



BALTIMORE CITY HEALTH DEPARTMENT

LEAD HAZARD ABATEMENT
REGULATIONS

2009

Title 1.
General Provisions

§ 1-101. Definitions.

(a) *In general.* - In this regulation, the following words, terms and phrases, and their derivatives shall be construed and given their meaning as specified below.

(b) *Abate/abatement.* - means the elimination of exposure to lead hazards by the appropriate reduction of, removal of, or encapsulation of lead containing substances in conformance with this regulation.

(c) *Accessible surface.* - any protruding interior or exterior surface, such as an interior window sill that a child can mouth or chew.

(d) *Child/children.* - a person or persons under the age of six (6).

(e) *Commissioner.* - the Commissioner of the Baltimore City Health Department or his/her designee.

(f) *Department.* - the Baltimore City Health Department.

(g) *EBL child.* - child who has a blood lead level greater than or equal to 10 ug/dl, or higher.

(h) *Elevated blood lead level (EBL)* -excessive absorption of lead in the blood in concentrations equal to 10 ug/dl, or higher.

(i) *Environmental investigation.* - a targeted survey of an EBL child's present and/or past environment, conducted by the Commissioner or Department to determine the sources and conditions that cause or have caused lead exposure. It includes the administration of a questionnaire, environmental sampling and other measures.

(j) *Encapsulate or encapsulation.* - to cover surfaces with durable material and to seal or caulk seams with durable material so as to control and prevent exposure to lead hazards.

(k) *Friction surface.* - any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

(l) *Impact surface.* - any interior or exterior surface, such as surfaces on doors, subject to damage, repeated impact or contact.

(m) *Lead-based paint action levels.* - paint surfaces tested by XRF Analyzer which contains more than .07 mg/cm² lead or paint chip samples analyzed by Flame Atomic Absorption (FAA) method that contain more than 0.5% or 5000 ppm lead.

(n) *Lead hazard.* - any condition that causes exposure to lead from lead contaminated dust; bare lead contaminated soil; other environmental sources; or lead based paint that is deteriorated or intact lead-based paint present on accessible surfaces, friction surfaces or impact surfaces that would result in adverse human health effects.

(o) *Lead dust.* - dust containing lead generated by the deterioration of lead-based paint or by other environmental factors.

(p) *Lead dust clearance test.* - a lead dust test conducted by the Department to confirm that levels of lead dust fall within the range of levels permitted by federal laws and regulations as those laws and regulations may be revised in the future.

(q) *Occupant.* - any person who uses or who has the right of possession of all or any part of a property.

(r) *Operator.* - any person who has charge, care, or control of all or any part of a property.

(s) *Owner.* - any person who has a legal or equitable interest in a property, is recorded in the land records as holding title to the property, or otherwise has control of the property, with or without accompanying possession of a property, including: a guardian of the person or estate or an owner, a trustee, including a trustee in bankruptcy of an owner, or the personal representative of the estate of an owner. In the case of a toy, appliance, item of furniture or other household item which is the property of a tenant, the term "owner" shall mean tenant for the sole purpose of the abatement of a lead-based paint violation existing thereon.

(t) *Person.* - any individual, sole proprietorship, corporation, limited liability company, firm, partnership, association, organization, joint venture, or other entity or group acting as a unit, executor, administrator, trustee, receiver, guardian, or other representative appointed by law.

(u) *Person responsible for compliance.* - an owner and/or operator of a property.

(v) *Relocation expenses* – all expenses necessitated by the relocation of a tenant's household to lead-safe housing, including moving and hauling expenses, the HEPA-vacuuming of all upholstered furniture, payment of a security deposit for the lead-safe housing, and installation and connection of utilities and appliances.

(w) *Secondary residence.* - a caretaker's home, daycare center or other dwelling, institution or property frequented by an EBL child.

(x) *Ug.* - standard abbreviation for micrograms.

(y) *XRF analyzer.* - a portable instrument that determines lead concentration using the principles of X-ray fluorescence.

§ 1-102. Undefined terms.

