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1.01: Authority, Purpose and Scope

- (1) $\underline{Authority}$. These rules and regulations are promulgated in accordance with and under the authority of M. $\underline{G.L.c.111}$, sections 31 and 122 and Chapter 656 of the Acts of 1965.
- (2) Purpose. These rules and regulations shall establish and/or constitute:
 - (a) Reasonable requirements necessary to protect the health and safety of persons engaged in the removal, enclosure, encapsulation or disturbance of asbestos or asbestos containing material and reasonable requirements for the prevention of occupational disease.
 - (b) Reasonable requirements necessary to protect the health and safety of the public in private and public buildings and outdoors while persons are engaged in the removal, enclosure, encapsulation or disturbance of asbestos or asbestos containing material.
 - (c) Reserved.
 - (d) Reserved.
 - (e) Reserved.
 - (f) Reserved.
 - (g) Reserved.
 - (h) Standards and conditions concerning the performance of asbestos associated work.
 - (i) Reserved.
 - (j) Reserved.
 - (k) Reserved.

- Uniform provisions for implementing the asbestos provisions of Title II of the State Sanitary Code, 105 CMR 410.353.
- (m) Standards for enforcement and implementation of these regulations.
- (3) Scope. These regulations are applicable in Boston to all asbestos containing materials and to all work including construction, demolition, alteration, repair, and maintenance involving any facility or location where such work involves the use, handling or disposal of asbestos, asbestos containing material or asbestos containing waste.

1.02: Definitions

For the purpose of these asbestos regulations, the following definitions shall apply. Terms not defined herein shall be understood to have their usual and ordinary meaning unless a different meaning is plainly required by the context or by asbestos procedures and practices as applied and accepted by the asbestos abatement industry and its other regulating agencies.

<u>Abatement project designer</u> - A person who determines how asbestos abatement work should be conducted and who prepares for purposes of an abatement project, plans, design, procedures, work scope or other substantive direction or criteria.

<u>Adequately Wetted</u> - Means sufficiently mixed or coated with water or an aqueous solution to prevent dust emissions.

AHERA - The Asbestos Hazard Emergency Response Act.

<u>Approved training provider</u> - Any entity which has been duly certified pursuant to 453 CMR 6.09 to provide training required by 453 CMR 6.00.

<u>Asbestos</u> - the asbestiform varieties of chrysotile, crocidolite, cummintonite-grunerite (amosite), anthophyllite, actinolite and tremolite.

<u>Asbestos abatement (project) or work</u> - Any activity which has as its principal purpose the removal, enclosure or encapsulation of asbestos or asbestos containing material, including, but not limited to, activity in connection with the renovation, repair or demolition of a facility and the replacement of furnaces or boilers that are covered or coated with asbestos containing material.

<u>Asbestos abatement project monitor</u> - A person who functions as the on-site representative of the facility owner or other persons by overseeing the activities of the asbestos contractor.

<u>Asbestos abatement worker</u> - A person not acting as a foreperson or supervisor who performs asbestos abatement work as an employee, or who performs such work under the direction and control of another, with or without compensation.

<u>Asbestos analytical services</u> - Asbestos analytical services include, but are not limited to, the counting or enumeration of asbestos fibers in the air (air monitoring analysis) or to the identification and quantification of asbestos (bulk sample analysis).

<u>Asbestos associated project or work</u> - Any work activity which does not have the removal, enclosure or encapsulation of asbestos or asbestos containing material as its principal purpose but which may disturb or cause worker exposure to asbestos. Such activity will include but not be limited to: general building maintenance, electrical and low voltage wiring, plumbing, carpentry, masonry, HVAC and heating service.

Asbestos associated project worker - Any worker engaged in an asbestos associated project or work.

<u>Asbestos containing material</u> - Any material containing more than one (1) percent asbestos, including, but not limited to, thermal system insulation, fireproofing, asbestos cement (transite), and vinyl or asphalt asbestos flooring.

<u>Asbestos contractor</u> - Any person, firm corporation or other entity who has a valid license issued by the Commonwealth for the purpose of entering into or engaging in asbestos work.

<u>Asbestos inspector</u> - Any person who identifies, assesses the condition of, or collects pre-abatement air samples or bulk samples of asbestos containing materials.

Asbestos surface - Any surface which is covered by, coated with or which consists of asbestos containing material.

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Asbestos work - Removal, enclosure or encapsulation of asbestos or asbestos containing materials in any facility.

<u>Board of Health and Hospitals</u> - The City of Boston Board of Health and Hospitals established as the board of health for the City of Boston by Chapter 656 of the Acts of 1965.

<u>Certification</u> - A certificate issued under the provisions of the 453 CMR 6.00 authorizing an individual or entity to enter into or to be come engaged in asbestos work in the Commonwealth of Massachusetts pursuant to the limitations of each discipline.

<u>Clearance air monitoring</u> - Air monitoring conducted at the conclusion of an asbestos abatement activity which is used in combination with visual inspections to assess adequacy of cleanup and project completion.

<u>Commissioner</u> - The Commissioner of the City of Boston Department of Health and Hospitals or the Commissioner's designee.

<u>Consultants</u> - Persons engage in asbestos abatement in the capacity of advising, directing and assessing asbestos abatement and related functions. Such persons shall include asbestos inspectors, management planners, abatement project designers, and asbestos abatement project monitors, as defined herein.

Containment - As used in M.G.L.c. 149, s.6B, and in accordance with the use of terms in the asbestos abatement industry, the word "containment" shall mean "enclosure", as defined herein.

<u>Critical barrier</u> - A solid, asbestos-impermeable partition erected so as to constitute a work area closure' the outer perimeter of an asbestos work area, usually erected across corridors or other open spaces to complete a containment.

<u>Defective Asbestos Containing Material</u> - Any asbestos containing material, including its enclosures or coverings, with structural or water damage, holes, cracks, tears, looseness, open ends or seams, or other conditions which may allow the release of asbestos dust or any powdered, crumbled or pulverized asbestos material.

<u>Demolition</u> - The wrecking or removal of any facility or portion thereof together with any related handling operations.

<u>DEP</u> - The Massachusetts Department of Environmental Protection.

Department - The City of Boston Department of Health and Hospitals.

<u>Department Asbestos Abatement Notice</u> - Notice of asbestos abatement projects provided to the Department in accordance with Section 1.12(2)(c).

<u>Department Asbestos Abatement Permit</u> - A permit to engage in asbestos abatement issued by the Department in accordance with Section 1.12(1).

<u>Department Asbestos Abatement Plan</u> - A site specific asbestos abatement project plan application approved by the Department in accordance with Section 1.51(3)(a-e).

DHH - The City of Boston Department of Health and Hospitals.

DLI - The Massachusetts Department of Labor and Industries.

Emergency Asbestos Abatement Project - An asbestos abatement project resulting from an unforeseeable, sudden and unplanned event. An emergency asbestos abatement project includes abatement operations required by non-routine equipment failures. An emergency asbestos project is always necessary for the immediate protection or preservation of life or property, or to protect or preserve life or property from imminent harm, damage or deterioration, as accepted by the Commissioner.

<u>Encapsulation</u> - The application of a coating or liquid sealant to asbestos containing material to reduce the tendency of the material to release fibers.

Enclosure - The covering or wrapping of friable asbestos containing material in, under, or behind air-tight barriers.

<u>Enforcement Action</u> - The issuing of notices of non-compliance and health hazards; cease and desist orders; abatement orders; emergency orders; and the filing and processing of criminal or civil litigation in courts of competent jurisdiction on behalf of the Board of Health and Hospitals and Commissioner.

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<u>Entity</u> - Any partnership, firm, association, corporation, sole proprietorship or any other business concern, state or local government agency or institution or political subdivisions or authorities thereof, or any religious, social or union organization, whether operated for profit or otherwise, owning property or carrying on an activity regulated herein.

EPA - United States Environmental Protection Agency.

<u>Facility</u> - Any property, private or public building or structure including but not limited to those used for institutional, residential (including single family homes), commercial or industrial purposes and vessels while ashore or in drydock.

