

## DIVISION 1 GENERAL REQUIREMENTS

### 01810 LEAD DUST HAZARDS

#### PART 1 – GENERAL

##### 1.1 WORK

- A. PRESUMPTION OF LEAD: For the purposes of these **Specifications**, and unless the building was constructed in 1978 or later, or the building has undergone a Lead-Based Paint Risk Assessment by a properly licensed Lead-based Paint Inspector or Risk Assessor and is certified as being “Lead Free”, the City of Milwaukee assumes that all painted surfaces contain lead-based paint. This presumption is made in lieu of a risk assessment. As a result of this presumption each rehabilitation project shall be conducted in a lead-safe manner as outlined herein.
- B. Work under this section **does not** apply to painted or coated surfaces when the lead content of that surface coating is determined to be below 0.7 mg/cm<sup>2</sup> as measured by an x-ray fluorescence (XRF) analyzer, or less than .06% lead by weight as determined by a certified laboratory paint chip analysis.
- C. Work under this section is limited to painted or coated surfaces that are presumed or known to contain lead-based paint per the City of Milwaukee Presumption of Lead notice.
- D. Provide all related materials, equipment, and labor required to complete the work in a lead safe manner in accordance with the **Scope** and as specified herein.
- E. After the work under this section is complete, provide all materials, equipment and labor necessary to clean and prepare the property for lead (Pb) clearance testing. It is the **Contractor's** responsibility to achieve lead clearance per the Department of Housing and Urban Development Lead-Based Paint Regulation [24 CFR Part 35] standards.
- F. **Contractor** shall be responsible for compliance with Department of Housing and Urban Development Lead-Based Paint Regulation [24 CFR Part 35], State of Wisconsin, Department of Health and Family Services Lead-Based Paint Regulations [Chapter HFS 163], and the City of Milwaukee Code of Ordinances, Lead-based Paint Hazard Control Regulations, [Chapter 66-47].
- G. **Contractor** shall obtain a Lead Abatement Permit from the Milwaukee Health Department at least two (2) business days prior to starting any **lead abatement** work.

##### 1.2 QUALITY STANDARDS

- A. Provide experienced, well-trained workers competent to complete the work as specified.
- B. Provide a certified lead abatement supervisor and certified lead abatement workers for any containment installation, demolition, removal, encapsulation, enclosure, debris removal or clean-up of suspected lead containing materials per the **Scope** and as specified herein.
- C. All work shall comply with the governing lead-based paint regulations and OSHA Worker Safety Regulations.
- D. Lead abatement and lead reduction work is time sensitive. **Contractor** shall complete the abatement work in accordance with the **Occupant Protection Plan** and as quickly and safely as possible to minimize potential exposure to lead hazards and to minimize the disruption to **Owner** and tenants.

##### 1.3 SUBMITTALS

- A. **Contractor** shall notify the Milwaukee Health Department (MHD) – Lead Section (414-286-5033) **at least 24 hours prior to starting any work that involves disturbance of painted or otherwise coated surfaces**. MHD will assign a Lead Risk Assessor to monitor the work to document lead safe rehabilitation procedures were followed.
- B. **Contractor** shall obtain a Lead Abatement Permit from the Milwaukee Health Department **at least two (2) business days prior to starting any lead abatement work**.
- C. **Contractor** shall complete an **Occupant Protection Plan** form and submit it to the Milwaukee Health Department along with their Lead Abatement Permit application.
- D. **Contractor** shall provide **Owner** and (if applicable) tenant a minimum of two (2) days advance notice prior to starting any lead abatement work.
- E. Prior to starting work under this section, **Contractor** shall present to the **Agency** for the purpose of making a copy, a current State of Wisconsin Lead (Pb) Company license and all Lead Supervisor(s) or Lead Worker(s) licenses of individuals employed by the **Contractor** or the **Contractor's Sub-contractors**.

- F. At the completion of the job and prior to final payment to the **Contractor**, the **Contractor** shall provide copies of all lead clearance testing results to both the **Owner** and the **Agency**.

#### 1.4 PRECONSTRUCTION AND PREPARATION

- A. Examine and verify that job conditions are satisfactory for speedy and acceptable work.
- **Contractor** shall meet with the **Owner** and (if applicable) tenant to explain the **Occupant Protection Plan**.
  - **Contractor** and **Owner** shall arrange for all occupants and other non-lead certified workers to remain out of the lead containment areas during construction and clean-up.
  - Children under seven (7) years of age shall not occupy the living unit or work area during lead abatement work, lead reduction work or clean-up of work.
  - Post in an obvious location, Lead Hazard Warning Signs, **Occupant Protection Plan**, and a copy of the Lead Abatement Permit at the entrances to containment areas. Note: Lead Hazard Warning Signs are available from MHD.
  - All containment measures shall be in place prior to starting any work which will disturb painted or otherwise coated surfaces.

