



# **City of Atlanta**

## **Lead Based Paint Policy and Standards**

Department of Grants and Community Development  
55 Trinity Avenue, SW Suite 3500  
Atlanta, Georgia 30303 (404) 330-6390

# Lead Hazard Reduction Guidelines

## I. Purpose

The purpose of the Lead Based Paint Policy is to reduce or eliminate lead hazards in all housing units that receive Federal funding through any of the City of Atlanta's programs. The goals of this policy are:

- To reduce lead poisoning or the risk of lead poisoning to children and families;
- To educate and inform families about lead poisoning prevention; and
- To provide intervention through the reduction of lead-based paint hazards.

## II. General Requirements

- A. Notification - The City and all sub-recipients must follow the lead notification procedures outlined below when dealing with pre-1978 housing units, regardless of the type of activity funded. Proper documentation that all required notification was given must be maintained in all project files. The notices are as follows:
1. Lead Information Pamphlet and Lead Disclosure Form - occupants of the unit will receive the HUD/EPA pamphlet "Protect Your Family from Lead in Your Home" and the Lead Disclosure Form. If the unit is known to be a pre-1978 unit that contains lead-based paint or lead-based paint hazards, owners must notify tenants and prospective buyers if the owner at any time uses the unit for rental property or decides to sell the property.
  2. Notice of Hazard Evaluation or the Presumption of Lead-Based Paint or Hazards - unit occupants will receive notification of the results of any lead hazard evaluation or the presumption of lead-based paint or hazards within fifteen (15) days after the results has been determined.
  3. Notice of Reduction Activities - unit occupants will receive notification of the results of hazard reduction activities. The type of reduction activity will vary according to the level of assistance provided.
  4. Completion of two required forms: Lead-Safe Housing Rule Checklist for General Compliance Documentation, and Lead-Safe Housing Rule Applicability Form, by the Housing of Urban Development. These forms are to be maintained in the file.
- B. Continued Maintenance - Property owners must incorporate an ongoing lead-based paint maintenance policy and procedure as required by HUD. This is to ensure the safety of all units and units occupied by one or more children under age six as well as the safety of any occupants under Federal funded programs. Property owners must use Periodic Visual Assessments after the completion of Lead Hazard Controls and Notifications as listed in 'General Requirements' of this document. This procedure must be documented by owners and maintained in all project files. This procedure includes identifying:
1. Deteriorated paint
  2. Unusual amounts of visible dust
  3. Paint related debris
  4. Failed lead hazard controls
  5. Bare soil
  6. Horizontal surfaces that are not easily cleanable

7. Chewable surfaces with evidence of teeth marks and
8. Problems (structural and otherwise) that may be causing some of the foregoing conditions

### III. Corrective Actions

#### A. Children Under The Age of Six

1. Elevated Blood Level Procedure – Within 15 calendar days after being notified by a public health department or other medical health care provider that a child under the age of six (6) has an elevated blood lead level while living in a unit, per HUD regulations, the following procedure must be enacted:
  - I. An Environmental Investigation must be completed. This will consist of an administration of a questionnaire, comprehensive environmental sampling, case management, and other measures of the unit where the child lived at the time the blood was last sampled.
  - II. After the investigation is completed, occupants shall provide the report of the investigation to the owner of the housing unit.
    - a. If the child identified with having an elevated blood level is no longer living in the unit after the results of the investigation and a new occupant with children under six years of age occupy the residency, this
  - III. Within 30 calendar days after receiving the report of the Environmental Investigation from the designated party or the evaluation from the public health department, the owner shall complete the reduction of identified lead-based paint hazards in accordance with regulation § 35.1325 or § 35.1330. Lead-based paint hazard reduction is considered complete when clearance is achieved in accordance with § 35.1340 and the clearance report states that all lead-based paint hazards identified in the environmental investigation have been treated with interim controls or abatement or the public health department certifies that the lead-based paint hazard reduction is complete.

### IV. Best Practices

- A. Safe Methods of Paint Removal - The Bureau of Housing or the implementing agency will document that contractors have been informed of the permissible methods of paint removal and document safe work practices are followed. Safe work methods are required on interior surfaces larger than two square feet and on exterior surfaces larger than 20 square feet. These methods are:
  1. Wet scraping
  2. Wet sanding
  3. Chemical stripping off-site
  4. Replacing painted components
  5. scraping with an infrared or coil-type heat gun with temperatures below 1,100 degrees Fahrenheit
  6. Abrasive sanding with HEPA vacuum; and covering of defective paint surface with durable materials (such as wallboard) with joints sealed and caulked. (Note: Vinyl siding is not an approved lead hazard reduction method for historic structures.)
  7. High Efficiency Particulate Air (HEPA) vacuum sanding

8. High Efficiency Particulate Air (HEPA) vacuum sanding
9. HEPA vacuum needle gun
10. Abrasive sanding with HEPA vacuum; and covering of defective paint surface with durable materials (such as wallboard) with joints sealed and caulked. (Note: Vinyl siding is not an approved lead hazard reduction method for historic structures.)

B. Prohibited Methods of Paint Removal - The Bureau of Housing or the implementing agency will document that Contractors have been informed of the prohibited methods of paint removal. These methods are:

1. Open flame burning or torching
2. Machine sanding or grinding without a HEPA local exhaust control
3. Abrasive blasting or sandblasting without HEPA local exhaust control
4. Heat guns operating above 1,100 degrees Fahrenheit or that operate high enough to char the paint
5. Power washing
6. Dry sanding or dry scraping, except when dry scraping in conjunction with heat guns, dry scraping within one foot (0.20 meters) of electrical outlets, treating deteriorated paint spots that total no more than two square feet (0.2 square meters) in any one interior room or space, or treating deteriorated paint spots that total no more than 20 square feet (2.0 square meters) on exterior surfaces; and
7. Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous substance in accordance with the regulations of the Consumer Product Safety Commission at 16 CFR 1500.3 and/or a hazardous chemical in accordance with the Occupational Safety and Health Administration at 29 CFR 1010.1200 or 1926.59, as applicable to the work. (Note: Methylene chloride paint strippers may cause cancer and should be avoided.)