<u>Facility Owner</u> - Any person or entity, alone or severally with others, having legal title, care of, charge, or control of property and/or buildings, parcel of land, vacant or otherwise, in any capacity including but not limited to agent, executor, executrix, administrator, administratrix, trustee or guardian of the estate, mortgagee in possession; or agent, trustee, or other person appointed by the courts; or any officer or trustee of the association of unit owners of a condominium. Each such person is bound to comply with the provisions of these minimum standards as if he were the owner. For the purposes of publicly owned property only, the owner shall be defined as the chief executive officer of the agency which owns, leases, or controls the use of the property.

<u>Foreperson</u> - The individual responsible for the performance of workers at asbestos abatement projects. See Supervisor.

<u>Friable</u> - A term describing the physical characteristics or state of asbestos containing material which enables it to be crumbled, crushed, pulverized or reduced to a powder by hand pressure. The term friable also applies to non-friable asbestos materials which have been or may be rendered friable by deterioration, demolition or renovation, or waste processing operations. The characteristic of friability shall apply to the asbestos material and is not influenced or affected by coverings, coatings or other means of separating asbestos materials by hand

Glove bag - A manufactured plastic bag type of enclosure with built-in gloves, which is placed with an air-tight seal around asbestos pipe lagging or asbestos duct covering and which permits asbestos material contained by the bag to be removed without releasing asbestos fibers to the atmosphere.

<u>Hazard/risk assessment</u> - An opinion stated by a person certified to perform asbestos inspections describing the condition of asbestos containing materials in facilities and the materials' ability to release asbestos fibers; the potential for disturbance of the material; the potential for human or environmental exposure to the material, and/or appropriate response actions.

<u>H.E.P.A.</u> (filtration) - High efficiency particulate air filtration capable of filtering 0.3 micron particles with 99.97% efficiency.

<u>Inspection (Private)</u> - The activity of a certified person to visually identify the locations of asbestos materials; obtain samples; and create records of such activity.

<u>Inspection (Code Enforcement)</u> - The activity of a Department Health Inspector to visually identify the locations of asbestos materials; obtain samples; and create records of such activity, issue notices of noncompliance; issue cease and desist orders; issue emergency orders; issue abatement orders; and initiate enforcement actions as an agent of the Board of Health and Hospitals and Commissioner.

<u>License</u> - A document issued by the Massachusetts Department of Labor and Industries authorizing an asbestos abatement entity (asbestos contractor) to engage in the business of asbestos abatement (projects) in Massachusetts.

<u>Management planner</u> - A person who uses data gathered by inspectors to assess asbestos hazards, and by doing so determines appropriate response actions and develops implementation plans.

Notice of Non-compliance or Health Hazard - A legal notice from the Commissioner served on a facility owner, asbestos abatement contractor, or other persons providing notice that they are in non-compliance with laws and regulations pertaining to asbestos and/or responsible for health hazards.

Occupied Facility - Any facility to which the public or any person other than the asbestos abatement contractor has access, including, but not limited to schools, public and private office buildings, places of public assembly, and private and public residences.

OEH - The Office of Environmental Health of the City of Boston Department of Health and Hospitals.

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Operation and maintenance (O & M) plan - A site specific plan consisting of policies and procedures describing specific response actions applicable to the cleaning up of asbestos fibers previously released, the prevention of further release by minimizing disturbance or damage to asbestos containing material and the provision for long term surveillance of the facility with regard to renovation, maintenance, cleaning and general operations.

Orders, Cease and Desist - Orders issued by the Commissioner closing any site where the Commissioner determines that such action is necessary to stop violations of these regulations that may be creating imminent hazards threatening the health and safety of the public. Cease and desist orders shall remain in full force until the Commissioner determines that such orders can be rescinded.

<u>Orders, Abatement</u> - A legal notice from the Commissioner served on a facility owner, asbestos abatement contractor, or other persons providing notice that they must correct conditions at a facility creating non-compliance with asbestos laws and regulations and health hazards.

Orders, Emergency - A Notice of Non-compliance and/or Abatement Order from the Commissioner served on a facility owner, asbestos abatement contractor, or other persons whenever an emergency exists in which the interest of protecting the public health requires that ordinary procedures be dispensed with. The Commissioner, acting in accordance with the provisions of M.G.L.c. 111, section 30, may, without notice or hearing, issue an order reciting the existence of the emergency and requiring that such action be taken as the Commissioner deems necessary to meet the emergency.

<u>Orders to Vacate</u> - Orders from the Commissioner made at the time of inspection or anytime thereafter, served on a facility owner, asbestos abatement contractor, or other persons that a facility or portion thereof upon a Department finding that said facility is unfit for human occupation, must be vacated and secured pending hazard abatement under the provisions of a Commissioner approved abatement plan.

OSHA - The United States Occupational Safety and Health Administration.

<u>Personal exposure monitoring</u> - Air samples collected from the breathing zone of a person performing asbestos work which are analyzed according to standard protocols for the purpose of determining that person's level of exposure to airborne asbestos fibers.

<u>Plans, Management</u> - Site specific plans, including operation and maintenance plans, which detail specific response actions as may be appropriate for the abatement of immediate and long term asbestos hazards.

 $\underline{\underline{Prevention\ Measure}} \ - \ Steps\ taken\ to\ reduce\ or\ eliminate\ asbestos\ fiber\ release\ to\ the\ environment.$

<u>Private Residence</u> - Any facility used exclusively for residential purposes containing three (3) or less living units.

<u>Public Residence</u> - Any facility used exclusively for residential purposes containing greater than three (3) living units

Renovation - Altering one or more components of a facility in any way.

Repair - The durable restoration of damaged asbestos containing material using methods approved by the Commissioner. The sealing, patching, enclosing or encapsulating of damaged asbestos surfaces to prevent fiber release. A request for Commissioner approval of repair methods shall be made on the OEH asbestos abatement permit application.

<u>Response Action</u> - Steps or actions taken to protect persons and the environment from asbestos exposure or contamination including but not limited to facility surveillance, sampling, assessment, management plans and abatement design and implementation.

<u>Responsible Person(s)</u> - Person (s) having ownership or management control over a facility, or persons whose actions or omissions resulted in non-compliance with asbestos laws and regulations or the creation of threats to the public health and safety. In the case of a corporation, the responsible person (s) shall be officers of the corporation and other managing agent of such corporation, in the case of a sole proprietorship or a partnership, the responsible person (s) shall be the owners or partners and any other managing agent of such sole proprietorship or partnership.

<u>Sampling</u> - The process of obtaining representative portions of materials, suspected of containing asbestos including the taking of bulk portions of materials for analysis to determine composition, and the collection of air for the purposes of measuring asbestos content.

Spot repair - Any removal, enclosure or encapsulation of asbestos or material containing asbestos, where such activity may involve or disturb less than three (3) linear feet of asbestos surface on pipes or ducts, or less than three (3) square feet of asbestos surface on structures other than pipes or ducts.

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State - Commonwealth of Massachusetts.

<u>Supervisor</u> - An individual, or agent of an asbestos abatement entity having managerial or supervisory authority over asbestos abatement workers or a foreperson with responsibility for the completion of asbestos abatement projects or portions thereof. This position includes analogous job categories which may be contained in collective bargaining agreements.

Surfactant - A chemical wetting agent added to water to improve penetration.

<u>Training course</u> - A curriculum of instruction given pursuant to requirements established by the Commissioner of the Massachusetts Department of Labor and Industries for an asbestos discipline which requires training, including but not limited to the combination of lectures, hands-on training, printed materials, audio/visual materials, demonstrations and other instruction required by 453 CMR 6.00.

<u>Visible debris</u> - Any visually detectable particulate residue, such as dust, dirt or other extraneous material, which may or may not contain asbestos.

<u>Work area</u> - The area or location where asbestos abatement or asbestos associated work is being performed, or such other areas of a facility which the Commissioner determines may be hazardous to the health and safety of workers as a result of such asbestos work.

Work practices - The minimum standards, procedures, or actions taken or used for removal, enclosure or encapsulation of asbestos, or for renovation, demolition, maintenance or repair of facilities containing asbestos. This term also includes the minimum standards, procedures or actions taken or used by persons engaged in surveys, sampling, analysis, risk assessment or other activity relating to asbestos abatement.