### PART 2 – MATERIALS AND EQUIPMENT

#### 2.1 CONTAINMENT MATERIALS

- A. All materials used for containment shall be new and unused.
- Plastic shall be new, free of rips, tears and holes.
  - Tape shall be a minimum of 2" wide and of sufficient quality to serve its intended purpose.

#### 2.2 CONTAINMENT MEASURES

- A. Provide all materials and equipment required to safely contain lead dust hazards on the exterior of the building.
- Cover the ground in work areas with 6 mil plastic secured continuously along the foundation and extended out from the building a minimum of 6 feet and in all cases adequate to contain any falling debris. If adjacent structures are less than 6 feet away, contractor shall allow 6 mil plastic to extend up the side of the adjacent structure.
  - Cover all shrubbery, plantings, etc. with a minimum of 1-2 mil plastic.
  - All storm windows, windows and doors shall be closed to prevent the movement of lead dust and debris into or out of the building.
  - All storm windows, windows and doors in adjacent buildings closer than 6 feet to the work area shall be closed to prevent the movement of lead dust and debris into the building.
  - Maintain a HEPA vacuum in the containment area to periodically clean up dust and debris generated during the course of work.
- B. Provide all materials and equipment required to safely contain lead dust hazards in the interior of the building.
- Cover floors up to the top of the baseboard in work areas with 6 mil plastic secured continuously along the edges with duct tape.
  - Remove furniture, clothes, toys, etc. from the work area. If it is impractical or impossible to remove these items, the **Contractor** shall completely cover items with 1-2 mil plastic secured in place with duct tape.
  - All built in cabinets, countertops, bookshelves, plumbing, electrical, HVAC fixtures, etc. shall be covered with 1-2 mil plastic secured in place with duct tape.
  - Entrances to containment areas used by workers shall have two (2) layers of 6 mil plastic attached to the top edges of the doorway and at opposite sides of the doorway to form a z-door.
  - Provide continuous 6 mil plastic floor runners into and out of work areas, secured in place with duct tape.
  - Provide and use 6 mil plastic bages to transport sash from the containment area to other areas in and around the premises.
  - All storm windows, windows and doors shall be closed to prevent the movement of lead dust and debris into or out of the building or work area.

- All HVAC registers and vents shall be closed and covered with 6 mil plastic secured with duct tape.
- Provide tacky mats where necessary to control tracking of debris and dust hazards.
- Maintain a HEPA vacuum in the containment area to periodically clean up dust and debris generated during the course of work.

## 2.3 MATERIALS AND EQUIPMENT – LIMITATIONS ON USE

### A. Equipment and procedures not allowed.

- Do not use grinders, sandblasters, open flames, torches, power sanders, power washers or other abrasive type paint removal methods to remove paint or other coatings.
- Do not use heat guns that provide temperatures above 1,100 degrees Fahrenheit.
- Do not use solvents or chemical strippers that contain methylene chloride.
- Do not dry sweep dust or debris in areas not properly contained and sealed.
- Do not use standard house vacuums or shop vacuums that are not HEPA equipped.
- Do not use any method that allows leaded dust to become airborne.

### B. Permissible methods and equipment.

- Wet scraping with a sharp scraping tool using a spray bottle with water to first wet the surface.
- Wet sanding (by hand) using a spray bottle with water to first wet the surface.
- The use of a power planer with a HEPA vacuum attachment to collect the dust and debris.
- Using a heat gun with temperatures less than 1,100 degrees Fahrenheit.
- Chemical methods which do not contain methylene chloride.

## 2.4 WORKING CONDITIONS

### A. Maintain a lead safe working environment.

- Do not allow excessive accumulation of dust and debris in work area.
- Maintain containment area free of airborne construction dust.
- Do not allow children, uncertified workers, building occupants or other unauthorized individuals to enter containment areas.
- Do not allow tracking of dust and debris out of the containment areas. Tacky mats are required at any active unit entryways and outside of any contained work area.
- Do not perform exterior lead-based paint removal when weather conditions are unacceptable. Exterior work is not permitted in adverse weather conditions such as strong winds, or in any condition that would allow lead dust and debris to cause a hazard or escape the containment area.