C. Suggested Paint Removal Techniques for Historic Materials - Abatement may not be an approved lead hazard reduction activity in historic properties. Interim controls that allow intact historic paint to remain in place (with topcoats of lead-free paint) are the least damaging to an element. Removal of lead-based paint down to the operable substrate, if carefully done, is the second least invasive treatment. (Chemical, wet sanding, or low-heat removal of paint allows the substrate to stay intact and remain in place.) If paint layering is determined to be significant, it should be recorded with a preserved sample prior to paint removal. Offsite paint stripping is the most invasive and potentially damaging paint removal treatment. When offsite stripping, the following should be considered:

1. If the items are easily removed (e.g., doors, shutters, or windows), they potentially can be reinstalled, once treated.
2. The creation of lead dust generally accompanies the removal of attached trim work.
3. Damage can be reduced by using chemicals, heat, and wet sanding.
4. Companies experienced in treating historic building parts should do paint stripping.
5. If elements deteriorate during the paint removal process, repair or replacement of significant components should match the original parts in size, material, and configuration. Less significant features should match the visual appearance as closely as possible.

6. When selecting from various methods, paint removal in historic preservation should focus on retaining as much of the original historic fabric as possible to preserve the historic character of the resource.

The following removal techniques are recommended:

- A. Wet sanding of loose paint to bonded paint
- B. Finish sanding using mechanical sanders and HEPA vacuum
- C. Low-heat stripping with heat guns or heat plates (less than 450 degrees Fahrenheit, round-edge scrapper);
- D. Solvent-based non-caustic stripper to place (not ethylene chloride); and
- E. Offsite stripping with heat, chemicals, or cold-tank dipping (be careful of glued joints).

Paint removal techniques that are not recommended are:

- A. Torch or open flame burning that can vaporize lead and burn substrates finish sanding using mechanical sanders and HEPA vacuum
- B. Wet grit blasting (except for limited cast iron or concrete under containment)
- C. Caustic strippers that can raise the wood grain (unless supervised by a trained specialist)
- D. Power Washing
- E. Power sanding that can abrade wood surfaces; and
- F. Hot-tank dipping that often disintegrates glued joints

**NOTE: In properties determined by the City of Atlanta Urban Design Commission (UDC) to be historic and containing deteriorated lead contaminated windows and doors, use wet scraping and repainting instead of replacing windows with aluminum windows.**

- **Establishing Priorities for Intervention in Historic Properties**

1. Significant elements should be treated with great care when physical intervention is considered as part of the lead hazard control plan.
2. Interim controls are generally the preferred lead reduction activity. If the element is extremely significant (e.g., carved mantel) and in good condition, it should be disturbed as little as possible, while still ensuring that lead hazards are controlled.
3. If the element is not particularly significant (e.g., a simple baseboard) and is in poor condition it may be acceptable to remove the entire possible.
4. If the element is significant, but deteriorated, the preservation measures should be on rebuilding or repairing the element in a manner that will not cause further damage. Careful paint removal and thorough cleaning of substrates, although time consuming, is appropriate for highly significant elements.
5. During interim control work, only the deteriorated topcoats of paint should be removed, and the remaining well-bonded paint should be stabilized. The area can then be washed, re-primed, and covered with one or two topcoats of paint.
6. For highly significant properties (those listed individually in the National Register of Historic Places) where paint layering is to be removed, paint samples should be

collected, labeled, and stored by a historic preservation foundation or other organization.

7. Distinctive elements for painted surfaces are generally found in three categories:
  - a. Materials: wood, plaster, stone, cast iron, brick, brass, "comps" (a simulated wood/plaster), roofing metal;
  - b. Features: mantels, balusters, moldings, window and door trims, cast metal stair assemblies, paneled surfaces, milled siding, turned columns; and
  - c. Finishes: grained doors, stenciled borders, painted wallpapers, bronzed or gilded finishes.

D. Emergency Rehabilitation Environmental Inspection/Work Specification ≤ \$5,000

Housing units that are pre-1978, with lead-based paint hazards and rehabilitation activities under \$5,000 and whose occupants otherwise qualify for the program based on income guidelines published by the Department of Housing and Urban Development (HUD), will be exempt from compliance with both the lead rule and the environmental requirements. Work may not be completed on any item not directly required to correct the emergency condition.

- E. Rental and Homeowner Rehabilitation: Environmental Inspection/Work Specification ≥ \$5,001 - \$25,000 per Unit - Housing units that are pre-1978, with lead-based paint hazards and receiving rehabilitation activities valued between \$5,001 to \$45,000 per unit and whose occupants otherwise qualify for the program based on income guidelines published by the Department of Housing and Urban Development (HUD), will receive an environmental inspection to identify all lead-based paint hazards for reduction.

Inspections, risk assessments, and clearance tests will be performed according to the HUD training manuals Lead Risk Assessor Training: U.S. Environmental Protection Agency Model Course Curriculum and Lead Abatement Training for Contractors and Supervisors.

