

PART 1 - LEAD PAINT SPECIFICATIONS

These lead paint specifications are designed to satisfy the minimum regulatory requirements necessary to safely prepare and re-paint structural surfaces and building components that contain lead-based paint. They can be applied to the majority of renovation projects encountered at Rutgers. They are not designed to address lead *abatement* projects required as a result of a lead inspection/risk assessment. Lead *abatement* is generally limited to buildings that house children under the age of six and/or who are diagnosed with elevated blood lead levels.

1.1 SCOPE

- A. The following lead paint specifications apply whenever a surface to be painted contains lead and where:
 - 1. Manual surface preparation is required (e.g. sanding, scraping)
 - 2. Surface preparation other than manual methods is required (e.g. chemical strippers or abrasive removal)
 - 3. Complete paint removal to the substrate is required
- B. Paint can be assumed to contain lead in buildings constructed prior to 1978. Lead content can be confirmed through non-destructive testing by x-ray fluorescence (XRF) or paint chip sampling and analysis by atomic absorption (AA) or inductively coupled plasma (ICP).

1.2 TERMS AND CONDITIONS – GENERAL

- A. The Contractor shall comply with all applicable regulations. Evidence of compliance with the OSHA *Lead Standard – Construction Industry* (29 CFR 1926.62) and *Respiratory Protection Standard* (29 CFR 1910.134) shall be provided to Rutgers Environmental Health and Safety (REHS) department at the time of bid submittal. This shall include a copy of the Contractor's Lead Compliance Program, consisting of the following minimum requirements:
 - 1. A copy of the Contractor's Respiratory Protection Program, including records of training and fit testing.
 - 2. A copy of the Contractor's Lead Exposure Assessment protocol.
 - 3. A description of each activity in which lead is emitted including the equipment used, materials involved, control procedures, crew size, job responsibilities, operating procedures and maintenance protocols.
 - 4. A description of specific means employed to achieve compliance, including engineering, administrative, and work practice controls.
 - 5. A copy of the Contractor's Personal Protective Equipment selection criteria.
 - 6. Records of lead hazard training as required by the *Lead Standard*.
- B. The surface preparation method selected shall produce the least amount of lead dust and/or fumes. THE USE OF ABRASIVE BLASTING OR GAS FIRED TORCHES IS PROHIBITED.
- C. REHS shall review and approve the surface preparation method and contaminant control measures selected for use by the Contractor.

- D. The Contractor shall post proper warning signs which delineate the work area, indicating: CAUTION LEAD HAZARD – DO NOT ENTER WORK AREA UNLESS AUTHORIZED.
- E. The Contractor must ensure that all electrical connections are checked for proper grounding. For wet areas, ground fault protection is required.
- F. Access to the work area shall be limited to the Contractor, the Contractor's employees, and persons designated by the University. No one shall be allowed to enter the work area without an appropriate NIOSH approved respirator suitable for the work being done.
- G. The Contractor shall conduct daily clean-up by vacuuming all paint chips and dust using an industrial vacuum cleaner equipped with High Efficiency Particulate Air (HEPA) filtration. Use of household vacuum cleaners or shop vacs without HEPA filtration is prohibited.
- H. The Contractor shall place all waste in suitable (DOT approved) containers, which are to be sealed, secured, and labeled at the end of each work day. Waste generated from lead abatement projects, or other projects that disturb lead containing materials, shall be segregated into the following three waste streams:
 - 1. Solid waste generated from surface preparation activities (e.g. paint chips, dust)
 - 2. Other solid waste (e.g. plastic sheeting, protective clothing)
 - 3. Liquid waste (e.g. wastewater, TSP solution)

REHS shall provide for disposal of waste generated from small projects. The Contractor shall provide for disposal of waste generated from large projects. The responsibility for disposal will be determined on a project-by-project basis, pending review of the proposed paint removal method.

- I. The Contractor shall repaint with suitable lead-free paint and shall provide a copy of the Material Safety Data Sheet for the product with the bid submittal.

1.3 INTERIOR WORK

- A. The Contractor shall seal off the work area from the remainder of the building by taping doors and/or using plastic sheeting, until all work and clean-up activities are complete. All plastic sheeting shall be 6 mil thickness. Tape shall be waterproof.
- B. The Contractor shall use plastic sheeting or impervious cloths to cover vents, grates, furnishings and equipment in the work area.
- C. The Contractor shall ensure that the Heating, Ventilating and Air Conditioning (HVAC) system in the work area is shut off or blocked out and isolated prior to and during the work.
- D. After the removal of lead paint, the area shall be completely HEPA vacuumed. Dry sweeping is prohibited. The Contractor shall wet mop or sponge all surfaces in the work area on a daily basis. Clean water or a trisodium phosphate (TSP) solution shall be used for cleaning.

1.4 EXTERIOR WORK

- A. The Contractor shall use plastic or canvas drop cloths to catch all waste when preparing exterior surfaces. The drop cloths shall be secured to the building, cover all shrubs and trees, and extend at least eight feet from the building. Dust and chips shall be promptly removed from the drop cloths and surrounding affected areas.

- B. The Contractor shall assure that all windows or doors are closed and that outdoor air intakes are protected. This also applies to adjacent buildings that are in close proximity to the work area.
- C. When using surface preparation methods that generate dust, the Contractor shall construct containment areas to prevent the dispersion of lead-contaminated dust into adjacent areas and/or the environment.
- D. When using pressure wash or steam systems for paint preparation, the Contractor shall collect all liquid waste. A system of collection such as gutters, troughs, leaders and barrels shall be designed by the Contractor and submitted to REHS for review and approval prior to the start of the work.
- E. The Contractor shall adhere to all appropriate OSHA regulations including but not limited to scaffolds, fall protection, barricades, fire protection, personal protective equipment, and electrical.

1.5 WINDOW REPLACEMENT

- A. The Contractor shall pre-clean all window surfaces with a HEPA vacuum, removing all debris and loose paint chips. Interior surfaces and occupant belongings that cannot be removed shall be protected with one layer of 6 mil polyethylene sheeting, taped at the joints.
- B. The Contractor shall protect all exterior surfaces as described in the General Terms and Conditions for Exterior Work.
- C. 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 a pry
 - 6. Pry off head stop
 - 7. Remove existing mullions
 - 8. Remove exterior header
 - 9. HEPA vacuum surrounding surfaces and window wells
- D. Custom windows (e.g. stained glass, bow, plate glass) of unusual size, shape and components may require alternate procedures. These procedures shall be developed by the Contractor and submitted with the bid submittal.