

## **TITLE 216 – DEPARTMENT OF HEALTH**

### **CHAPTER 50 – ENVIRONMENTAL HEALTH**

#### **SUBCHAPTER 15 – HEALTHY ENVIRONMENT**

##### **PART 1 – Asbestos Control**

### **1.1 AUTHORITY AND PURPOSE**

These regulations are promulgated pursuant to the authority conferred under R.I. Gen. Laws § 23-24.5-5(c) and are established for the purpose of adopting minimum standards for asbestos control, and provide for the licensing of Asbestos Contractors, Asbestos Supervisors, and Asbestos Workers, the submission of asbestos abatement plans, certification of training courses, Competent Persons, Analytical Services, and Consultants, and other requirements related to the safe abatement of asbestos hazards.

### **1.2 INCORPORATION BY REFERENCE**

- A. These regulations hereby adopt and incorporate 29 C.F.R. § 1926.1101 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- B. These regulations hereby adopt and incorporate 40 C.F.R. § 763 Subpart A, Appendix A and Subpart E, Appendix C (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- C. These regulations hereby adopt and incorporate 29 C.F.R. § 1910.134 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- D. These regulations hereby adopt and incorporate USDOT 49 C.F.R. § 172, Subpart E (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- E. These regulations hereby adopt and incorporate Appendix D to 40 C.F.R. § 763, Subpart E (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.

- F. These regulations hereby adopt and incorporate USDOT 49 C.F.R. § 173.1300 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- G. These regulations hereby adopt and incorporate 40 C.F.R. § 763.95 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- H. These regulations hereby adopt and incorporate 40 C.F.R. § 763.90 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- I. These regulations hereby adopt and incorporate 40 C.F.R. § 763.94 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- J. These regulations hereby adopt and incorporate 40 C.F.R. § 763.92 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- K. These regulations hereby adopt and incorporate 40 C.F.R. § 763.85 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- L. These regulations hereby adopt and incorporate 40 C.F.R. § 763.86 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- M. These regulations hereby adopt and incorporate 40 C.F.R. § 763.88 (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.
- N. These regulations hereby adopt and incorporate EPA's NESHAP requirements, 40 C.F.R. § 61, Subpart M (2017) by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with this Part.

### **1.3 DEFINITIONS**

- A. Whenever used in these rules and regulations, the following terms shall be construed as follows:
  - 1. "Act" means R.I. Gen. Laws Chapter 23-24.5, entitled Asbestos Abatement.

2. "Adequately wet" means sufficiently mixed or penetrated with liquid to prevent the release of particulates. If visible emissions are observed coming from ACM, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.
3. "Agent" means any individual performing work on an asbestos abatement project for the Asbestos Contractor, that is not an employee of the Contractor (e.g. industrial hygiene subcontractor).
4. "Amended water" means water to which a surfactant has been added.
5. "Asbestiform materials" means those naturally occurring fibers of similar shape, size, strength, surface and characteristics of asbestos fibers as are otherwise described in the publication entitled "Non Occupational Health Risks of Asbestiform Fibers" published by the Committee on Non Occupational Health Risks of Asbestiform Fibers, Board on Toxicology and Health Hazards of the Commission on Life Sciences of the National Research Council; U.S. Environmental Protection Agency and National Academy of Sciences, National Academy Press, Washington, DC, 1984, E.P.A. 68-01-4655.
6. "Asbestos" means a unique group of naturally occurring minerals that separate into fibers of high tensile strength, resistant to heat, wear and chemicals, described as the following types: chrysotile, amosite, crocidolite, tremolite, anthophyllite, and actinolite, and every product containing any of these materials that have been chemically treated and/or altered which, after manufacture, are used for such products and end uses as insulation, textiles, paper, cement sheets, floor tile, wall covering, decorations, coating, sealants, cement pipe and reinforced plastics and other compounds.
7. "Asbestos abatement" means any activity involving the removal, encapsulation, enclosure, renovation, repair, demolition or other disturbance of friable asbestos containing materials. Asbestos Abatement shall be synonymous with Asbestos Management for the purposes of this Part.
8. "Asbestos consultant" means an Asbestos Inspector, Asbestos Management Planner, or Asbestos Project Designer licensed by the Department.
9. "Asbestos abatement project" means all activities, including site preparation and clean-up, associated with asbestos abatement, from the

time of initial arrival of the contractor on-site through obtaining an acceptable final clearance air sample in the abatement area(s) and/or removal of all abated ACM from the project site, whichever is later.