If a term is not defined in this regulation and is defined in the Building, Fire and Related Codes of Baltimore City, the term has the meaning given it therein.

§ 1-103. Successors in interest.

Unless otherwise expressly provided, any obligation imposed on any person automatically is binding on his assigns, successors, heirs, legatees, and personal representatives.

**Title 2
Investigations**

§ 2-101. Environmental Investigation

(a) When a child is identified as having an elevated blood lead (EBL) level, the Commissioner shall request the Department to conduct an environmental investigation. The environmental investigation shall be of the child's current residence and may include any secondary residence; any residence in which the child was living at the time of the blood test which identified an EBL level and/or any residence the child resided in the past year prior to any blood test which identified an EBL level.

(b) If the child's residence is part of a multi family dwelling, then all units, common areas and the premises of the multi family dwelling may be inspected for lead hazards.

§ 2-102. Determination that lead hazard exists.

(a) A determination that lead hazards exist in a property shall be based upon one or more of the following:

(1) readings of the X-RF analyzer taken during the Department environmental inspection which indicate a lead content greater than 0.7 mg/cm²;

(2) Analysis of paint samples taken during the Department environmental inspection indicating more than 0.5% lead;

(3) Analysis of dust samples taken during the Department environmental inspection indicating levels higher than acceptable federally established laws and regulations as those laws and regulations may be revised in the future.

**Title 3
Violation Notice**

§ 3-101. Issuance of a “Violation Notice and Order to Abate Lead Hazards.”

(a) If the Commissioner determines the existence of lead hazards, the Commissioner shall find the person responsible for compliance to be in violation of the law and this regulation and the Commissioner shall issue a "Violation Notice & Order to Abate Lead Hazards" to that person notifying that person of the existence of lead hazards and ordering the abatement of said hazards within a time period not to exceed 30 days, unless otherwise ordered by the Commissioner. Such lead hazards shall be abated in conformance with this regulation.

(b) Every owner and operator of any property is obligated, jointly and severally with all other owners and operators of that property to comply with all notices and orders issued by the Commissioner with regard to the abatement of lead hazards from the property.

(c) Violation notices must be in the form provided by Section 123 of the Baltimore City Building Code, and Title 5, Subtitle 2 of the Baltimore City Health Code

(d) Violation notices must be served on the owner or operator, or other person responsible for compliance as provided by Section 123 of the Baltimore City Building Code, Building Fire and Related Codes of Baltimore City.

**Title 4
Abatement Work Procedures**

§ 4-101. Standards, methods and requirements for abatement.

(a) The minimum mandatory standards, methods and requirements for every abatement of lead hazards, whether or not that abatement is being carried out in response to a notice issued by the Commissioner, an agency of government, a court, or voluntarily are as follows:

(1) Posting of dwelling or secondary residence under abatement.

(i) A person engaged in the abatement of a lead-based paint violation shall post 20-inch by 14-inch caution signs immediately inside the entrances and exits of the property under abatement. Such signs shall be conspicuously placed and shall inform persons entering or exiting the property that an abatement of a lead hazard violation will be or is being performed.

(ii) Except in emergency situations, signs shall be posted at least three days in advance of commencing the abatement project.

(iii) Such signs shall remain posted until the Department issues a written notice in conformance with Section 7-102 below to the person responsible for compliance.

(2) If the surface requiring abatement is subject to a violation or is found to be in violation of the Baltimore City Building, Fire, and Related Codes, and that code violation is likely to cause deterioration of surfaces, the code violation must be corrected prior to the abatement of the lead hazard violation unless the Commissioner determines that the correction of the violation is more appropriate after the abatement process. Examples of such code violations include but are not limited to: plumbing leaks which affect painted or plastered surfaces and structural defects which cause plaster to crack or break.

(3) Work shall be done in progression through the dwelling or secondary residence beginning with the area farthest from the entrance. In a multi-story dwelling or secondary residence, work shall begin on the uppermost floor in the area farthest from the stairway.