Paint surfaces to be disturbed during rehabilitation will be tested with an Environmental Protection Agency (EPA) approved RMD X-Ray Florescence (XRF) Analyzer. The contractor must be certified by the Georgia Department of Natural Resources as a risk assessor and will follow the following procedures:

1. The City or the implementing agency will contact the homeowner to schedule an appointment at the convenience of the family residing in the housing unit to conduct an environmental inspection.
2. Prior to conducting the inspection, the lead-based paint inspector will explain the inspection procedures to the resident and provide safety awareness information for all occupants.
3. The lead-based paint inspector will conclude each inspection by discussing preliminary results of the inspection with the homeowners.
4. A complete lead hazard report, including the drawing of the unit, results of the XRF testing, and results of any wipe, soil, and/or paint chip test is completed by the lead-based paint inspector.
5. Upon completion of each lead hazard reduction project, the lead based paint inspector will perform clearance testing of the unit to verify that lead dust levels are below the

EPA thresholds and the housing unit is lead-safe. The results are then placed in the rehabilitation permanent case file.

F. Lead Hazard Reduction Procedures - The City or the implementing agency is responsible for developing a detailed plan noting each specific lead hazard in the housing unit. The lead-based paint inspector and the housing personnel will monitor the work progress of the contractor to ensure that the specifications outlined in the contract are followed. Proof of successful completion of EPA/HUD Lead Safe Work Practices training or state lead-based paint abatement certification and licensing of all supervisors, contractors, and/or workers involved in lead hazard reduction activities will be confirmed before work begins on the unit.

In developing work specifications, the housing personnel will incorporate into the project design any rehabilitation activities to correct code violations, and/or work necessary for the health and safety of occupants, including lead-based paint reduction activities. This will be accomplished through the following:

1. The lead based paint inspector or designee will design a lead-based hazard reduction strategy for each unit.
2. The lead-based paint inspector will inspect the unit as part of the environmental assessment. Utilizing the environmental test results and the drawing outlining the location of the lead-based paint hazards, the inspector will determine the type of hazard reduction that will be required to minimize each hazard. The inspector will also measure each area and building component to develop a work specification.
3. Only contractors and workers who have successfully completed EPA/HUD approved training in Lead Safe Work Practices are eligible to bid and work on projects.
4. The lead assessor will determine the type of occupancy protection plan required to protect the health of residents during the lead-based paint reduction activities. If relocation is warranted, the family must be moved prior to beginning lead hazard reduction activities.
5. During the lead hazard reduction phase of the project, the City of Atlanta or the implementing agency will ensure that contractors comply with applicable state and federal policies and procedures, including, but not limited to:
  - a. containing lead-bearing dust and debris during hazard reduction activities to protect other areas from cross-contamination, using six (6) ml plastic to cover all floors, furniture, and any other household items not moved from the residence, and using six (6) ml plastic to cover exterior soil areas during the time that the work is performed;
  - b. not using prohibited methods as specified in Prohibited Methods of Paint Removal;
  - c. wet scraping and cleaning thoroughly before painting when using stabilization methods as a means of lead hazard reduction activities;
  - d. replacing lead-contaminated wood windows with aluminum windows, except when the unit is determined to be a historic property by the City's UDC;
  - e. replacing windowsills that protrude and show evidence of children mouthing or chewing with non-contaminated materials to prevent further lead hazards;
  - f. performing a post-abatement cleanup to include HEPA vacuuming of all surfaces, including wood trim, window sills, window troughs, and floors as needed to remove debris, followed by a high phosphate wash;

- g. disposing of all waste resulting from lead hazard reduction in a manner consistent with state and federal regulations;
- h. complying with Title X and any other relevant guidelines and statutes, including, but not limited to, the TDH, HUD, EPA, and OSHA;
- i. monitoring of workers during abatement by contractors and blood screening of workers periodically, as well as holding lead abatement safety classes with all workers performing abatement.

At least one (1) day after completion of the housing unit, the contractor will notify the lead assessor for a final inspection and clearance wipe test. The

for analysis. When the unit passes clearance testing, the assessor notifies the family that they can move back into their home. The assessor meets with the owner to review the work performed by the contractor.

G. Worksite Preparation and Containment - The worksite for lead hazard reduction activities must be prepared to prevent the release of leaded dust and debris. If necessary, the following measures must be taken to reduce the spread of lead contamination:

1. Sealing doorways with two flaps of poly sheeting;
2. Sealing heating/air conditioning vents (if possible);
3. Covering floors and ground with poly sheeting;
4. Covering furniture and shrubs with poly sheeting;
5. Wrapping debris in poly sheeting before disposal;
6. Removing lead-contaminated protective clothing before exiting the worksite; and
7. Posting warning signs at each entry to a room where lead hazard reduction activities are conducted when occupants are present; at the main and secondary entryways to a building from which occupants have been relocated; and at exterior worksites at a size and type readable from 20 feet from the edge of the worksite. Signs need to be in the occupant's primary language to the extent practicable.

#### Selecting Testing Components

1. In the interior of each home in the sample, the assessor must test surfaces representative of each type of painted and varnished component in every area (room, closet, pantry, hall, and part of a divided room, such as living room/dining room). On the exterior of the home, there is a similar requirement to test every type of painted and varnished component.
2. Interior components to be tested if painted or varnished may include, but are not limited to: ceilings, crown molding, walls, chair rails, doors, door trim, floors, fireplaces, radiators and other heating units, shelves, shelf supports, stair treads, stair risers, stair stringers, newel posts, railing caps, balustrades, and windows and trim, including sashes, window heads, jambs, sills and stools, built-in cabinets, columns, beams, bathroom vanities, counter tops, and air conditioners.
3. Exterior components to be tested if painted or varnished may include, but are not limited to: painted roofing, chimneys, flashing, gutters and downspouts, ceilings, soffits, fascia, rake boards, corner boards, bulkheads, doors and door trim, fences, floors, joists, lattice work, railings and railing caps, siding, handrails, stair risers and treads, stair stringers, columns, balustrades, window sills, casings, sashes and wells, and air conditioners.



