

LEAD PAINT PROGRAM

This lead paint program provides a strategy for safely addressing maintenance work on surfaces coated with lead-based paint. The program is intended to protect Rutgers employees from exposure to lead and comply with applicable regulations.

A committee comprised of representatives from Facilities Design, Facilities Maintenance Services, Housing and REHS (Rutgers Environmental Health and Safety) developed the following program based on an evaluation of job tasks likely to impact lead-based paint.

1. GENERAL INFORMATION

In general, paint can be assumed to contain lead on buildings or structures built before 1978. It is *not* necessary to have the paint tested prior to routine maintenance (i.e. cleaning, repainting). Lead paint poses no risk to building occupants as long as it is maintained in a tight or intact condition. Even loose or damaged paint poses little or no risk to most adults as long as it is not ingested or inhaled. The goal of this program is to maintain all lead paint surfaces in tight condition and nearby surfaces free of accumulated lead dust.

2. CHILD-OCCUPIED BUILDINGS

Children under the age of six are the most likely age group to suffer from lead poisoning related to lead-based paint. For this reason, it is important that REHS be notified of any pending renovation projects in child-occupied buildings such as day care centers, single parent living centers, and married student housing built before 1978.

3. ACTIVITIES THAT IMPACT LEAD PAINT

The Rutgers lead paint committee defined two categories of activities that impact lead paint: “no risk” activities and “at risk” activities. “No risk” activities are defined as those that generate either no airborne lead at all or only low levels of lead dust in air ($< 30\mu\text{g}/\text{M}^3$)*. Examples include:

- ◆ Painting Intact Lead Paint
- ◆ Cleaning Intact Lead Paint
- ◆ Hand Scraping Lead Paint for < 2 Hours
- ◆ Wet Sanding Lead Paint for < 1 Hour

“At risk” activities are defined as those that are likely to generate moderate to high levels of lead dust or fume in air ($> 30\mu\text{g}/\text{M}^3$)* and are of long or short duration. Examples include:

- ◆ Hand Scraping Lead Paint for > 2 Hours
- ◆ Wet Sanding Lead Paint for > 1 Hour
- ◆ Electric Sanding Lead Paint**
- ◆ Grinding or Burning Lead Paint**
- ◆ Using a Heat Gun on Lead Paint**
- ◆ Removing Lead Paint With Chemical Strippers
- ◆ Replacing Windows With Lead Paint
- ◆ Demolishing Lead Painted Structures

Footnotes:

* The action limit for airborne lead as defined by the OSHA *Lead Standard*. A concentration $\geq 30\mu\text{g}/\text{M}^3$ averaged over an 8-hour work shift triggers requirements for employee exposure monitoring, medical surveillance and training.

** These operations are prohibited in all residential settings (i.e. dorms, apartments, homes) unless approved by REHS.

4. GENERAL REQUIREMENTS FOR “NO RISK” AND “AT RISK” ACTIVITIES

A. Equipment and Supplies

The following supplies are necessary for any work involving surface preparation of lead paint:

- ◆ Polyethylene sheeting (6 mil)
- ◆ Water spray bottle
- ◆ HEPA vacuum
- ◆ Waste containers
- ◆ Utility knife/scrapper
- ◆ Masking tape and/or duct tape

B. Personal Protective Equipment

The following personal protective equipment is required for “at risk” activities:

- ◆ Disposable coverall (Tyvek™ suit or equivalent)
- ◆ Air Purifying Respirator with HEPA filters

Employees who conduct “at risk” activities are required to participate in the Rutgers Lead Program which includes annual lead awareness training, respirator training and fit testing, and medical screening for respirator use (See Section 5).

C. Work Practices – Interior Work

Plastic sheeting (6 mil thickness) shall be used to protect the following areas:

- ◆ Floor surfaces beneath the work area
- ◆ Nearby furnishings (e.g. desks, chairs, computers, etc.)
- ◆ Ventilation diffusers, vents, grills

Scraping and sanding of lead paint shall be conducted using a spray water bottle to pre-wet the affected surface and to mist the air.

Loose paint chip debris shall be HEPA vacuumed from the plastic sheeting before removal and disposal of the sheeting.

Final cleaning of affected work surfaces shall be accomplished by wet wiping and HEPA vacuuming. Clean water or a high phosphate solution (i.e. 5% tri-sodium phosphate) shall be used.

D. Work Practices – Exterior Work

Plastic sheeting shall be used to protect the following areas:

- ◆ Shrubs, trees and ground cover beneath the work area
- ◆ Sidewalks and other paved areas
- ◆ Outside air intakes, window air conditioners and other vents

Plastic sheeting shall be secured to the building and extend out at least 8 feet.

Windows and doors shall be closed for the duration of the work.

A simple barricade shall be erected to control pedestrian traffic around the work area.

Scraping and sanding of lead paint shall be conducted using a spray water bottle to pre-wet the affected surface and to mist the air.

Loose paint chip debris shall be HEPA vacuumed from the plastic sheeting before removal and disposal of the sheeting.

Final cleaning of the affected work surfaces shall be accomplished by wet wiping and HEPA vacuuming. Clean water or a high phosphate solution (i.e. 5% tri-sodium phosphate) shall be used for wet cleaning.

Workers shall adhere to other safety policies including scaffold safety, ladder safety, fire protection and electrical safety.

D. Window Removal and Replacement

Window surfaces shall be pre-cleaned with a HEPA vacuum prior to window replacement. Nearby interior surfaces and occupant belongings shall be protected with 6 mil plastic sheeting. Exterior surfaces shall be protected as described in Section 4D.

The following sequence of work shall be followed:

1. Unscrew and remove exterior stops
2. Remove top sash
3. Remove parting beads with pry or pliers
4. Remove bottom sash
5. Remove right and left side window trough casings with pry
6. Pry off head stop
7. Remove existing mullions
8. Remove exterior header
9. HEPA vacuum surrounding surfaces and window wells

The removal sequence for custom windows (e.g. stained glass, bow, plate glass) with components that are lead painted shall be determined on a case-by-case basis.

5. SPECIFIC REQUIREMENTS FOR “AT RISK” ACTIVITIES

Rutgers employees who perform “at risk” activities are required to participate in an exposure monitoring, medical surveillance and training program specifically designed to address lead paint hazards. This program is implemented by REHS. Employees included in the program typically include painters, carpenters and maintenance mechanics who perform some level of surface preparation or demolition of painted surfaces. Specific requirements of the program include:

- ◆ Medical screening for respirator use
- ◆ Training and fit testing of respirators
- ◆ Lead Hazard Training
- ◆ “Hands On” Training in Lead Control Measures
- ◆ Exposure Monitoring (Personal air testing for lead during “at risk” activities)
- ◆ Possible medical surveillance (e.g. blood testing)

6. WASTE COLLECTION AND DISPOSAL

The lead paint waste from maintenance work shall be segregated into three categories:

1. Solid waste generated from surface preparation (e.g. paint chips, dust and HEPA vacuum contents)
2. Other solid waste (e.g. plastic sheeting, protective clothing)
3. Liquid waste (e.g. wastewater, TSP solution)

Waste shall be stored in DOT approved containers and properly labeled indicating the container contents. Contact REHS (445-2550) for waste container delivery and pick-up.

Painted building components (i.e. window frames, trim, walls, doors, etc.) that are removed during renovation can be disposed of as construction debris (ID#27) and do not need to be segregated as a hazardous waste.