(4) Furnishings, including wall-to-wall carpeting, must be removed from each room or area as it is prepared for abatement. Those furnishings that cannot be moved (e.g., built-in furniture) must be covered with plastic at least 6 mils. thick and sealed with tape. Furnishings should be thoroughly cleaned to remove lead dust before returning them to a room that has undergone abatement.

(5) Each area that is to be abated shall be sealed with plastic at least 6 mils. thick and taped prior to abatement in order to contain the lead dust and abatement residue.

(6) All cabinets, closets and drawers must be sealed with tape so as to prevent contamination by lead dust and/or lead particles.

(7) In the case of a rental property, the tenant is responsible for the removal of all ingestible items from any room or area under abatement prior to the commencement of the abatement.

(8) The entire floor of the work area shall be covered with plastic at least 6 mils. thick, and all seams and edges shall be secured with tape or staples.

§ 4-102. Prohibited Methods of Abatement

(a) Persons performing abatement of lead-containing substances may not use the following methods: open flame burning; dry sanding - except as allowed in Section 4-104 below; open abrasive blasting- except as allowed in Section 4-104 below; uncontained hydro-blasting; methylene chloride for interior use except that methylene chloride may be used in interior work areas for localized touch-up; dry scraping; heat gun operating at or above 1,100°F.

(b) A person performing abatement containing-containing substances shall only use the following methods: replacement with a part free of lead containing-containing substances; removal of lead based paint using an approved removal method; reversal of component parts; or encapsulation of the surface. Not all of these options are permitted or suitable for all surfaces. Please see specific surface descriptions below for limitations as to allowable abatement method.

§ 4-103. Windows.

(a) Acceptable abatement methods are replacement and/or removal of lead-based paint.

(b) Windows must be completely abated, including inside, outside, and sides of sashes; window frames must be abated to the outside edge of the frame, including slides, sash guides and window wells.

§ 4-104. Walls/ceilings.

(a) Unless replaced or encapsulated, walls or ceilings may only be abated by using the following techniques: heat gun operating below 1,100°F; non-flammable chemical strippers which do not contain methylene chloride, except that chemical strippers containing methylene chloride may be used for localized touch-up; sander equipped with HEP A vacuum; vacuum-blasting in exterior work areas only; or contained hydro-blasting in exterior work areas only; wet-scraping of loose material if scraping is followed by encapsulation.

(b) If abating walls and ceilings by encapsulation, only the following materials may be used: gypsum board; fiberglass mats; canvas backed vinyl wall coverings; Formica; tile; paneling; or other durable material that does not readily tear, chip, or peel.

§ 4-105. Woodwork and wood trim.

(a) In addition to removal, replacement, or encapsulation, a woodwork surface may be abated by reversal of its component parts so long as no lead-containing surface remains exposed at the completion of the process, and all seams are caulked and sealed.

(b) A woodwork surface may be abated by encapsulation using only the following materials: plastic; metal; or wood.

§ 4-106. Floors.

(a) Floors coated with lead-based paint must be encapsulated using tile, vinyl flooring, wood, or stone.

§ 4-107. Soil.

- (a) If the soil is tested and found to contain lead the owner shall:
- (i) enclose soil with cement or grass, or sod to eliminate bare soil exposure to children, or:
 - (ii) remove 6 inches of topsoil from the contaminated area, place water –permeable textile fabric over the exposed subsurface, and cover fabric with 8 inches of clean soil and ground cover.
 - (iii) Keep children & animals out of contaminated soil. Do not grow vegetables in contaminated soil.

§ 4-108. Clean-up.

(a) At the end of each workday, rooms or areas in which abatement is incomplete shall be thoroughly cleaned in conformance with this subsection, or properly sealed from the remainder of the dwelling or secondary residence.

(b) Before unsealing each room or area, it should be thoroughly cleaned, surfaces re-coated, and then cleaned again. Once a room or area has received clean-up, it should not be reentered by workmen.

(c) At a minimum, the first clean-up should consist of a thorough High Efficiency Particle Accumulator (HEPA) vacuuming of all surfaces, including woodwork and wood trim, walls, ceilings, windows and window wells, and floors, followed by a high phosphate wash and a second HEPA vacuuming. After repainting or coating walls, woodwork and wood trim, ceilings, windows, and floors the clean-up process should be repeated.