4. Common area components to be tested if painted or varnished may include, but are not limited to: hallways, stairways, laundry and fences.
5. The above-mentioned components are not intended to be an exhaustive listing. Unlisted components must still be tested. Also, if two components of the same type have or are suspected of having a different paint history, both must be tested.

#### H. Component Selection Procedures

1. The Housing City of Atlanta inspects the home or unit and develops a complete list of areas to be sampled.
  2. Within each area, the specialist lists all painted and varnished components, including repeat components.
  3. Where a component is repeated, the specialist randomly selects one from the list for testing, using a random calculator.
  4. The specialist selects a location on each component for XRF testing, or for taking a paint sample, and records the location of every sample taken for future reference.
- I. Worker Protection - Workers should take proper precautions to protect themselves from lead-based paint hazards, including inhaling dust, and avoid taking it home with them on their clothes where it can poison children. Protective measures for workers include:
1. Using safe work practices;
  2. Wearing National Institute of Occupational Safety Hazards (NIOSH)-approved respirators; and
  3. Wearing disposable gloves, work suits, booties, and head coverings.
- J. Work Site Cleanup - The purpose of work site cleanup is to remove dust and debris from the work area. Work site cleanup of lead paint hazards is the responsibility of the general contractor and subcontractors and will be done using methods, products, and devices that are successful in cleaning lead- contaminated dust. Appropriate cleaning should be done with vacuum cleaners with HEPA filters or equivalent equipment, and household or lead-specific detergents or equivalent products. Debris must be disposed of properly each day and excessive amounts of paint chips and dust should be removed.

1. Clearance Procedures - During clearance, the specialist/clearance professional will complete the following tasks:

- Conduct a visual assessment of the unit and worksite to identify dust, debris, and deteriorated paint;
- Take dust samples from floors, interior windowsills, and window troughs;
- Exterior work - visually assess the soil near the worksite;
- Submit the samples to a laboratory accredited under the EPA National Lead Laboratory Accreditation Program for analysis;
- Write a report presenting the results of the clearance examination.

Re-cleaning: If the clearance report shows that the lead levels found in any of the tested areas of the unit are higher than the HUD thresholds, then the home or unit must be re-cleaned.

Retesting: The exact same surface area is not to be tested twice since, by wiping the area, the lead has already been removed by the previous wipe sample. A similar surface is to be retested and sent to the laboratory.

2. Clearance Exemptions - Clearance is not required:

- If maintenance or a lead hazard reduction activity at a worksite does not disturb painted surfaces; or
- If the total area disturbed does not exceed the following:
  - a. 20 square feet (two square meters) on exterior surfaces;
  - b. Two square feet (0.2 square meters) in any one interior room or space; or
  - c. Ten percent of the total surface area on an interior or exterior type of component with a small surface area like windowsills, baseboards, and trim.

K. Temporary Occupant Relocation Plan - The HOME Owner-Occupied Rehabilitation Program, Emergency Repair Program are voluntary programs (not mandatory rehabilitation programs) and will not offer relocation benefits if temporary or permanent relocation is necessary. Any relocation or related expenses will be borne by the homeowner.

L. Sampling Procedures

1. Wipe Sampling for Lead in Dust - There are separate clearance standards for floors, windowsills, and window wells. The clearance standards are as follows.

- Floors: (ft<sup>2</sup>) micrograms per square foot
- Windowsills: 100 micrograms per square foot
- Window wells: 200 micrograms per square foot

The method for testing surfaces is wipe sampling. The surface must be visually inspected prior to taking wipe samples. If dust is visible, the area should be re-cleaned before wipe sampling. Samples must be taken with commercially available wipes moistened with a non-alcohol wetting agent. The lead assessor must take proper precautions to avoid contamination of samples and to keep track of sampling locations. The complete list of wipe sampling equipment and supplies consists of the following items:

- Sealed package of non-alcohol disposable wipes;
- Washable template (inner dimensions 1ft. x 1ft.);
- Steel measuring tape or ruler;
- Pencil and marking pen;
- Sealable 50 ml centrifuge tubes;
- Disposable vinyl or latex gloves;
- Disposable shoe covers;
- Self-adhesive labels; and
- Field sample log.

2. Sampling procedures for floors are as follows.

- Put on disposable shoe covers before entering the dwelling to be sampled. Put on a pair of vinyl or latex gloves.
- Remove the seal on a package containing the wipes, and open the lid.
- Remove and discard the top wipe to avoid contamination.
- Position a 1ft. by 1ft. template on the floor surface to be sampled.
- Place the wipe flat on the surface within the sample area as defined by the template. Using an open flat hand with the fingers together, wipe the marked surface in an overlapping “S” pattern, first side to side and then front-to-back, so that the entire one square foot is covered.
- Fold the wipe in half with the sample side folded in and repeat the wiping procedure within the marked surface area on one side of the folded wipe.
- Fold the wipe again with the sample side folded in.
- Insert the folded wipe into a new sealable 50-ml centrifuge tube and seal.
- Clean the vinyl or latex gloves with a new wipe. Clean the template with a new wipe.
- Label the sample with site location, date, and time and record the same information on the field sample log.

3. Number and Location of Wipe Samples - The number of samples varies, depending on the nature and extent of the lead reduction activity conducted. The greatest number of samples is for when on-site paint removal has occurred throughout the unit. In this case, three wipe samples (one floor, one window well, one windowsill) are required in each area (room or distinct area, such as a hallway). If on-site paint removal has occurred in limited areas, three samples should be taken in each abated area, and one sample should be taken within ten feet of the containment area in 20 percent of the abated units, to check whether abatement has caused an elevation in dust lead levels outside containment. In the case of exterior abatement, at least one wipe sample should be taken on a horizontal surface (such as a front porch) in part of the living area.