1.03: General Requirements

(1) Licensure.

- (a) <u>Licensure Requirement</u>. No person shall engage in or work at the business of asbestos abatement where such work involves or disturbs more than three linear feet of asbestos surface on pipes or ducts or more than three square feet of asbestos surface on structures other than pipes or ducts unless such person, firm corporation or other entity has been duly licensed by the Massachusetts Department of Labor and Industries in accordance with 453 CMR 6.04.
- (b) Exception. Notwithstanding Section 1.03(1)(a) above, persons, firms, corporations or other entities who perform asbestos abatement work at their own property or usual place of business using their own regular employees, need not be licensed, provided such asbestos abatement work is performed and supervised by persons certified pursuant to 453 CMR 6.00 and so long as they adhere to these regulations and other applicable laws and regulations.

(2) Certification.

- (a) Persons Requiring Certification. No person shall engage in or perform any work in connection with asbestos abatement unless such person has been duly certified in the appropriate discipline in accordance with 453 CMR 6.00.
- (b) <u>Asbestos Analytical Services</u>. No person, firm corporation or other entity shall provide asbestos analytical services as defined in 453 CMR 6.02 unless such person, firm, corporation or other entity has been certified pursuant to 453 CMR 6.08.
- (c) <u>Training Provider</u>. No entity shall provide training courses required by 453 CMR 6.00 unless such entity has been certified as an approved training provider for such courses pursuant to 453 CMR 6.09

(3) Requirements for Asbestos Associated Projects.

(a) All work which does not have asbestos abatement as its principal purpose but which may result in the disturbance of more than three linear feet of asbestos surface on pipes or ducts or more than three square feet of asbestos surface on structures other than pipes or ducts must be carried out as an asbestos abatement project by persons certified pursuant to 453 CMR 6.03(2)(a) and in conformance with the permit requirements of Section 1.12 of these regulations, the work practice requirements of 453 CMR 6.14 and these regulations, and the requirements of all other applicable sections of 453 CMR 6.00 and these regulations.

- (b) All work which does not have asbestos abatement as its principal purpose but which may result in the disturbance of less than three linear feet of asbestos surface on pipes or ducts, or less than three square feet of asbestos surface on structures other than pipes or ducts may be performed by persons other than those requiring certification under 453 CMR 6.03(2)(a), provided such persons have received training in accordance with the provisions of 453 CMR 6.10(4)(h) prior to engaging in such asbestos associate projects, all work is conducted under a permit pursuant to Section 1.12 of these regulations, and all work is conducted in conformance with the applicable work practice requirements of 453 CMR 6.14 and Section 6.14 of these regulations.
- (4) Worker Protection. All persons involved in asbestos abatement work or asbestos associated project work who are potentially exposed to asbestos shall be provided with appropriate respiratory protection, personal protective clothing, and other protective equipment as presented by OSHA Asbestos Regulations 29 CFR 1926.58, EPA Asbestos Regulations 40 CFR Part 763, Subpart G and by 453 CMR 6.15. Responsibility for compliance with such worker protection requirements shall rest with the responsible person(s) as defined in Section 1.02 of these regulations or the asbestos contractor, or where an asbestos contractor is not required for the work being performed, the responsible person(s) of the employer of the employees for which protection is required by this section.
- (5) Work Practice and Notification Requirements. All persons, firms, corporations or other entities engaged in or performing asbestos abatement projects or asbestos associated projects, whether or not such persons, firms, corporations or other entities are required to be licensed shall comply with all applicable notification requirements set forth in 453 CMR 6.12, 310 CMR 7.15, permit requirements set forth in Section 1.12 of these regulations and all applicable work practice requirements set forth in 453 CMR 6.14 and Section 1.14 of these regulations. Responsibility for compliance with such notification, permit, and work practice requirements shall rest with the responsible person(s) as defined in Section 1.02 of these regulations or the asbestos contractor, or where an asbestos contractor is not required for the work being performed, the responsible person(s) of the employer of the employees for which protection is required by this section.
- (6) <u>Record Keeping Requirements</u>. All approved training providers, asbestos contractors, asbestos analytical services, certified consultants and employers of asbestos associated project workers shall maintain records pursuant to the requirements set forth in 453 CMR 6.11 and Section 1.11 of these regulations.
- (7) Effective Dates. These rules and regulations shall be effective on the 30th day after their promulgation by the Board of Health and Hospitals.
- (8) Other Applicable Laws and Regulations. Every person engaged in an asbestos abatement project or an asbestos associated project shall comply with all applicable state, federal, and City of Boston laws and regulations pertaining to asbestos as well as Department of Health and Hospitals asbestos regulations promulgated under M.G.L.c. 111, sections 31 and 122 and Chapter 656 of the Acts of 1965.

1.04: Reserved

1.05: Reserved

1.06: Reserved

1.07: Reserved

1.08: Reserved

1.09: Reserved

1.10: Reserved

1.11: Record Keeping

- (1) Reserved.
- (2) Asbestos Contractors.
 - (a) <u>Central Location</u>. The following records and documents shall be maintained by asbestos contractors at a central location at the principal place of business and shall be made available to the Commissioner upon request:
 - 1. Records and documents required by 453 CMR 6.11(2)(a) and 310 CMR 7.15.
 - 2. Reserved.

- 3. A copy of Boston Department of Health and Hospitals asbestos regulations.
- 4. A copy of all Department of Health and Hospitals asbestos permits, asbestos notices and approved asbestos plans for asbestos abatement projects initiated within 24 months of the current date
- (b) On-site. The following records and documents shall be maintained on-site at the asbestos abatement project location for the duration of the project. All on-site records and documents shall be made available to the Commissioner upon request.
 - A current copy of 453 CMR 6.00, 310 CMR 7.00, and the asbestos regulations of the Boston Department of Health and Hospital.
 - 2. All records and documents required to be maintained on-site at the asbestos project location pursuant to 453 CMR 6.11(2)(b), 310 CMR 7.15, and Boston Fire Prevention Code.
 - 3. Copy of the contractor's current DLI asbestos abatement contractor's license, when applicable.
 - Copies of the valid Boston Department of Health and Hospital's asbestos abatement project permit, and the Department approved asbestos abatement plan or asbestos abatement notification, whichever is required.
 - Valid worker identification and valid Asbestos Associated Project Training Certificates for each worker involved in asbestos associated projects.
- (3) Reserved
- (4) Reserved
- (5) Employers of Asbestos Associated Project Workers. Employers of asbestos associated project workers shall maintain at the place of employment of such workers copies of each asbestos associated project worker's Massachusetts Asbestos Abatement Worker's certification card, and, where certification of such workers is not required, copies of each worker's certificate of successful completion of required training from an approved training provider. Employers shall make such documents available to the Commissioner upon request.
- (6) Reserved

1.12: Permit requirements for Asbestos Abatement Projects

- (1) General. Persons engaging in any asbestos abatement project or asbestos-associated project shall apply to the Commissioner for a site specific asbestos abatement permit and receive such site specific permit before engaging in any asbestos project or any asbestos associated abatement project. Applications shall be on forms prescribed by the Commissioner. Applications shall be postmarked or hand delivered at least ten (10) days before the project start date, or in the case of an approved emergency project, within one working day after the project start date. Asbestos abatement permit applications shall be reviewed and complete applications shall be processed as approved or denied within 5 work days of receipt of the permit application.
- (2) Application. Applicants for an asbestos abatement project permit must submit to the Commissioner the following documents and information:
 - (a) A completed application form as prescribed by the Commissioner.
 - (b) An approved Department of Health and Hospitals asbestos abatement project plan for projects requiring such plans.
 - (c) A completed Department of Health and Hospitals asbestos abatement project notification form for projects not requiring an approved asbestos abatement plan.
 - (d) Copies of the asbestos notice required by the Massachusetts Departments of Labor and Industries and Environmental Protection.
 - (e) A copy of the Boston Fire Department asbestos permit for projects requiring such permits.
 - (f) Copy of the contractor's current DLI asbestos abatement contractor's license, when applicable.