(d) In the absence of a HEPA vacuum, two thorough wet washings with a high phosphate wash, with frequent changes of water, each followed by a wet vacuuming while surfaces are still wet followed by two additional such treatments after repainting or coating will be considered satisfactory.

(e) Use of an ordinary household vacuum for clean-up of abatement debris is prohibited. Sweeping should be limited to preliminary cleanings only.

(f) All sponges, rags, mop heads and other materials used in clean-up must be properly disposed of along with other abatement debris.

**Title 5
Safety**

§ 5-101. Presence of persons and pets during abatement.

(a) The Commissioner shall inform the occupants of the property of the health hazards to persons and pets associated with the abatement procedures.

(b) Persons and pets may not enter or remain in the work area at any time during the abatement process or until such time as the Commissioner determines that abatement has been completed in a satisfactory manner unless that person is: the person responsible for compliance; a federal, State or City official; an inspector or contractor or their employee hired for the abatement project.

(c) In the case of rental properties, the owner shall immediately secure a temporary lead-safe residence for the tenants and pay all relocation expenses for the tenants as directed by the Department Sanitarian assigned to the Property. These persons shall not return to the residence until such time as the Department determines that abatement has been completed.

(d) Under State and City law, owners may not eject, lock out, raise the rent, or decrease services to tenants in response to being issued a "DEPARTMENT Violation Notice and Order to Abate," a "Notice of Elevated Blood Lead Level," or a "Notice of Defect. "

§ 5-102. Safety of workers.

Persons carrying out abatement activities must comply with all applicable federal, state, and City laws and/or regulations related to safety in the workplace.

§ 5-103. Disposal of abatement waste.

(a) Disposal of waste generated in the course of the abatement process shall be in compliance with Hazardous Waste Small Quantity Generators regulations as required by the Code of Maryland Regulations (COMAR). Lead waste subject to COMAR shall be removed from the site not later than seven days after completing the abatement. Lead waste not subject to COMAR shall be removed from the site not later than twenty-four hours after completing the abatement.

(b) Lead abatement waste shall be transported and disposed of in a manner to prevent lead from becoming airborne.

(c) If disposal of lead waste is within the State of Maryland, disposal facilities authorized for that purpose shall be used.

(d) In no event shall such waste be disposed of through regular residential or commercial trash collection.

§ 5-104. Inspection by the Department during the abatement process.

The Commissioner may inspect any dwelling or secondary residence at any time during the abatement to determine compliance with abatement standards.

§ 5-105. Stop work order.

(a) If the Health Commissioner finds any work involving potential lead hazards being performed in a manner contrary to the provisions of State or City law or regulation, or in a dangerous or unsafe manner, the Commissioner will issue a notice of violation/stop work order.

(b) The order shall be in writing, describe the nature of the dangerous or unsafe condition, the law or regulation being violated, the manner of correction, that the correction must be made immediately, and the conditions under which work can be resumed.

(c) The order shall be sent by first class and certified mail to the owner of the property. A copy of the stop work order must be posted and remain posted on the property until the dangerous and unsafe conditions are eliminated and any required permits obtained.

(d) Upon posting of the order, all work shall immediately cease until there has been compliance with the terms of the order.

(e) No person may remove, deface damage or change any notice, poster, or sign placed under this section on any land, structure or other object.

**Title 6
Clearance Inspections**

§ 6-101. Clearance Inspection.

(a) Upon request from the person responsible for compliance to the Department, and within a reasonable timeframe thereafter, the Commissioner shall perform a clearance inspection to determine if the abatement has been completed in conformance with this regulation. This determination shall be made based on a visual inspection and one or more of the following:

- (i) reading of the X-RF analyzer;
- (ii) results of a lead dust clearance test when three samples are taken from each room;
- (iii) analysis of paint samples.

(b) Lead levels detected through the use of a lead dust clearance test shall fall within the range of levels permitted by federal laws and regulations currently in effect and as those laws and regulations may be revised in the future in order for the Department to find that the abatement has been completed in conformance with this regulation.