4. Sampling Procedures for Lead in Soil - The equipment needed for soil sampling is as follows:

- stainless steel soil-recovery probe;
- hammer attachment;
- One-inch (internal diameter) butyrate plastic liner inserts;
- One-inch diameter plungers with and without adjustable stop;
- Plastic ruler;
- Vinyl or latex gloves;
- Sealable plastic containers at least two inches in diameter;
- Commercial, non-alcohol, disposable wipes; and
- Self-adhesive labels, pencil and marking pen, and field sampling log.

5. The sampling protocol for soil is as follows.

- Put on a pair of vinyl or latex gloves.
- Disassemble the soil recovery probe by unscrewing the soil probe section from the coupling in preparation for inserting a new, clean, plastic liner.
- Remove the protective end caps, if present, from a clean plastic liner, and insert it into the probe with the arrow pointing down toward the tip.
- Reassemble the probe and attach the crossbar handle.

- Push the soil recovery probe into the soil to a depth of approximately two inches, then twist and snap the coring tool to one side and remove the core sample. If the soil is hard, dry, or frozen, the full two-inch penetration may not be achievable. In such cases, it is important to penetrate to a minimum of ½ inch and to record any problems in the field-sampling log.
- Disassemble the probe, remove the plastic liner containing the core sample, and insert a clean one-inch diameter plunger into the top end of the liner.
- Orient the liner with the arrow pointing up and push out all but the top ½ inch of the core from the liner with the plunger. Discard the soil pushed out of the liner.
- With a clean plunger, push the remaining ½-inch section of the core sample into a clean, sealable plastic container.
- Reinsert the plastic liner into the soil recovery probe and reassemble the unit.
- Collect the remaining core samples of the composite using the same method. The three to five cores constituting the composite sample are placed in the same plastic container.
- Label the plastic container with sample ID and time, date, and location of sample, and then record the same information on the field-sampling log.
- Before collecting the next composite sample, discard the plastic liner.
- Wipe down the recovery probe, plungers, and straight edge with disposable wipes, and discard the wipes. Clean the vinyl or latex gloves with a wipe. All these steps must be followed to avoid cross contamination.

#### 6. Number and Location of Soil Samples:

The lead assessor shall first, prepare a site description and make a detailed drawing showing the boundary of the lot and the position of the main building (and any other structures such as garages and storage sheds), the position of the play areas, the position of areas with exposed soil, roof rain spouts, general drainage patterns, the drip lines of the buildings, and areas of heavy traffic. In addition to the diagram, the assessor shall describe the location of the property, including the following information:

- Type of building construction;
- Condition of main building;
- Condition of the property and nature of adjacent property;
- Fencing and animals on the property; and
- Apparent use of the property (e.g., used as a play area).

The number of samples to be taken depends on the area of exposed soil around the dwelling. If area of exposed soil is less than 800 square feet, a single composite soil sample can be taken. This sample should consist of a composite of five soil cores taken at random locations within two feet of the building foundation. If the area of exposed soil is between 800 and 1600 square feet, two composite soil samples must be taken. One of these samples should consist of five randomly located cores within two feet of the foundation. The other should consist of five cores randomly located at the yard boundary. If the area of exposed soil exceeds 1600 square feet, the area more than two feet from the foundation should first be divided in two. Then three composite samples of five soil cores each should be taken. One sample should consist of cores taken within two feet of the foundation; the second should consist of five randomly selected cores in the first half of the rest of the yard; and the third composite should be taken from five cores in the second half of the rest of the yard.



# Housing Rehabilitation Standards

## I. MINIMUM BASIC EQUIPMENT AND FACILITIES

- A. Kitchens - Every dwelling unit, shall have a kitchen room or kitchenette equipped with the following:
1. Kitchen Sink: It shall contain an approved kitchen sink, properly connected to both hot and cold running water lines, under pressure, and maintained in working order.
  2. Stove: It shall contain a stove (gas or electric), properly connected to the source of power, maintained in working order, and capable of supplying the service for which it is intended.
  3. Refrigerator: It shall contain a refrigerator, properly connected to the source of power, maintained in working order, and capable of supplying the service for which it is intended.
  4. In properties being acquired for homeownerships, if the purchasers are required to furnish their own appliances, there shall be sufficient space and all required electrical-gas hookups, properly installed to facilitate the use of said appliances.
- B. Toilet room - Every dwelling unit, shall contain a room, which is equipped with a flush water closet and a properly installed lavatory. All lavatories shall be properly connected to both hot and cold running water, under pressure, and shall be properly maintained in working order. All flush water closets shall be properly connected to the water supply, under pressure and shall be maintained in working order.
- C. Bath - Every dwelling unit shall contain a bathtub and/or shower. Potable water supply piping, water discharge outlets, backflow prevention devices or similar equipment shall not be so located as to make possible their submergence in any contaminated or polluted liquid or substance. Said bathtub and/or shower may be in the same room as the flush water closet and lavatory or said bathtub and/or shower may be in a separate room. In all cases, these facilities shall be properly connected to both hot and cold running water lines, under pressure, and shall be maintained in working order.
1. Privacy in room containing toilet and bathtub - Every toilet and every bath shall be contained in a room or within separate rooms, which affords privacy to a person within said room or rooms. Toilets and bathrooms shall have doors with a privacy-type lock and such doors, lock and hardware shall be operable and maintained in working order.
  2. Hot and cold water lines to bath and kitchen - Every dwelling shall have supplied water-heating units, that are either gas fired, or have electric heating elements that are properly installed as per applicable building codes and per the manufactures' installation instructions. Water heating units are to be properly maintained in working condition and must be free of any water leaks. Water heating units are to properly connected to required water

lines and are capable of heating and supplying a sufficient amount of hot water to the structure.