- (3) Fees. A certified or bank check in the amount of the entire permit fee shall be submitted with the application. The permit fee payment is refundable should the Commissioner deny the permit for reasons specified in Section 1.12(4)(a-f). The amount of the asbestos abatement project permit fee shall be determined according to criteria set by the Commissioner.
- (4) <u>Denial of Permit</u>. The Commissioner may deny a permit upon finding of sufficient cause. Applicants shall be advised by the Commissioner in writing of the denial and the reasons therefore. Applicants shall have the right to appeal the Commissioner's determination through an administrative hearing by submitting a written request for such hearing within 30 calendar days upon receiving such notice of denial. The following shall be sufficient cause:
 - (a) False statements in the application.
 - (b) Omission of required documentation or information.
 - (c) Repeated and/or serious failure of the applicant to comply with the provisions of these regulation or to comply with orders issued by the Department of Health and Hospitals pursuant to these regulations, M.G.L.c. 111, section 122 et seq., or 105 CMR 410.000.
 - (d) Repeated and/or serious failure to comply with laws, rules, regulations relating to occupational or public safety and health, and asbestos.
 - (e) Any other cause affecting the responsibility of the applicant which the Commissioner determines to be of such serious and compelling nature as to warrant denial.
 - (f) Failure to pay any fees, penalties, or fines imposed by the Commissioner or Court in asbestos related legal action filed on behalf of the Board of Health and Hospitals pursuant to these regulations or other laws and regulations, unless imposition of such fees and fines are under ongoing appeal or ongoing litigation.
- (5) Revocation of Permit. The Commissioner may revoke a permit upon finding of sufficient cause. Applicants shall be advised by the Commissioner in writing of the denial and the reasons therefore. Applicants shall have the right to appeal the Commissioner's determination through an administrative hearing by submitting a written request for such hearing within 30 calendar days upon receiving such notice of revocation. The following shall be sufficient cause:
 - (a) False statements in the application.
 - (b) Omission of required documentation or information.
 - (c) Repeated and/or serious failure of the applicant to comply with the provisions of these regulation or to comply with orders issued by the Department of Health and Hospitals persuant to these regulations, M.G.L.c. 111, section 122 et seq., or 105 CMR 410.000.
 - (d) Repeated and/or serious failure to comply with laws, rules, regulations relating to occupational or public safety and health, and asbestos.
 - (e) Any other cause affecting the responsibility of the applicant which the Commissioner determines to be of such serious and compelling nature as to warrant revocation.
 - (f) Failure to have a supervisor/foreperson present at the job site, where required, or use persons with appropriate DLI certifications for the work performed are causes for revocation or suspension of the Boston Department of Health and Hospital's asbestos abatement permit.
 - (g) Failure to adhere to any special provisions that may be imposed by the Commissioner as a condition for approval of an asbestos abatment plan or issuance of an abatement permit.
- (6) Emergency Asbestos Abatement Projects. Emergency asbestos abatement projects may be initiated without receiving a permit in advance as required by Section 1.12(1) of these regulations, provided that every available opportunity has been taken to receive advanced permission in writing or, if necessary, by telephone from all affected state and local government agencies. All required documents for ordinary asbestos abatement projects must be filed with the Department by persons engaging in an Emergency Asbestos Abatement Project within one workday of project initiation and the project permit fee paid. DEP and DLI emergency project notice waiver numbers shall be noted on the permit application for emergency

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abatement projects. All other provisions of these regulations must be adhered while performing emergency asbestos abatement projects.

1.13: Use of Personnel

- (1) Persons engaged in asbestos work shall only be assigned to perform those tasks authorized by a valid current Massachusetts Department of Labor and Industries certificate. Performance of tasks or functions by a person not certified to perform such tasks or functions shall be considered a cause for revocation or suspension of the Boston Department of Health and Hospital's asbestos permit.
- (2) Persons engaged in or performing asbestos projects shall comply with the work practice standards set forth in 453 CMR 6.14, 310 CMR 7.15, 29 CFR 1926.58, 40 CFR Part 763, and Section 1.14 of these regulations.
- (3) At least one Massachusetts Department of Labor and Industries certified supervisor/foreperson shall be assigned to and be present at each asbestos abatement project, except a spot repair job site, while work is in progress.
- (4) All persons engaged in asbestos work shall keep their Massachusetts Department of Labor and Industries certification identification card at their job site and shall present it to the Commissioner upon request.

1.14: Work Practice Requirements

This section establishes minimum work practice requirements for all asbestos abatement and asbestos associated projects and includes specific requirements for spot repairs and projects involving the use of the glove bag.

(1) General

- (a) Any removal, enclosure, encapsulation or disturbance of asbestos containing material shall be performed only by those persons who have been duly certified to perform such work pursuant to 453 CMR 6.05 or 6.06, except as provided in 453 CMR 6.03 (3)(b).
- (b) All persons involved in asbestos abatement work or asbestos associated project work who are potentially exposed to asbestos shall be provided with appropriate respiratory protection and personal protective clothing, and other protective equipment as prescribed by OSHA Asbestos Regulations 29 CFR 1926.58, EPA Asbestos Regulations 40 CFR Part 763, Subpart G, Massachusetts Department of Labor and Industries Regulations 453 CMR 6.15., Massachusetts Department of Environmental Protection Regulations 310 CMR 7.00 and section 1.15 of these regulations.
- (c) In addition to complying with the specific requirements set forth in 453 CMR 6.14 asbestos contractors and other persons and entities shall perform asbestos work in a manner which is at least equivalent to "state-of-the-art" as described and defined in the most current editions of EPA Guidance Documents pertaining to the control of asbestos in facilities; and which is in conformance with the requirements set forth in 29 CFR 1926.58, Appendix F and G and in 40 CFR Part 763, Subpart G which are incorporated herein by reference.

(2) Asbestos Abatement Projects and Asbestos Associated Projects

- (a) Work Area Preparation. Prior to commencing an asbestos abatement project or asbestos associated project, the following steps shall be taken:
 - 1. Exclusion of Persons from the Work Area and Warning Signs. All persons not directly involved in the work operation shall be excluded from the work area. Warning signs meeting the specifications set forth in 29 CFR 1926.58 (k)(1)(ii) shall be posted at all approaches to the work area. Signs shall be posted a sufficient distance from the work area to permit a person to read the sign(s) and take precautionary measures to avoid exposure to asbestos.
 - Shutdown of HVAC Systems. The facility heating, ventilation and air-conditioning (HVAC) systems of the area where the asbestos work is being performed shall be shut down, locked out and isolated.
 - 3. <u>Removal of Moveable Objects</u>. All moveable objects shall be removed from the work area. Items to be reused which may have been previously contaminated with asbestos shall be decontaminated by HEPA vacuuming or wet cleaning prior to their being removed from the work area. All other contaminated items which are not to be reused shall be disposed as asbestos waste.

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- 4. <u>Covering of Non-Moveable Objects</u>. All non-moveable or fixed objects remaining within the work area shall be wrapped or covered with six (6) mil thick (minimum) plastic sheeting. Plastic sheet covering shall be completely sealed with duct tape or equivalent.
- 5. <u>Isolation of Work Area</u>. The work area shall be isolated by sealing all openings including but not limited to windows, doors, ventilation openings, drains, grilles, and grates with six (6) mil thick (minimum) plastic sheeting and duct tape or the equivalent to prevent the passage of asbestos fibers. For all asbestos abatement projects or asbestos associated projects which are performed in an occupied facility, as defined in Section 1.02, excepting those projects in an occupied facility in which glove bags are used as the sole method of removal or repair in accordance with Section 1.14(4), large openings such as open doorways, elevator doors, and passageways shall be first sealed as a critical barrier. The critical barrier, as defined by Section 1.02, shall constitute the outermost boundary of the asbestos abatement project work area. Critical barriers may be erected of suitable solid construction materials such as plywood, sheetrock, gypsum board, or consist of existing suitable barriers and partitions. Plastic sheeting on open framing is not a suitable critical barrier. All cracks, seams and openings in critical barriers shall be caulked or otherwise sealed, so as to prevent the movement of asbestos fibers out of the work area.
- 6. Covering of Floor and Wall Surfaces. Floor and wall surfaces shall be covered with plastic sheeting or equivalent. All seams and joints shall be sealed with duct tape or equivalent. Floor covering shall consist of at least two layers of six (6) mil plastic and must cover at least the bottom 12 inches of the adjoining wall. Wall covering shall consist of a minimum of two (2) layers of four (4) mil plastic sheet which shall overlap the floor covering to prevent leaks. There shall be no seams in the plastic sheet at the wall-to-floor joints.
- 7. Exceptions to Covering of Floor and Wall Surfaces Requirement Where Glove Bags Are Used or Surfaces Are Impervious. Asbestos abatement projects and asbestos associated projects which utilize glove bags as the sole method of removal or repair shall be exempt from the work practice requirements of Section 1.14(2)(a)6. provided that the work practice requirements of Section 1.14(4) are met. Ceramic tile or other impervious surface walls or floors that are free from holes, drains, cracks, fissures or other openings shall be exempt from the work practice requirements of Section 1.14(2)(a)6., provided such action does not result in the passage or escape of asbestos fibers from the project area.
- GFCI Protection. All electrical cords and connections within the enclosed removal area shall be ground fault circuit interrupter (GFCI) protected.