(c) In the case of rental property, no clearance inspection may be conducted until such time as the owner of that property has registered, if so required, with the Maryland Department of the Environment ("MDE") Lead Poisoning Prevention Program and provided the Department with verification of such registration.

(d) If during the clearance inspection the visual inspection of the property by the Department discloses that the abatement was not carried out in conformance with this regulation, the Department is not required to conduct further analysis under Section 7-101 and the clearance inspection shall be halted pending further abatement action as the Department may direct.

§ 6-102. Written statement abatement completed successfully.

(a) If the clearance inspection is concluded successfully and the Department has confirmed that results from any tests conducted pursuant to the clearance inspection are within the limits established by federal laws and regulations as those laws and regulations may be revised in the future, the abatement will be determined to have been conducted in conformance with this regulation.

(b) The Commissioner shall, without delay, issue a written statement to the owner that the lead hazard violation notice has been abated.

(c) No abatement shall be deemed completed until this written statement is issued.

(d) Such statement shall not preclude the Commissioner from issuing future notices of lead hazard violations against the same property. The owner and/or operator have a continuing obligation to maintain the property in accordance with this regulation.

Title 7
Exceptions to Standard Abatement Procedures

§ 7-101. Alternative abatement.

The Commissioner may on a case-by-case basis, approve an alternative procedure for abatement of a lead hazard violation, provided that the owner submits a written description of the alternative procedure to the Commissioner and demonstrates to the satisfaction of the Commissioner that compliance with this regulation is not practical or feasible, or that the proposed alternative procedure provides the equivalent control and removal of lead hazards. The Commissioner, following his/her review, may approve an alternative procedure if he/she determines that it will minimize the emissions of lead into the environment.

§ 7-102. Requests for extensions.

(a) Abatement is expected to be completed within 30 days of notice to the person responsible for abatement of the lead hazard violation. Any request for an extension of this deadline must be submitted in writing to the Department prior to the expiration of the 30 days. The request should fully demonstrate that compliance within the time frame previously allotted is not practical or feasible, and will not cause undue harm.

(b) The Commissioner, following his/her review, may grant an extension if he/she determines that additional time is appropriate under the particulars of the case. The time period of the extension shall be within the discretion of the Commissioner.

(c) In the case of rental property, the granting of an extension of time in which to complete the abatement on a Baltimore City Health Department "Violation Notice and Order to Abate Lead Hazards" in no way diminishes or satisfies the obligation of the person responsible for compliance to complete modified lead risk reduction treatments described in §6-819(a) of file Environment Article of the Annotated Code of Maryland which have been triggered by the receipt of a "Notice of EBL" or a "Notice of Defect."

**Title 8
Penalties and Fines**

§ 8-101. Penalties.

Violations of this regulation are subject to civil and criminal penalties as provided in the Health Code and the Building, Fire, and Related Codes of Baltimore City.

§ 8-102. Abatement by Commissioner.

If the abatement is not conducted within the time specified in the notice, or at the end of any extension period that may have been granted, the Commissioner may proceed to remove or abate the condition at the expense of the person responsible for compliance.

**Title 10
Liability and Severability**

§ 10-101. Liability of the Department.

Any liability claim related to the Commissioner's enforcement of this regulation, including a finding of satisfactory abatement, is subject to the Local Tort Claims Act.

§ 10-102. Severability.

The provisions of this regulation are severable. If any word, phrase clause, sentence, paragraph, section or part in or of this regulation or the application thereof to any person, circumstance or thing is declared invalid for any reason whatsoever, the remaining provisions and the application of such provisions to other persons, circumstances or things shall not be affected thereby but shall remain in full force and effect, the Commissioner hereby declaring that he would have ordained the remaining provisions of this regulation without the word, phrase, clause, sentence, paragraph, section or part, or the application thereof, so held invalid.

Approved:



Olivia D. Farrow, Esq., R.S.
Interim Commissioner
Baltimore City Health Department

Date adopted: June 1, 2009
Date effective: June 15, 2009