Hot water storage associated with water heating facilities shall be not less than the following minimum capacities: one dwelling unit - 30 gallons. No water heaters shall be allowed in bathrooms or closets other than for the specific purpose housing the water heater. All water heaters shall be properly vented and sealed and shall be equipped with a pressure relief valve and drip leg. All water heating units that are newly installed must be equipped with a means of prevent water expansion with the installation of either an expansion tank or a relief / bypass valve.

3. Connection of sanitary facilities to water and sewer-septic system – Every kitchen sink, toilet, lavatory basin and bathtub and or shower, shall be maintained in working condition and be properly connected to an approved water, and sewer or septic system.
4. Exits - Every exit from every dwelling unit shall comply with the following requirements:
  - It shall be kept in a state of maintenance and repair.
  - It shall be unobstructed at all times.
  - All newly installed exterior door units are to be pre-hung with weather-stripping and a sill installed.
  - All newly installed exterior doors are to measure 36” across the width of the door to allow for proper handicap accessibility.
  - All stairways and steps of two or more risers shall have at least one handrail, and all stairways and steps which are five feet or more in width, or which are open on both sides, shall have a handrail on each side.
  - Every dwelling unit shall have two independent means of egress.
  - All handrails shall be not less than 30 inches vertically above the nose of the stair treads and not less than 36 inches above the stairway platform.
  - All balconies and platforms which are 30 inches or more above grade shall have a protective railing not less than 36 inches in height above the balcony or platform level.
  - All stairs and steps shall have a rise height of not more than eight inches and a tread width of not less than nine inches. This requirement may be waived if in an existing structure it would be impossible or cost-prohibitive to meet this requirement. In such cases, new stairs could be installed which have the same rise and run as the old.

- D. Smoke detectors - All residential structures shall have U.L. approved hard-wired smoke detectors or battery operated smoke detectors, properly installed in accordance with applicable building codes. At least three (3) smoke alarms are to be installed in each

structure. It is recommended that one alarm be installed in each of the following areas: Kitchen, Bedroom Hallway, Basement / Garage. At least one alarm is to be installed on each level of the structure.

## II. MINIMUM STANDARDS FOR LIGHT, VENTILATION AND HEATING

- A. Required window area - Every habitable room, provided such rooms are adequately lighted, shall have at least one open air space. The minimum total window area, measured between stops, for every habitable room shall be as follows:
- 1/12 of the floor area if two or more separate windows exist, or;
  - 1/10 of the floor area if only one window exists;
  - A minimum of 10 square feet of window area is required in habitable rooms other than kitchens and baths;
  - A kitchen may pass without a window area, provided, there is a mechanical means of ventilation, which is maintained in working order.
  - Every dwelling unit shall have access directly to the outside. Every sleeping room shall have at least one (1) operable window or exterior door approved for emergency egress or rescue. The units shall be operable from the inside to provide a clear opening without the use of separate tools.
  - All egress windows from sleeping rooms shall have a minimum net clear opening of 5.7 square feet. The minimum net clear opening height dimension shall be twenty-four inches (24"). The minimum net clear opening width dimension shall be twenty inches (20"). Where windows are provided as a means of egress or rescue, they shall have a finished sill height not more than forty-four inches (44"). Pre-existing windows that do meet these requirements but met applicable code at the time the structure was built are exempt from this requirement.

Whenever the only window in a room is a skylight type window at the top of the room, the total window area of such skylight shall be equal to at least 15 percent of the total floor area of such room. Skylight type windows, if less than 15 percent of the total floor area, shall be increased to 15 percent of the total floor area unless another window is to be installed which will provide adequate light and ventilation.

- B. Adequate ventilation required - Every habitable room shall have at least one window or skylight which can easily be opened, or other such device as will adequately ventilate the room. The total open window area, in every habitable room, shall be equal to at least 50 percent of the minimum window area size of minimum skylight type window size as required above, except where there is supplied some other device affording adequate ventilation.
- C. Electric outlets and service required - Where there is suitable electricity available from supply lines that are not more than 300 feet away from a dwelling, all existing dwellings shall be supplied with electrical services.
- Every habitable room within such dwelling shall contain at minimum, two separate and remote wall type electric convenience outlets. Habitable rooms



over 120 square feet, shall contain, at a minimum, three separate and remote wall type electric convenience outlets. Temporary wiring or extension cords shall not be used as permanent wiring.

- Every habitable room shall have at least one ceiling or wall type electric light fixture, controlled by a wall switch, or a wall type grounded electric convenience outlet controlled by a remote switch.
- Every toilet room, bathroom, laundry, furnace room, and hallway (hallway where applicable) shall contain at least one supplied ceiling or wall type electric light fixture, controlled by a wall switch, and at least one wall type electric convenience outlet. Wall type convenience outlets used in bathrooms and kitchens shall be based on applicable code.
- Every kitchen shall be wired to meet the requirements of the N.E.C. at the time of original construction, based on the size and layout of each individual kitchen, unless the main electrical panel is to be replaced. At which time, 2007 N.E.C. standards are to be used throughout the structure.
- All heavy-duty appliances, i.e., window air conditioners, freezers, refrigerators, electric stove, washers, electric dryers, microwaves, etc., shall be supplied with their own proper outlet(s) on separate circuits, as applicable.
- A wall switch shall control all wall and or ceiling type lighting fixtures, except that porcelain type fixtures such as those used in attics may be controlled with a proper pull chain. All old pendant type lighting fixtures shall be removed and replaced with properly installed non-pendant type fixtures.
- All electric lighting fixtures installed on the exterior shall be of the type approved for exterior use.
- All broken and or missing switch plates and or receptacle plates shall be replaced.
- All outlets and fixtures shall be properly installed, shall be maintained in working condition, and shall be connected to the source of electric power in a proper manner and shall be in accordance with the electrical code of the city and or the N.E.C. at time of original construction, as applicable.
- All electrical outlets and fixtures shall be properly grounded. 2-wire, non-grounded systems are not permitted. All kitchens and bathrooms are to have GFCI protected electrical outlets installed, as well as any outlet that is within 6' of a water source, including all exterior electrical outlets.
- If a unit does not have a central air-conditioning system and central air will not be installed, at a minimum proper-grounded outlet shall be installed under one window or within two feet of the window in each habitable room to allow the occupants to install window air conditioning units.
- All electric panel boxes shall be properly labeled.