b. Decontamination System

- 1. Decontamination Facilities. Asbestos abatement project and asbestos associated project work areas shall be equipped with decontamination facilities consisting of: a) a clean room, b) a shower, and c) an equipment room. The clean room (or change room) shall be equipped with suitable hooks, lockers, shelves, etc. for workers to store personal articles and clothing. The shower room shall be contiguous to the clean room and equipment room. The shower room shall be of sufficient capacity to accommodate the workers at the project. Warm water shall be supplied to the showers. The shower room shall be separated from the ambient area and the clean room by means of passage of air or asbestos fibers. The equipment room (dirty room) shall be situated between the shower room and the work area, and separated from both by means of suitable barriers or overlapping flaps such as will prevent the free passage of air or asbestos fibers.
- Decontamination Required. No employees or equipment shall leave the work area unless first decontaminated by showering or wet washing to remove all asbestos debris. No asbestos contaminated materials or persons shall enter the clean room.
- 3. Location of Decontamination Facilities. Where feasible, decontamination systems shall be located adjacent to the work area, and in all cases shall be contiguous to the work area. In situations where it is not possible, due to unusual conditions, to establish decontamination systems continuous to the work area, persons shall be directed to remove visible asbestos debris from their persons by HEPA vacuuming prior to donning clean disposable coveralls while still in the work area, and then to proceed directly to a remote decontamination system to shower and change clothes.

- 4. Notification of Intent to Utilize Remote Decontamination Systems. In specific situations where the contractor or abatement project designer determines that it is not feasible to establish a contiguous decontamination system at a work site, asbestos contractors shall provide written notification of intent to utilize a remote decontamination system that must be operated in conformance with 29 CFR 1926.58, Appendix F. Such notice of intent shall be made with the Department asbestos abatement notification, Department asbestos abatement permit application, or Department asbestos abatement plan approval application required under Section 1.12 of these regulations.
- 5. Exception to Decontamination System Requirement for Work Less Than 25 Feet. Compliance with Section 1.14(2)(b)1. is optional for asbestos abatement projects and asbestos associated projects which involve the removal, encapsulation, or enclosure of less than 25 linear feet of asbestos surface on structures other than pipes or ducts and which otherwise conform to the definition of a small-scale, short-duration renovation and maintenance activity as defined and described in Appendix G of OSHA Asbestos Regulation 29 CFR 1926.58. For such projects a change room may be used in lieu of the 3-compartment decontamination facility specified in Section 1.14(2)(b)1. If a change room is used, as allowed above, it shall be constructed and operated in accordance with Appendix G of OSHA Asbestos Regulations 29 CFR 1926.58 and used as the sole ingress and egress to the contained work area. Persons exiting the work area shall first clean their protective clothing by HEPA vacuuming while still in the work area before entering the change room. All material and equipment shall be either thoroughly decontaminated by HEPA vacuuming or wet cleaning or be wrapped in a minimum of two (2) layers of six (6) mil (minimum) thickness plastic sheeting or be containerized in metal, plastic or fiber drums with locking sides before removal from the work area.
- 6. Exception to Decontamination System Requirement for Work in Connection with Furnaces or Boilers in Private Residences. Compliance with Section 1.14(2)(b)1. is optional for asbestos abatement projects and asbestos associated projects which involve the removal, encapsulation or enclosure of asbestos surface in connection with work on any furnace or boiler and furnace combination used exclusively to provide heat and/or hot water services to living units within private residences, and which otherwise conform to the definition of a small-scale, short duration renovation and maintenance activity as defined and described in Appendix G of OSHA Asbestos Regulation 29 CFR 1926.58. For such projects a change room may be used in lieu of the 3-compartment decontamination facility specified in Section 1.14(2)(b)1. If a change room is used, as allowed above, it shall be constructed and operated in accordance with Appendix G of OSHA Asbestos Regulations 29 CFR 1926.58 and used as the sole ingress and egress to the contained work area. Persons exiting the work area shall first clean their protective clothing by HEPA vacuuming while still in the work area before entering the change room. All material and equipment shall be either thoroughly decontaminated by HEPA vacuuming or wet cleaning or be wrapped in a minimum of two (2) layers of six (6) mil (minimum) thickness plastic sheeting or be containerized in metal, plastic or fiber drums with locking lids before removal from the work area
- 7. Exception to Decontamination System Requirement Where Glove Bags Used. Asbestos abatement projects and asbestos associated projects which utilize glove bags as the sole method of removal or repair and otherwise conform to the definition of a small-scale, short-duration renovation and maintenance activity as defined and described in Appendix G of OSHA Asbestos Regulations 29 CFR 1926.58 and interpreted by the OSHA Directorate of Compliance shall be exempt from the requirements of Section 1.14(2)(b)1., provided that the work practice requirements of Section 1.14(4) are met.
- 8. Equipment Decontamination. No equipment, supplies, or materials (except properly containerized waste material) shall be removed from an asbestos abatement project or asbestos associated project work area unless such equipment, supplies, and materials have been thoroughly decontaminated and cleaned free of asbestos debris. Where the configuration of the equipment, supplies, materials is such that decontamination and cleaning free of asbestos debris is neither possible nor feasible, then the object shall be thoroughly wrapped in a minimum of two (2) layers of six (6) mil polyethylene sheeting with all joints, seams and overlaps sealed with tape; or containerized in a metal, plastic or fiber drum with a locking lid. Examples include, but are not limited to air filtration or HEPA vacuuming equipment which may be wrapped in plastic sheeting rather than dismantling beyond the filters for cleaning purposes; sections of insulated pipe or other objects to be disposed of asbestos; and wood or other materials used to construct on-site decontamination or shower units which may be wrapped in plastic for disposal or transport to another contaminated work site for reuse.
- 9. Emptying of Vacuums. HEPA vacuums shall be emptied of collected asbestos waste contents prior to removal of the equipment from the work area.

- 10. Work Area Ventilation System. A work area ventilation system shall be used to maintain a reduced atmospheric pressure within the contained work area at all times. The equipment utilized to reduce air pressure within the contained work area shall be of sufficient number and capacity to provide a minimum of four (4) air changes per hour. Ventilation units shall be operated in accordance with EPA recommendations. Make-up air entering the work area should pass through the decontamination system has been put into operation but before any asbestos is disturbed ventilation (smoke) tubes shall be used to characterize air current patterns in and around the enclosed work area, especially around the entrance to the decontamination system and around any other breaches in the work area barriers. In all cases any movement of air (and smoke) shall be from areas on the outside of the contained work area to areas inside. If not, corrections of the work area ventilation system and/or work area containment barriers shall be made before being discharged outside of the work area. Exhaust air tubes or ducts associated with the work area ventilation system shall be free of leaks. In all cases where feasible exhaust air shall be discharged to the outside of the building. If access to the outside is not available, HEPA filtered exhaust air shall be discharge to an area within the building that is as far away from the work area as possible. In no case shall exhaust air be discharged into occupied areas of the building or into areas of the building which contain exposed or damaged asbestos. When exhaust air is discharged to the interior of a building the outflow shall be sampled and analyzed at lest once per day per machine using sampling and analysis methods prescribed in 453 CMR 6.93 Appendix 3. If at any time fiber levels in the exhausted air exceed 0.01 fibers/cc the work operation shall stop immediately, and the corresponding ventilation unit(s) shall be shut off and repaired or replaced before the abatement operation is resumed. The work area ventilation system shall operate 24 hours per day from the commencement of the asbestos abatement project until the requirements of Section 1.14(2)(f) have been met.
- 11. <u>Decontamination of Air Filtration Devices</u>. Air filtration devices shall have used pre-filters removed, and replaced with fresh filters prior to removal of the unit from an asbestos work area. If HEPA filters of an air filtration device are not changed while the unit is in the asbestos work area, the equipment shall be wrapped in plastic sheeting pursuant to Section 1.14(2)(B)8. above prior to removing it from the work area. Used HEPA filters and pre-filters shall be disposed of as asbestos waste.