## PART 3 – DISPOSAL AND CLEAN-UP

### 3.1 DISPOSAL

#### A. Disposal of painted components:

- Place construction debris in 6 mil plastic bags. Seal bags with duct tape.
- Debris too large for bags shall be wrapped in 6 mil plastic and secured with duct tape.
- Properly wrapped debris can be placed within the green garbage containers for City of Milwaukee pick-up.
- Items too large to fit in the green garbage carts should be neatly stored on the **Owner's** property in an area accessible for City of Milwaukee pick-up. If necessary **Contractor** shall call the City of Milwaukee, Department of Public Works Sanitation Division (414) 286-8282 for a special pick-up.
- For large quantities of debris, **Contractor** shall remove debris from property and dispose of debris at **Contractor's** expense.
- At the end of each work day, **Contractor** shall not leave more than six (6) unabated window sash at the property. **Contractor** is responsible for removing and properly disposing of these additional sashes at the **Contractor's** expense.

### 3.2 CLEAN-UP

#### A. Clean-up and removal of containment measures:

- All construction debris shall be wrapped and removed from the containment area.
- Clean and remove all unused materials, tools and power cords from containment area.

- Clean with a HEPA vacuum containment area to remove excessive paint chips and dust prior to removing containment measures.
  - Remove containment from furniture, walls, etc. and carefully roll-up plastic and seal with duct tape.
  - Remove containment from floors by carefully rolling up plastic to prevent lead dust and debris from becoming airborne. Seal plastic with duct tape.
  - HEPA vacuum all surfaces including floors and windows after containment measures have been removed.
- B. **Contractor** shall supply all materials, equipment and labor necessary to safely clean and prepare properties for lead (Pb) clearance testing.
- Use cleaning solutions mixed from water and standard household cleaning products.
  - Use clean buckets and mops with disposable mop heads.
  - Use disposable towels, rags, mop heads or sponges for cleaning and rinsing surfaces.
- C. Washing and cleaning surfaces:
- All horizontal surfaces including floors and windows shall be washed and rinsed using a mixture of water, soap or other household cleaning solutions.
  - Use a separate bucket for cleaning and a bucket for rinsing surfaces.
  - Frequently change the cleaning and rinse solutions. Do not allow wash solution or rinse water to become saturated with dust and dirt.
  - Frequently dispose dirty or saturated towels, rags, mop heads or sponges.
  - Repeat wash and rinse process multiple times to assure that all residue and dust has been removed and surface will pass a clearance test.
  - Carpeted floors shall be thoroughly HEPA vacuumed in one direction overlapping each row and repeated in a perpendicular direction.
  - Walls and other vertical surfaces shall be washed as specified herein.
  - Window glass shall be free of dust, dirt, streaks, spots, paint and excess glazing material.
  - Used cleaning materials shall be disposed of in a plastic bag sealed with duct tape.

### 3.3 INSPECTION TOUCH-UP AND REPAIRS

- A. The **Contractor** is responsible for contacting the Milwaukee Health Department to schedule final inspections and clearance testing.
- All work involving the disturbance of painted or otherwise coated surfaces shall be completed prior to the final clearance test.
  - Clearance testing shall be scheduled with the Milwaukee Health Department – Lead Section (414) 286-5033 a minimum of 24 hours in advance.
  - The **Contractor** shall be responsible for contacting the **Owner** and (if applicable) tenant to schedule access to the building for clearance testing.
  - All cleaning and preparation work shall be completed a minimum of one hour prior to the scheduled clearance appointment.
  - The **Contractor's** abatement supervisor or other licensed representative shall be present during the final clearance test.

### 3.4 CLEARANCE

- A. The property must first pass a visual inspection by the Risk Assessor prior to clearance sampling.
- B. Clearance wipes samples will only be taken if the property passes the visual inspection.
- C. The Risk Assessor will determine the number, location and type (i.e. floor, sill, well, other) of clearance wipes taken.
- D. Clearance test results shall be provided to the **Contractor** by the Milwaukee Health Department Laboratory.
- Upon completion of the job and before final payment to the **Contractor**, the **Contractor** shall provide copies of all clearance results to both the owner and agency.
  - **Contractor** shall maintain copies of all clearance results.

### 3.5 CLEARANCE FAILURES

- A. Failure of visual inspection:
- **Contractor**, at **Contractor's** expense, shall make all necessary repairs as directed by the Risk Assessor upon failure of the visual inspection.

- After completion of defects found during the visual inspection, **Contractor** shall reschedule final clearance testing as outlined herein.
- B. Failure of clearance test:
- Upon notification from Milwaukee Health Department – Lead Section of clearance failure(s), the **Contractor** shall re-clean the failed surface(s) and schedule another clearance test within 72 hours.
  - **Contractor** shall make all necessary arrangements for entry with the **Owner** and (if applicable) tenant for re-cleaning and clearance testing.
  - **Contractor** shall re-clean failed surface(s) at contractors expense.
  - Continued clearance failure(s) by the **Contractor** may result in citations, notification being sent to the State of Wisconsin Health and Family Services Lead Section and/or the levying of clearance testing and laboratory fees to the **Contractor**.

END OF SECTION – 01810 LEAD DUST HAZARD