- The minimum electrical service for each dwelling shall be 100 amps, or as adjusted and approved in writing by the Chief Electrical Inspector of the City.

D. Heating facilities - All heating facilities shall be properly installed, be maintained in working condition and be capable of adequately heating all habitable rooms, bathrooms, and toilet rooms contained therein, or intended for use by the occupants thereof, to a temperature of at least 70 degrees F. (21 degrees C.) at a distance three feet above the floor when the outside temperature is at or below zero degrees F. Every supplied central heating system shall comply with all of the following requirements:

1. The central heating unit shall be safe and in good working condition.
2. Every heat duct, steam pipe, and hot water pipe shall be free of leaks and shall function so that an adequate amount of heat is delivered where intended.
3. Every seal between any of the section of a hot air furnace shall be airtight so noxious gases and fumes will not escape into the heat ducts.
4. If there is no existing flue liner, a double-walled metal asbestos liner shall be installed. The liner shall meet or exceed the requirements of the local building code and shall be installed according to same.
5. When required All fuel burning heating systems shall be inspected by a qualified furnace inspector to determine if the unit is safe, free from carbon monoxide leakage, and capable of supplying heat as required above.
6. Each dwelling and/or dwelling unit shall be supplied with its own thermostatically controlled heating system.
7. Any dwelling and/or dwelling unit having space heaters or floor furnaces as its only source of heat shall have such units removed and replaced with a properly sized central heating system.

E. Screens required - Every window opening to outdoor space, which is used or intended to be used for ventilation, shall be supplied with screens covering the entire window areas required for ventilation. The material used for all such screens shall be not less than 16 meshes per inch and shall be properly installed, maintained, and repaired to prevent the entrance of flies, mosquitoes or other insects. Half screens on windows may be allowed, provided, they are properly installed and are bug and insect tight.

### III. MINIMUM STANDARDS FOR MAINTENANCE

A. Maintenance of foundations, exterior walls, roofs, soffits and fascia – every foundation, exterior wall, roof, soffit, fascia and all component parts shall be weather tight, watertight, rodent proof, and insect-proof and shall be kept in a state of maintenance and repair.

1. All exterior surface material shall be protected from weather and the elements by lead-free paint or other protective coatings i.e., stain, in accordance with acceptable standards. The exception to painting shall be all types of exterior materials

acceptable to weathering without deterioration, i.e., siding. All siding material shall be kept in a state of maintenance and repair.

2. In units constructed on or before 1978, treatment of all applicable surfaces, (interior and exterior) will be in full compliance with the Lead Base Paint regulations, as found at 24CFR Part 35, including all future amendments as published by HUD.
  - B. Maintenance of interior walls, floors, ceilings, doors and windows – every interior partition, wall, floor, ceiling, door, window, and all component parts shall be kept in a state of maintenance and repair, and shall be maintained in such a manner so as to be capable of being kept in a clean and sanitary condition. All interior doors shall be capable of affording the privacy for which they were intended.
  - C. Rainwater drainage from roof - all rainwater shall be so drained and conveyed from every roof so as not to cause dampness/damage to walls, ceilings, or floors of any habitable rooms, bathroom, toilet room, laundry room, or any other type of room therein. If present, all rainwater draining devices such as gutters and downspouts shall be kept in a good state of maintenance and repair. Ground areas around buildings shall be sloped away from the foundation walls to eliminate low areas where standing water may collect.
  - D. Maintenance of windows and exterior doors - every front, rear, and side door shall be not less than three feet, zero inches in width and not less than six feet six inches in height, except where larger doors and doorways are required to accommodate handicapped access. In existing structures, if replacement to meet these requirements would be impossible or cost-prohibitive, said requirements may be waived, in writing. Every window and exterior door shall be substantially tight and rodent-proof, and be kept in a state of maintenance and repair. In addition, the following requirements shall be met.
    - a. All exterior doors to the outside shall be solid core and be equipped with adequate security locks. In no instance, shall double-keyed deadbolts or locks that require special knowledge be installed on an exterior exit door.
    - b. All windows located in sleeping rooms accessible from ground level without the aid of mechanical devices shall have a security device-lock. The lock cannot be of a keyed-type, or require any special knowledge to operate.
    - c. Every window sash shall be fully equipped with glass windowpanes, which are without cracks or holes, and all panes shall be secured with an adequate amount of putty. Said putty shall not be cracked, broken or missing.
    - d. Every window, other than a fixed window, shall be capable of being easily opened and shall be held in position by window hardware, not broom handles, sticks or other such items;
    - e. Every exterior and interior door, when closed, shall fit well within its frame;
    - f. Every exterior and interior door, door hinge, and door latch and or lock shall be maintained in good working condition;