12. Reserved

13. Exception to Work Area Ventilation System Requirement Where Glove Bags Used. Asbestos abatement projects and asbestos associated projects which utilize glove bags as the sole method of removal or repair and otherwise conform to the definition of a small-scale, short-duration renovation and maintenance activity as defined and described in Appendix G of OSHA Asbestos Regulations 29 CFR 1926.58 and interpreted by the OSHA Directorate of Compliance shall be exempt from the provisions of Section 1.14(2)(b)10.

(c) Work Procedures.

- Wetting of Asbestos. Prior to its removal, asbestos materials shall be thoroughly wetted with
 water to which a surfactant has been added, or with substitute wetting solutions suitable to
 reduce the generation of dust. Water should not be applied in amounts that will cause run-off
 or leakage of the water from the project area. Once removed, asbestos materials shall be kept
 wet until containerize for disposal.
- 2. Containerization of Asbestos. Removed asbestos material shall not be allowed to accumulate in the work area but it shall be containerized in a timely fashion. Asbestos waste and asbestos contaminated debris shall be containerized in impermeable containers. Waste which does not contain components with sharp edges shall be containerized in double (2) plastic bags (six (6) mil minimum thickness each bag) except as allowed in Section 1.14(2)(c)4, or containerized in metal, plastic or fiber drums with locking lids. Metal, plastic or fiber drums with locking lids shall be used to containerize asbestos waste which contains sharp-edged components. Large components removed intact shall be containerized in accordance with Section 1.14(2)(c)4.
- 3. <u>Material Deposition</u>. Asbestos materials shall not be dropped or thrown from heights greater than that of the point of removal, or 15 feet, whichever is less. Materials that must be lowered from greater than 15 feet must be transported through a dust tight chute, or containerized prior to lowering to the ground or floor.
- 4. <u>Large Components</u>. Large components containing or covered with asbestos containing material may be removed intact, but shall be wrapped in at least two (2) layers of six (6) mil thick plastic sheeting and securely sealed for transport to an approved disposal site.

- 5. <u>Enclosure</u>. In addition to the work practices requirements contained in Section 1.14 and the permit requirements of Section 1.12, all asbestos abatement projects or asbestos associated projects involving enclosure of asbestos materials shall also adhere to the following:
 - a. Friable asbestos materials that are enclosed during an asbestos abatement or asbestos associated project, shall be identified on building records.
 - b. Enclosure systems shall be constructed to be leak tight to prevent the release of asbestos fibers. All seams and joints of the enclosure shall be of tongue and groove construction or caulked.
 - c. Pipe, duct, tank, boiler or other objects that are enclosed by wrapping shall be labeled indicating the asbestos containing nature of the enclosed material.
- 6. Encapsulation. The work practices requirements contained in 1.14 and the permit requirements of Section 1.12 of these regulations shall apply whenever asbestos materials are to be encapsulated. In addition, liquid encapsulants shall be applied with airless spray equipment so as to reduce the potential for fiber release during application of the sealant materials. Encapsulants shall not be applied directly to severely damaged or deteriorating asbestos containing fireproofing.
- Furnace-boiler replacement. Replacement of furnaces and boilers that are covered or coated with asbestos containing materials constitutes an asbestos abatement project for the purposes of these regulations.
- 8. <u>Asbestos Cement Materials</u>. The work practice requirements contained in Section 1.14, including the disposal requirements of Section 1.14(2)(g) shall apply to projects involving asbestos cement materials that are broken and to excavations involving the removal, cutting, and disposal of asbestos cement pipe.
- 9. <u>Demolition</u>. The provisions of notification, permit, work practices, disposal, and other requirements of these asbestos regulations shall apply to any planned demolition of any facility containing friable asbestos containing materials. Such work must also be performed in conformance with DEP regulations 310 CMR 7.00, 18.00 and 19.00, 453 CMR 6.00, and the requirements of the EPA National Emission Standard for Asbestos, as contained in 40 CFR Part 61, Subpart M, as most recently amended.
- (d) Clean-Up. Following an asbestos abatement project, clean-up procedures using HEPA vacuuming and/or wet cleaning techniques shall be used to decontaminate all contaminated surfaces within the contained work area. All equipment, materials, and all surfaces from which asbestos has been stripped or removed shall be decontaminated. An inch of soil shall be removed from dirt floors and disposed as asbestos waste. All clean-up materials shall be disposed as asbestos waste. Clean-up shall be to the level of no visible debris.
- (e) <u>Air Monitoring</u>. The air monitoring requirements of this subsection are minimum requirements. For many asbestos abatement projects it will be advantageous to have additional monitoring.
 - 1. <u>Personal exposure monitoring</u>. Personal exposure monitoring shall be conducted during asbestos abatement projects and asbestos associated projects, as required by and in conformance with, the provisions of OSHA Asbestos Regulations 29 CFR Part 763, Subpart G.
 - Clearance air monitoring. At least one sample of air per each one thousand (1000) square feet or
 portion thereof, up to five thousand (5000) square feet plus one sample for each additional five
 thousand (5000) square feet or portion thereof; or one sample per room whichever is greater, shall
 be collected and analyzed.
 - 3. <u>Collection of samples</u>. The collection of clearance air monitoring samples for the purpose of Section 1.14(2)(e)2. shall be performed only by an Asbestos Abatement Project Monitor certified pursuant to 453 CMR 6.07(5). In no case shall clearance air monitoring samples be collected by the contractor or an employee of the contractor.
 - 4. <u>Analysis of samples</u>. All analyses of air monitoring samples required by Section 1.14(2)(e) shall be performed by a provider of analytical services certified pursuant to 453 CMR 6.08.
 - 5. <u>Maintenance of air monitoring records</u>. The asbestos contractor shall maintain records of all air monitoring results on site and at a central location, pursuant to 453 CMR 6.11.

- 6. Exception to requirement for clearance air monitoring. Asbestos associated projects which result in the disturbance of less than three (3) linear feet of asbestos surface on pipes or ducts or less than three (3) square feet of asbestos surface on pipes on structures other than pipes or ducts, spot repairs, as defined in Section 1.02, and projects in which the glove bag is used as the sole method of removal or repair are exempt from the requirements of Section 1.14(2)(e)2.
- (f) Project completion. Except as allowed in Section 1.14(2)(e)6., asbestos abatement projects shall be satisfactorily completed only when the project area is free from visible debris and the area meets the release criteria for clearance air monitoring conducted pursuant to Section 1.14(2)(e)2 and 453 CMR 6.14(2)(e)2. and specified in Appendix 3, 453 CMR 6.93 and the recommendations or requirements of the EPA contained in 40 CFR Part 763, Subpart E, Appendix A. Until these conditions are achieved all work area barriers shall remain in place, work area ventilation systems (if required) will remain in operation, respirators and other personal protective equipment shall be worn and all other work practice controls, as required by 453 CMR 6.14 shall remain in effect.

(g) Disposal requirements.

- Waste. Any asbestos containing materials removed from a facility that can be crushed, crumbled, or reduced to a powdery substance when dry must be handled and disposed as an asbestos waste.
- 2. <u>Transport</u>. Only asbestos waste which has been properly containerized pursuant to Section 1.14(2)(c)2. shall be transported from the point of generation. Transport shall be in covered vehicles or locked containers. Transportation of asbestos waste shall be in conformance with the US Department of Transportation Regulations 49 CFR Parts 172 and 173.
- Disposal. Disposal of asbestos waste shall be in conformance with Section 1.52(2) of these regulations, EPA NESHAPS Regulations at 40 CFR Part 61 and Massachusetts Department of Environmental Protection (DEP) Regulations 310 CMR 7.00, 18.00 and 19.00.