10. "Asbestos supervisor" means an employee of a licensed Asbestos Contractors who supervises asbestos abatement projects.
11. "Asbestos worker" means any employee of a licensed Asbestos Contractor who engages in Asbestos Abatement.
12. "Asbestos containing material" or "ACM" means any material or product which contains more than one percent (1%) asbestos, as determined using the method specified in Appendix A, Subpart F, 40 C.F.R. Part 763, Section 1, Polarized Light Microscopy (PLM). If the asbestos content of friable material is less than 10 percent as determined by a method other than point counting by PLM, the asbestos content must be verified by point counting using PLM.
13. "Asbestos containing waste materials" means RACM waste and materials contaminated with asbestos including disposable equipment and clothing.
14. "Asbestos contractor" means any person or entity engaged in asbestos abatement as a business and whose employees perform the asbestos abatement work. (see also: Asbestos Abatement)
15. "Asbestos hazard emergency response act regulations" or "AHERA regulations" refers to specific amendments to Title II of the Toxic Substances Control Act enacted by 15 U.S.C. §§ 2641-2654 and the regulations of the U.S. Environmental Protection Agency contained in 40 C.F.R. §§ 763.80 through 763.99 (Subpart E).
16. "Asbestos inspector" means an individual who:
  - a. conducts inspections and reinspections to identify locations of friable and nonfriable ACM;
  - b. collects bulk samples of homogeneous areas of friable surfacing materials;
  - c. conducts surveillance of thermal systems insulation; and/or
  - d. discharges other such related activities.
17. "Asbestos management planner" means an individual who, for any school or school building subject to the AHERA regulations:

- a. develops an asbestos abatement/management plan for abatement action(s) no larger than small-scale short-duration maintenance activities, as defined by 40 C.F.R. § 763 Subpart E, Appendix C incorporated by reference at § 1.2(B) of this Part, that disturb friable ACM and/or for minor fiber release episode(s);
  - b. maintains records and reports of asbestos activities relating to the implementation of abatement/management plans;
  - c. is responsible for the implementation and administration of the abatement/management plan; and/or
  - d. discharges other such related activities.
18. "Asbestos project designer" means an individual who:
- a. designs all types of abatement actions including other than small-scale, short-duration maintenance activities, as defined by 40 C.F.R. § 763 Subpart E, Appendix C, and major fiber release episodes; and/or
  - b. discharges other such related activities.
19. "Authorized asbestos disposal facility" means a location approved for handling asbestos waste by the Rhode Island Department of Environmental Management or by an equivalent regulatory agency if the material is disposed of outside the state of Rhode Island.
20. "Auxiliary work" means work activity which does not directly involve the performance of an asbestos abatement project but may, in the process of assisting in the performance of that project, disturb or cause exposure to asbestos or asbestos-containing materials.
21. "Category I nonfriable asbestos containing material" means any ACM in the form of packings, gaskets, resilient floor covering, and asphalt roofing products.
22. "Category II nonfriable asbestos containing material" means any ACM, excluding Category I nonfriable ACM, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
23. "Clean room" means an uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective equipment.

24. "Competent person" means a designated public employee, designated public maintenance person, maintenance worker in the private sector, teacher and/or parent representative certified under the provision of § 1.19 of this Part.
25. "Cutting" means penetrating with a sharp-edged instrument. This term also includes sawing, but does not include shearing, slicing, or punching.
26. "Demolition" means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility (see also: Structural Member).
27. "Department" means the Rhode Island Department of Health.
28. "Emergency asbestos abatement project" means any Asbestos Abatement Project which was not planned but results from a sudden, unexpected event. This includes operations required by non-routine failures of equipment.
29. "Emergency renovation operation" means a renovation operation that was not planned but:
  - a. results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard;
  - b. is necessary to protect equipment from damage; or
  - c. is necessary to avoid imposing an unreasonable financial burden.
  - d. This term also includes operations necessitated by nonroutine failures of equipment.
30. "Encapsulation" means the application of an encapsulant to asbestos containing materials to control the release of asbestos fibers into the air. The encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant). [c.f. also: Removal Encapsulant]
31. "EPA" means the U.S. Environmental Protection Agency.
32. "Equipment room" means a contaminated area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.