- g. Every window, door and frame shall be constructed and maintained in such relation to the adjacent wall construction, so as to exclude rain, as completely as possible and to the maximum extent feasible substantially exclude wind from entering the dwelling or structure, i.e., it must have adequate weather-stripping.
- E. Maintenance of stairways and porches - every interior and exterior stairway, every porch and every appurtenance thereto shall be so constructed to be safe to use and capable of supporting the load that normal use may cause to be placed thereon; and, shall be kept in sound condition and in a state of maintenance and repair, including compliance with the Lead Based Paint Regulations, if applicable.
- F. Maintenance of supplied plumbing fixtures - every supplied plumbing fixture and water and waste pipe shall be properly installed in accordance with the plumbing code of the City and maintained in safe, sanitary working condition, free from leaks, defects and obstructions.
- G. Maintenance of bathroom, toilet rooms, kitchen and utility room floors – every bathroom, toilet room, kitchen and utility room floor surface shall be constructed and maintained to be substantially impervious to water and so as to permit such floor to be easily kept in a clean and sanitary condition.
- H. Safe and effective functioning of supplied facilities - every supplied facility, piece of equipments, or utility which is required under this section, shall be constructed or installed so it will function properly and shall be maintained in working condition.

**IV. MINIMUM SPACE, USE, AND LOCATION REQUIREMENTS**

- A. MINIMUM CEILING HEIGHT- habitable space shall have a ceiling height of not less than seven feet (7') except as otherwise permitted in this section. Kitchens, halls, bathrooms and toilet compartments may have a ceiling height of not less than seven feet (7') measured to the lowest projection from the ceiling. Where exposed beam ceiling members are spaced at less than forty-eight inches (48") on center, ceiling height shall be measured to the bottom of these members. Where exposed beam ceiling members are spaced at forty-eight inches (48") or more on center, ceiling height shall be measured to the bottom of the deck supported by these members provided that the bottom of the members is not less than seven feet (7') above the floor.

If any room in a building has a sloping ceiling, the prescribed ceiling height for the room is required in only one-half (1/2) the area thereof. No portion of the room measuring less than five feet (5') from the finished floor to the finished ceiling shall be included in any computation of the minimum area thereof. If any room has a furred ceiling, the prescribed ceiling height is required in two-thirds (2/3) the area thereof, but in no case shall the height of the furred ceiling be less than seven feet (7'). All rooms, except kitchens and/or kitchenettes and baths, shall have a minimum width of seven feet.

- B. Maintenance of sleeping, bath and toilet rooms - no dwelling or dwelling unit containing two or more sleeping rooms shall have such room arrangement that access to a bathroom or toilet room intended for use by the occupants can be had only by going through another sleeping room or bathroom or toilet room.

- C. Occupants to have access to sanitary facilities - every occupant of every dwelling unit shall have unrestricted access to a toilet, to a bath, and to a kitchen sink and lavatory basin located within that dwelling unit.
- D. Minimum storage and counter areas - each dwelling unit shall have at least one closet with a minimum of six square feet of floor area and a minimum height of 6' located within the dwelling unit. Dwelling units with two or more bedrooms shall have a storage floor area of at least four square feet per bedroom. This storage requirement does not necessarily have to be located in the bedrooms. All kitchens shall have a minimum enclosed storage area of eight square feet with a minimum vertical clearance of 12 inches and a horizontal width of at least 12 inches. Each kitchen shall have a minimum of four square feet of counter area.

#### **V. MAINTENANCE OF NON-DWELLING STRUCTURES, FENCES AND PREMISES**

- A. Maintenance of non-dwelling structures - every foundation, wall, roof, window, door, hatchway, and every other entryway of every non-dwelling structure shall also be so maintained as to prevent the structure from becoming a harborage for rodents, snakes, vermin, and insects, and shall be kept in a state of maintenance and repair.
- B. Protection of exterior wood surfaces - all exterior wood surfaces of all non-dwelling structures shall be properly protected from the elements and from decay and rot by lead-free paint or other approved protective coatings. If units are constructed on or before 1978, treatment of all applicable surfaces shall be in full compliance with the Lead Based Paint regulations as found at 24 CFR Part 35, including all future amendments as published by HUD.
- C. Maintenance of fences - every fence shall be kept in a state of maintenance and repair or shall be removed. Replacement of non-required fencing is optional. If a fence is to be removed and replaced installation shall be in conformance with all local requirements.
- D. Grading and drainage of premises - every premises shall be graded and maintained so as stagnant water cannot accumulate or stand around the perimeter of the premises, or within or around any building or structure located on the premises. Ground areas around buildings shall be sloped away from walls to eliminate low areas where standing water may collect.
- E. Maintenance of retaining walls, sidewalks, and driveways and patios - all retaining walls shall be kept in a state of maintenance and repair. All sidewalks, service walls driveways and patios shall be kept in a state of maintenance and repair, free from obstruction, defects, uneven joints, tripping hazards, etc.
- F. Maintenance of property - All areas and all parts of the premises upon which any dwelling or dwelling units are located, and all areas adjacent thereto and a part of the premises, shall be maintained and kept in a clean and sanitary condition. This shall include, but not be limited to, the cutting of grass-weeds; removal of dead trees and brushes, removal of abandoned and junked automobiles, automobile bodies, chassis and parts, trailer, removal of inoperable machines and appliances, lumber pile, and

furniture, boxes, crates and other debris, rubbish, junk and garbage.

- G. Water supply – connect to water main - every owner of a dwelling unit situated on property which abuts any street or alley in which a water main is laid, shall cause the water service system of his dwelling to be connected to such main.
- H. Abandoned wells and cisterns - every owner of a dwelling which contains an abandoned well or cistern on the premises shall close and fill them in a proper manner.