(3) Specific Work Practice Requirements for Spot Repairs

- (a) Any removal, enclosure, or encapsulation of asbestos or asbestos containing material, where such activity involves or disturbs less than 3 linear feet of asbestos surface on pipes or ducts or less than 3 square feet of asbestos surface on structures other than pipes or ducts shall be performed only by persons certified under 453 CMR 6.05 or 6.06, except as provided in 453 CMR 6.03(3)(b).
- (b) All employees who perform spot repairs and who are potentially exposed to asbestos shall be provided with appropriate respiratory protection and personal protective clothing, and other protective equipment as prescribed by OSHA Asbestos Regulations 29 CFR 1926.58, EPA Asbestos Regulations 40 CFR Part 763, Subpart G, 453 CMR 6.15, and by Section 1.15. Person(s) performing spot repairs shall wear a half mask dual-cartridge HEPA-filtered respirator as the minimum level of respiratory protection.
- (c) Spot repairs shall be performed in such a manner as to minimize the release of asbestos fibers. The following work practices are minimum requirements for spot repairs under these regulations:
 - All persons excepting those who are directly involved in the work operations shall be excluded from the work area. Physical barriers shall be used to limit access to the work area for the duration of the spot repairs.
 - Airtight barriers shall be constructed to insure that asbestos fibers released during abatement activities are contained within the work area. Glove bags are permitted in place of a barrier for removal or repair of asbestos-containing materials located on pipes or ducts.
 - Before any asbestos material is handled or disturbed it shall be wet with water to which a surfactant has been added. All asbestos material shall be kept wet throughout the work operation until it has been properly containerized.
 - 4. Any friable asbestos material that has been exposed as a result of the spot repair operation shall be suitably enclosed or encapsulated in accordance with 453 CMR 6.14(2)(c)5. and Section 1.14(2)(c)6.
 - 5. HEPA vacuuming or wet cleaning shall be used to decontaminate the work area and any equipment used in the work operation until there is no visible debris.
 - 6. Asbestos-containing waste shall be containerized, transported, and disposed at an approved facility in accordance with Sections 1.14(2)(g) and 1.52(2).

- (d) If the owner or contractor chooses to repair an asbestos containing material, any repair method may be used provided that such repair method,
 - (1) is approved by the Commissioner as suitable for the particular defects being repaired, and
 - (2) results in the elimination of defects which may allow the release of friable asbestos containing material
- (4) Specific Work Practice Requirements for Glove Bag Operations. The use of glove bags as described in Appendix G of OSHA Asbestos Regulations 29 CFR 1926.58 is allowed by these regulations for the removal or repair of asbestos containing materials located on pipes or ducts. Glove bag operations shall be conducted in conformance with the work practices set forth in OSHA Asbestos Regulations 29 CFR 1926.58. The following work practices are specifically required by these regulations:
 - (a) All persons except those who are directly involved in the glove bag operation shall be excluded from the work area. Physical barriers shall be used, to limit access to the work area for the duration of the glove bag operation.
 - (b) The person(s) performing the glove bag operation shall wear a half mask dual-cartridge HEPA-filtered respirator, as the minimum level of respiratory protection.
 - (c) All moveable objects shall be removed from the work area. Non moveable objects remaining in the work area shall be covered completely with six (6) mil (minimum) plastic sheeting securely taped or otherwise secured in place, so as to prevent their contamination. Objects which have already been contaminated shall be thoroughly cleaned with a high efficiency particulate air (HEPA) filtered vacuum or be wet wiped before they are removed from the work area or covered in place.
 - (d) Glove bags shall be installed so that they completely cover the pipe or structure in such a manner as to prevent leakage of air or asbestos fibers. The arms, open edges, and other openings in the glove bag shall be completely sealed against leakage with duct tape or other equivalent material.
 - (e) Asbestos material shall be wet prior to its removal and maintained in a wet condition inside the glove bag.
 - (f) Any asbestos material that has been exposed as result of the glove bag operation shall be suitably encapsulated or enclosed so as to prevent the leakage of asbestos fibers prior to the removal of the glove bag.
 - (g) All surfaces inside the glove bag from which asbestos has been removed and the upper portions of the glove bag itself shall be cleaned by wet wiping until no traces of asbestos containing material can be seen.
 - (h) Removed material shall be isolated in the bottom of the glove bag by twisting the bag so as to form a construction in the middle. The closure formed by the construction shall then be taped around with duct tape or equivalent material. Prior to twisting the bag excess air in the bag shall be exhausted with a HEPA vacuum cleaner.
 - (i) The glove bag and its contents shall be removed from the pipe or duct, containerized in accordance with Section 1.14(2)(c)2. and disposed of in accordance with Sections 1.14(2)(g) and 1.52(2).

1.15: Worker Protection Requirements

- (1) <u>Respiratory Protection</u>. All employees involved in asbestos or asbestos associated work and who are potentially exposed to asbestos shall be provided with provided with appropriate respiratory protection as required by 453 CMR 6.15(1) and 29 CFR 1926.58.
- (2) <u>Protective Clothing and Equipment</u>. All employees involved in asbestos or asbestos associated work and who are potentially exposed to asbestos shall be provided with personal protective clothing and equipment in accordance with 453 CMR 6.15(2) and 29 CFR 1926.58.
- (3) Medical Monitoring. All employees involved in asbestos or asbestos associated work shall be medically monitored in accordance with the provisions of 453 CMR 6.15(3) and 29 CFR 1926.58.

1.51: Duty to Maintain Asbestos Building Materials

- (1) Every owner shall maintain all asbestos material which is used as insulation or covering on a pipe, boiler or furnace, in good repair, and free from any defects such as holes, cracks, tears, or looseness which may allow the release of asbestos dust or which may allow the release of any powdered, crumbled or pulverized asbestos material. Every owner shall correct any violation of Section 1.51 by repairing, removing, or enclosing defective asbestos building materials in accordance with the provisions of these regulations.
- (2) Every owner shall maintain all other asbestos building materials free of defects or conditions which may allow the release of asbestos dust and may threaten human health and the environment. Where defects or conditions releasing or threatening to release asbestos dust occur, every owner shall take an appropriate response action sufficient to protect human health and the environment.
- (3) For the following facilities, no person shall perform asbestos abatement other than in compliance with the provisions of a written site specific Asbestos Hazard Abatement Plan approved in advance by the Commissioner:
 - a. Any residence, vacant or otherwise, or a facility intended to be converted to residential use.
 - b. Any bedded facility where persons sleep overnight.
 - c. Schools subject to AHERA.
 - d. Day care facilities.
 - e. Sites under Department asbestos hazard abatement orders.
- (4) If, because of the condition, location, height, or accessibility of asbestos material, it appears that despite repair, damage or defects to the asbestos material in violation of Sections 1.51(1) and 1.51(2) are likely to recur through normal or expected use or occupancy of the facility, the Commissioner may order the owner to remove or enclose the asbestos material.
- (5) Wherever feasible, asbestos material shall be repaired before enclosure.
- (6) If any person chooses to remove, abate, or otherwise disturb in a manner that may generate airborne dust any material used as insulation or covering on a pipe, boiler, or furnace, spray-on fire proofing, cementitious siding or roofing, or resilient flooring material, such person shall either:
 - (a) Determine that the material does not contain asbestos by certified laboratory analysis, verification from construction records, or other certain method.
 - (b) Assume that the material contains asbestos and remove it only in compliance with these regulations.
- (7) Facility owners shall not permit any person to remove abate, or otherwise disturb in a manner that may produce airborne dust any asbestos containing material at their facility without first determining that such person possesses all necessary valid asbestos certificates, licenses, and permits.