33. "Facility" means any institutional, commercial, public or industrial structure, installation or building. For compliance with § 1.24 of this Part, this definition also includes any ship and any structure, installation, or building containing condominiums or individual units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units. For the purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation, or building that was previously subject to either the NESHAP regulations 40 C.F.R. § 61, Subpart M incorporated by reference at § 1.2(N) of this Part, or this Part is not excluded, regardless of its current use or function. This term does not include a private residence as defined in the Act.
34. "Facility component" means any part of a facility including equipment.
35. "Friable asbestos material" means any ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.
36. "Glove bag" means a sealed compartment with attached inner gloves used for the handling of asbestos containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations.
37. "Grinding" means reducing to powder or small fragments. This term also includes mechanical chipping or drilling.
38. "HVAC" means heating, ventilation and air conditioning system.
39. "HEPA filtration" means high efficiency particulate air filtration found in respirators and vacuum systems capable of filtering 0.3-micron particles with 99.97% efficiency, for use in asbestos contaminated environments.
40. "High priority areas" means those areas of a building which are used or occupied by a high percentage of the building population on a regular basis. Such areas include classrooms, cafeterias, gymnasiums, offices, places of assembly, work stations, corridors, lobbies, restrooms, and others that may be determined by the Director of Health.
41. "High priority building" means a child inhabited or child frequented structure either privately or publicly owned. This category shall include, but not be limited to, public and parochial schools (Grades Pre-K to 12), day care centers, nurseries, acute or chronic children's hospitals (or wardrooms thereof) as otherwise defined by the National Building Code Use Groups E, B and I. Private residences used for the above purposes

and housing or occupied by ten (10) children or less are excluded from this group.

42. "Homogeneous material" means asbestos containing material having a similar distribution of mineralogical types of asbestos and approximately the same percentages of each type throughout.
43. "Individual" means any human being.
44. "Industrial hygiene consultant" means an individual who provides industrial hygiene services in one or more of the following categories: Collection of Air Samples; Compliance Monitoring of Asbestos Abatement/Management Plans; and/or Respiratory Protection Programs.
45. "In poor condition" means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.
46. "Installation" means any building or structure or any groups of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).
47. "Intermediate priority building" means public buildings, other than those in the high and low priority groups, which are designated within the National Building Code Use Groups as follows: Places of public assembly (Group A); structures occupied by adult inmates and/or patients, and state employees (Group I); colleges, hospitals, and auditoriums (Group I); and occupied places of employment (Group F). Also included are private buildings which are: private colleges, hospitals, banks, and other business, industrial, educational and mercantile institutions (Groups M, H, I, R1 and R2) including, but not limited to, hotels, motels, multi-family dwellings and places of employment with more than ten (10) employees.
48. "Leak-tight" means solids or liquids cannot escape or spill out. This term also means dust-tight.
49. "License" means the permit issued by the Department to allow an Asbestos Contractor to engage in asbestos abatement projects.
50. "Low priority areas" means those areas of a building which are used or occupied by a small fraction of the building population or very infrequently used. Such areas include general access storage rooms and manned boiler rooms unless these areas supply ventilation air to other parts of the building, in which case they would be classed according to the areas served by the ventilation air. These are areas where exposure to asbestos



would be limited to a small number of people and where a reasonable course of action would be educating occupants or users of these areas in proper prevention and safety techniques.

51. "Low priority building" means public or private buildings which are not in the other groups and which are infrequently used or closed, or abandoned or scheduled for same in the immediate future and those structures which are private residences (Groups S, R3 and 4).
52. "Major fiber release episode" means the falling or dislodging of greater than three (3) square or linear feet of friable ACM.
53. "Minor fiber release episode" means the falling or dislodging of three (3) square or linear feet or less of friable ACM.
54. "NESHAP" means the National Emission Standards for Hazardous Air Pollutants.
55. "NIOSH" means the National Institute for Occupational Safety and Health.
56. "Nonfriable asbestos containing material" means any ACM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
57. "Nonscheduled renovation operation" means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.
58. "Outside air" means the air outside buildings and structures including, but not limited to, the air under a bridge or in an open-air ferry dock.
59. "Owner" means the person or entity having legal title to property and/or buildings. For purposes of publicly owned property only, the owner shall be defined to be the chief executive officer of the state or municipal agency which owns, leases or controls the use of the property.
60. "Owner or operator of a demolition or renovation activity" means any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.
61. "OSHA" means the Occupational Health and Safety Administration of the U.S. Department of Labor.

62. "Particulate asbestos material" means finely divided particles of asbestos or material containing asbestos.
63. "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this State, and other State or political subdivision or agency thereof, and the legal successor, representative, agent or agency of the foregoing.
64. "Planned asbestos abatement project" means an asbestos abatement project or many such projects in which the amount of asbestos containing material to be removed, stripped or otherwise disturbed within a given period can be predicted. Individual, non-scheduled abatements are included if many such operations can be predicted to occur during a given period based on operating experiences.
65. "Planned renovation operations" means a renovation operation, or many such operations, in which some RACM will be removed or stripped within a given period and that can be predicted. Individual nonscheduled operations are included if many such operations can be predicted to occur during a given period based on operating experience.
66. "Private residence" means any structure which is designated within National Building Code Use Groups R3 or R4.
67. "Regulated asbestos containing material" or "RACM" means:
- a. Friable asbestos material;
  - b. Category I nonfriable ACM that has become friable;
  - c. Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or
  - d. Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during the demolition or renovation operations regulated by this Part.
68. "Removal" means the taking out of RACM or facility components that contain, or are covered with, RACM from any facility.
69. "Removal encapsulant" means a penetrating encapsulant specifically designed for use in removal of asbestos containing material rather than for permanent encapsulation.

