notifying all employees of the purpose and intent of the Lead Policy and procedures;
2. Conducting periodic inspections of job sites to ensure appropriate procedures and work practices are being followed;
3. Assuring that all employees are trained in the procedures;
4. Contacting Environmental Health & Safety for assistance in lead based paint testing.
5. Contacting Environmental Health & Safety when there is a production, process control, or personnel change which may result in new or additional exposure.

Project Management is responsible for:

1. The procurement of state-licensed lead certified contractors for construction activities with known lead hazards;
2. Contacting Environmental Health & Safety when lead based paint abatement work is being conducted;
3. Disclosing the presence of lead to any outside contractors conducting work activities which will involve the disturbance of lead based paint surfaces;
4. Distributing the Lead Policy to contractors and referencing the pertinent sections or writing the pertinent sections of the policy into job specifications; and
5. Bringing any safety related concerns pertaining to unsafe working practices or procedures to the attention of Environmental Health & Safety.

Disclosure:

Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as Title X, to protect families from exposure to lead from paint, dust, and soil. Section 1018 of this law directed HUD and EPA to require the disclosure of known information on lead-based paint and lead-based paint hazards before the sale or lease of most housing built before 1978.
What is required?

Before ratification of a contract for housing sale or lease, sellers and landlords must:

- Give an EPA-approved information pamphlet on identifying and controlling lead-based paint hazards "Protect Your Family From Lead In Your Home"
- Disclose any known information concerning lead-based paint or lead-based paint hazards. The seller or landlord must also disclose information such as the location of the lead-based paint and/or lead-based paint hazards, and the condition of the painted surfaces.
- Provide any records and reports on lead-based paint and/or lead-based paint hazards which are available to the seller or landlord (for multi-unit buildings, this requirement includes records and reports concerning common areas and other units, when such information was obtained as a result of a building-wide evaluation).
- Include an attachment to the contract or lease (or language inserted in the lease itself) which includes a Lead Warning Statement and confirms that the seller or landlord has complied with all notification requirements. This attachment is to be provided in the same language used in the rest of the contract. Sellers or landlords, and agents, as well as homebuyers or tenants, must sign and date the attachment.
- Sellers must provide homebuyers a 10-day period to conduct a paint inspection or risk assessment for lead-based paint or lead-based paint hazards. Parties may mutually agree, in writing, to lengthen or shorten the time period for inspection. Homebuyers may waive this inspection opportunity.

Any construction work to be done in facilities that are governed by the Renovation, Repair and Painting (RRP) Rule must have a “Renovate Right” pamphlet signed by all occupants of the dwelling prior to construction beginning. The contractor is required to ensure the document is handed out to all occupants and signed by all occupants prior to construction beginning.
Appendix A

Good Work Practices For Working With Lead Paint

General Requirements:

The following work practices will be performed by University employees when working in buildings constructed before 1978:

- Move furnishings and equipment away from the area of work;
- Place a plastic drop cloth over fixed equipment or furnishings;
- Place a plastic drop cloth on floor under working area and extending five feet from all areas of work;
- Overlap and seal additional drop cloths as necessary with duct tape;
- Turn drop cloth up baseboard of wall within the work area and seal to wall with duct tape;
- Limit access through the work area to workers utilizing barricade tape across the door;
- Mist the work area;
- Use a putty knife or scraper to scrape loose paint flakes and deteriorated subsurfaces;
- Chip or wet sand all edges until no loose paint remains on the surface;
- Wash immediate area and tools with a spic-and-span/water solution;
- Rinse the area with clean water;
- Gently roll the drop cloth inward from the outside edges to the center;
- Use a HEPA vacuum to clean area thoroughly after project is finished;
- Dispose of tape, drop cloth, personal protective equipment, vacuum bags/contents and used towels into a plastic bag labeled “Lead Contaminated Waste”;
- Immediately wash hands and face thoroughly;
- All work areas shall be visually inspected after clean-up procedures to ensure no visible dust is left in the work area;
- Dispose of all plastic bags inside drums provided at a designated location; and
- Contact Environmental Health & Safety for a pick up as needed.
Appendix B

Window Removal Procedures

General Requirements

*Exterior window removal of windows from the outside of a building is prohibited on windy days (Winds greater than 15 miles per hour or the chips and dust are blowing off the plastic sheeting) as determined by the supervisor or project manager in charge of the job.*

The exterior removal of window which has lead-based paint shall be conducted as follows:

- Seal off the work area by covering entryways with six mil polyethylene plastic sheeting and barrier tape, if you are working on the window from the inside;
- All adjacent and surrounding area windows shall be kept closed;
- Put a piece of plywood on the inside of the window and tape polyethylene plastic over the plywood extending 12 inches past the plywood, if you are working on the window from the outside;
- Tape plastic over the entire outside window opening if you are working on the window from the inside (when feasible);
- Cover the floor inside under the window with polyethylene plastic sheeting to catch any falling dust;
- Cover bare soil and vegetated areas with polyethylene extending at least five feet from the base and an additional three feet for every story where the windows are located;
- Spray the window sill and frame with water to reduce the dust;
- Remove the window unit from the outside, if possible;
- Completely wet-scrape, use a High Efficiency Particulate Air (HEPA) vacuum to clean debris and wash the window opening before removing the plastic seal inside;
- Collect all dust and paint chips as the window is disassembled;
- Gently roll the drop cloth inward from the outside edges to the center;
- Dispose of tape, drop cloth, personal protective equipment, vacuum bags/contents and used towels into a plastic bag labeled “Lead Contaminated Waste”;
- Wash hands and face thoroughly;
• All work areas shall be visually inspected after clean-up procedures to ensure that no visible dust or debris is left in the work area;
• Dispose of all plastic bags inside drums provided at a designated location; and
• Contact Environmental Health & Safety for a pick up as needed.
Appendix C

Lead Renovation, Repair and Painting (RRP) Rule

In general the Renovation, Repair and Painting (RRP) Rule applies to anyone who is paid to perform a service that disturbs paint in housing and child-occupied facilities built prior to 1978. This may include, but is not limited to:

- Residential rental property owners/managers;
- General contractors;
- Special trade contractors, including:
  - Painters
  - Plumbers
  - Carpenters
  - Electricians

Activities that are subject to the RRP rule are any activity that disturbs paint in pre-1978 housing and child-occupied facilities, including:

- Remodeling and repair/maintenance
- Electrical work
- Plumbing
- Painting preparation
- Carpentry
- Window replacement

There are housing and activities that are **EXCLUDED** from the RRP Rule and they are:

- Housing Built in 1978 or later;
- Housing for elderly or disabled persons, unless children under the age of 6 reside or are expected to reside there;
- Zero-bedroom dwellings (studio apartments, dormitories, etc.);
- Housing or components that have been declared lead-free. Such declaration can be made by a certified inspector or risk assessor. Also, a certified renovator may declare specific components lead-free using an EPA recognized test kit or by collecting paint chip samples and obtaining test results from an EPA recognized laboratory showing the components do not contain lead-based paint.
• Minor repair and maintenance activities that disturb 6 square feet or less of paint per room inside, or 20 square feet or less on the exterior of a home or building.
• Note: minor repair and maintenance activities do not include window replacement and projects involving demolition or prohibited practices.
Appendix D

Welding Exterior Surfaces

General Requirements

Welding conducted outside of a building is prohibited on windy days (Winds greater than 15 miles per hour) as determined by the supervisor or project manager in charge of the job.

Welding on exterior surfaces (e.g., fire escapes) covered with lead coatings or paint shall be conducted as follows:

- Contact Safety and Environmental Health & Safety to obtain a Hot Work Permit, Refer to the Welding, Cutting and Brazing policy;
- A competent person shall inspect the site to ensure that the operator is trained, the apparatus used for the work is operational, firefighting equipment is available and that the welder is protected;
- Provide portable and or mechanical ventilation (e.g., local exhaust) capable of keeping the levels of fumes, dust and gases below exposure limits;
- If welding shall be conducted near air intakes, building ventilation systems shall be shut down;
- Wear respirators* when engineering controls are not feasible;
- Wear gloves, apron and/or jacket that are made of a material which is an insulator from heat and electricity;
- Wear welders helmet equipped with proper filter plate and cover lenses;
- Place a fire resistant tarp below the work area;
- Cover any combustibles in the path with a fire resistant tarp;
- Provide a fire watch on ground level;
- Restrict access to work area with barrier tape;
- Provide a Class A fire extinguisher;
- Keep adjacent and surrounding windows closed for the duration of the activity;
- Limit access through the work area to workers utilizing barricade tape around the area;
- Mist the work area;
- Use a putty knife or scraper to scrape loose paint flakes and deteriorated subsurfaces;
- Wash immediate area and tools with a detergent/water solution;
- Rinse the area with clean water;
- Gently roll drop cloth inward from the outside edges to the center;
• Dispose of drop cloth, personal protective equipment and used towels into a plastic bag labeled “Lead Contaminated Waste”;
• All work areas shall be visually inspected after clean-up procedures to ensure that no visible dust or debris is left in the work area;
• Dispose of all plastic bags inside drums provided at a designated location; and
• Contact Environmental Health & Safety for a pick up as needed.