1.52: Standards for Demolition/Renovation

- (1) <u>Applicability</u>. No person shall cause, suffer, allow, or permit the demolition/renovation, installation, reinstallation, handling, transporting, storage, or disposal of a facility or facility component that contains asbestos, asbestos-containing material, or asbestos-containing waste material in a manner which causes or contributes to a condition of air pollution.
- (2) Waste Disposal. Each owner/operator shall:
 - (a) Discharge no visible or particulate emissions to the ambient air during the collection, processing, packaging, transporting, transferring, or disposing of any asbestos-containing waste material, and use the disposal methods specified in this section such that the asbestos-containing material is nonfriable;
 - Adequately wet asbestos-containing waste material obtained from air cleaning equipment or from removal operation and while wet, containerize and seal the asbestos-containing waste material in leak-tight containers, labeled

CAUTION Contains Asbestos Avoid Opening or Breaking Container

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Breathing Asbestos is Hazardous to your Health

or use warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA),

- Use an alternative processing method to render the asbestos non-friable that has been approved in writing by the Massachusetts Department of Environmental Protection pursuant to 310 CMR 7.15 and by the Commissioner.
- (b) If within Boston, store asbestos waste only at the site of waste generation or a refuse transfer station facility assigned pursuant to M.G.L.c. 111, section 150A, with assignment of site conditions specifically permitting the storage of asbestos wastes, and in accordance with 310 CMR 19.00 requirements for the storage of asbestos waste.
- (c) Dispose of asbestos-containing waste material at an approved sanitary landfill special waste site. If within Massachusetts, such sites must be operated in accordance with 310 CMR 19.00. Outside Massachusetts, such sites must be operated in accordance with applicable state and federal asbestos laws
- (3) <u>Spraying</u>. No owner or operator of a facility shall spray on any facility or facility component any asbestoscontaining material.
- (4) <u>Insulating Material</u>. No owner or operator of a facility may install or reinstall on a facility or facility component asbestos-containing insulating material.

1.53: Inspections

- (1) <u>Inspection Authority</u>. In order to carry out their respective responsibilities under these asbestos regulations and properly protect the health and well-being of the public, the Commissioner is authorized to enter, examine, or survey at any reasonable time such places as considered necessary, and otherwise to conduct examinations or survey.
- (2) <u>Interference</u>. If any owner, occupant, or other person refuses, impedes, inhibits, interferes with, restricts, or obstructs entry and free access to every part of a structure, operation or premises where inspection pursuant to these asbestos regulations are sought, the Commissioner may:
 - (a) Seek in a court of competent jurisdiction a search warrant so as to apprise the owner, occupant or other person concerning the nature of the inspection and justification for it and may seek the assistance of police authorities in presenting said warrant and/or
 - (b) Revoke or suspend any license, permit or other permission regulated under these regulations where inspection of the structure, operation or premises is sought to determine compliance with these regulations.

1.54: Correction Orders

- (1) Cease and Desist Orders. The Commissioner, upon determination that there is a violation of any asbestos regulations relative to the protection of the public health and safety, or any standard or requirement for permits and licensure, may order any asbestos abatement work site to be closed by way of the issuance of a cease and desist order enforceable in the appropriate courts of the Commonwealth. For purposes of such cease and desist orders, the asbestos abatement work site may include the area where asbestos-related work is being performed and other areas of the facility which the Commissioner determines may be hazardous to the health and safety of the public as a result of such asbestos work.
- (2) Emergency Orders. Exposure to asbestos is considered to constitute an extraordinary public health risk. Effective action to remedy deficiencies in abatement work must be immediate. Therefore, the Commissioner may make an ex-parte determination to issue an emergency cease and desist order, emergency hazard abatement order, or emergency order to vacate the premises, upon finding a violation as set forth in these asbestos regulations, 453 CMR 6.00, 310 CMR 7.15, 105 CMR 410.353, 29 CFR 1926.58, 40 CFR part 763 subpart G, and 40 CFR part 61 subpart M, and any other regulations relevant to asbestos.
 - (a) Form and Content of Orders. Cease and Desist Orders, Hazard Abatement Orders, and Orders to Vacate the premises, shall be in writing and shall, at a minimum, contain the following:

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- Identification of responsible parties and descriptions of the premises or work areas to which the order applies.
- 2. Violation serving as the basis for the issuance of the order.
- 3. Health hazards serving as the basis for the issuance of the order.
- Actions to be taken to abate health and safety hazards and/or correct non-compliance with asbestos laws and regulations.
- 5. Time for completion of required corrective actions.
- (b) <u>Service of Order</u>. Orders other than emergency orders issued pursuant to M.G.L.c. 111, section 30, shall be served as specified at 105 CMR 400.400.
- (c) <u>Posting of the Premises</u>. At the time of the emergency cease and desist order, abatement order, or order to vacate becomes effective, the Commissioner may cause the premises to become conspicuously posted as specified at 105 CMR 410.950. The facility owner shall maintain such posting of the facility at all times until its removal by the Commissioner.
- (d) <u>Access to Closed Premises</u>. Access to the premises while under an order to vacate shall be restricted to persons authorized access by the Commissioner.

1.55: Enforcement

- (1) Pursuant to M.G.L.c. 111, section 30, the Commissioner is hereby authorized to take action to enforce these regulations and any law or ordinance relative to the public health. These regulations may be enforced in the same manner as Article II of the Sanitary Code, 105 CMR 410.000 and as specified below.
- (2) These asbestos regulations may be enforced by the Commissioner through Notices of Non-compliance, Emergency and Non-emergency Permit revocation, Emergency and Non-emergency Cease and Desist Orders, Emergency and Non-emergency Abatement Orders, Emergency and Non-emergency Orders to Vacate, and any other appropriate civil or criminal processes in any court of competent jurisdiction.
- (3) Violations of these asbestos regulations may be enforced in the manner provided at M.G.L.c. 40, section 21D as an alternative to the enforcement processes indicated at Section 1.55(1) and (2).
- (4) Nothing in these regulations shall be deemed to limit the authority of the Board of Health and Hospitals or its agents pursuant to M.G.L.c. 111, sections 122 through 125 to examine into, destroy, remove, or prevent any nuisances, sources of filth and causes of sickness related to asbestos which may, in the opinion of the Board or its agents be injurious to the public health.

1.56: Penalties

- (1) <u>Interference After Search Warrant is Presented.</u> Any owner, occupant, or other person who refuses, impedes, inhibits, interferes with, restricts, or obstructs entry and free access to every part of a structure, operation or premises where inspection pursuant to Section 1.53 is sought after a search warrant has been obtained and presented in accordance with Section 1.53(2) shall be fined upon conviction or civilly penalized not less than ten nor more than five hundred dollars.
- (2) Failure to Comply With an Order. Any person who shall fail to comply with any order issued pursuant to the provisions of these regulations shall be fined upon conviction or civilly penalized not less than ten nor more than five hundred dollars. Each day's failure to comply with an order shall constitute a separate violation.
- (3) <u>Penalties not Otherwise Provided</u>. Any person who shall violate any provision of these regulations for which penalty is not otherwise provided in these regulations shall be fined upon conviction or a finding of guilt or civilly penalized not less than ten nor more than five hundred dollars.

1.57: Variances

The Commissioner may vary the application of any provision of these regulations with respect to any particular case when in the Commissioner's opinion, the enforcement thereof would do manifest injustice; provided that the decision of the Commissioner shall not conflict with valid federal requirements, valid state requirements, or the spirit of these regulations. Any variance granted by the Commissioner shall be in

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writing. Any variance may be subject to such qualification, revocation, suspension, or expiration as the Commissioner expresses in the grant.

1.58: Severability

If any provision of these asbestos regulations shall be held inconsistent with the laws of the Commonwealth, or held unconstitutional, either on its face, or as applied, the inconsistency or unconstitutionality shall not affect the remaining provisions.

1.59: Provisions and Policies for Implementation of these Regulations

The Commissioner is hereby authorized to establish provisions and policies for the implementation of the Department of Health and Hospitals Asbestos Regulations. Such provisions and policies, which may incorporate federal and state provisions and policies interpreting federal and state regulations, shall be made in writing and distributed as an Appendix of the Department of Health and Hospitals Asbestos Regulations.

1.90: Appendix A, Provisions and Policies for the Implementation of These Regulations