70. "Renovation" means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.
71. "Repair" means the restoration of asbestos containing insulation that has been damaged, usually located on pipes, boilers, tanks, turbines, ducts or other facility components. Repair usually consists of the application of duct tape, rewettable glass cloth, canvas, cement or other suitable material to seal exposed areas where asbestos fibers may be released. Repair of previously encapsulated asbestos containing materials may involve filling damaged areas with non-asbestos substitutes and re-encapsulating. Repair of enclosures around asbestos containing materials is also included in this category of abatement.
72. "Restricted use areas" means those areas of a building which have infrequent occupancy such as unmanned boiler rooms, mechanical rooms, electrical rooms and secured storage rooms unless those areas supply ventilation air to the other parts of the building, in which case they would be classed according to the areas served by the ventilation air.
73. "Resilient floor covering" means Asbestos containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than one (1%) percent asbestos as determined using the methods specified in Appendix A, Subpart F, 40 C.F.R. Part 763, Section 1, Polarized Light Microscopy or any other method approved by the EPA for this type of analysis.
74. "Shower room" means a room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination.
75. "Spot repair" means any removal, repair, encapsulation, enclosure or other disturbance which encompasses:
- a. up to ten (10) linear feet of asbestos from piping and/or
  - b. up to twenty-five (25) square feet of asbestos from any surfaces other than pipes. Large project divided into smaller segments are not Spot Repairs.
76. "Strip" means to take off RACM from any part of a facility or facility components.

- 77. "Structural component " means any pipe, duct, boiler, tank, reactor, turbine or furnace at or in a facility or any structural member of a facility. (see also: Structural Member)
- 78. "Structural member " means any load-supporting member of a facility, such as beams and load-supporting walls or any non-load-supporting member, such as ceilings and non-load-supporting walls.
- 79. "Structure" means a whole facility, building or a major portion thereof, such as a building wing.
- 80. "Visible emissions" means any emissions, which are visually detectable without the aid of instruments, coming from RACM or Asbestos Containing Waste Material.
- 81. "Waste generator" means any owner or operator of a facility covered by this Part whose act or process produces Asbestos Containing Waste Material.
- 82. "Waste shipment record" means the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of Asbestos Containing Waste Material.
- 83. "Wet cleaning" means the process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops or other cleaning utensils which have been dampened with amended water or diluted removal encapsulant and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.
- 84. "Wet methods, wetted or wetting agents" means the use of amended water or removal encapsulants to control fiber release from asbestos containing materials.
- 85. "Working day" means Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

## **1.4 GENERAL PROVISIONS**

### **1.4.1 Exemptions, Variance and Practices and Procedures**

- A. The requirements for licensing and the submission of an asbestos abatement plan shall not apply to the performance of spot repairs.
- B. The requirements for licensing and the submission of an asbestos abatement plan shall not apply to private residences as defined in this Part.

C. Variance Procedures

1. The Department may grant a variance, either upon its own motion or upon request of the applicant, from the provisions of any rule or regulation in a specific case if it finds that a literal enforcement of such provision will result in unnecessary hardship to the applicant and that such a variance will not be contrary to the public interest, public health and/or health and safety of the public.
2. A request for a variance shall be filed by an applicant in writing, setting forth in detail the basis upon which the request is made. Upon filing of each request for a variance with the Department, and within thirty (30) days thereafter, the Department shall notify the applicant by certified mail of its approval, or in the case of a denial, a hearing date, time and place may be scheduled if the applicant appeals the denial and in accordance with the provisions of § 1.4.1(D) of this Part.

D. Rules Governing Practices and Procedures

All hearings and reviews required under the provisions of R.I. Gen. Laws Chapter 23-24.5 shall be held in accordance with the provisions of the rules and regulations governing the Practices and Procedures Before the Rhode Island Department of Health (Part 10-05-4 of this Title).

**1.4.2 Prohibitions**

- A. No asbestos abatement project shall be undertaken unless the Asbestos Contractor is licensed with the Department and an asbestos abatement plan has been approved by the Department.
- B. No on-site work for an approved asbestos abatement project may be conducted unless at least one of the Asbestos Contractor's licensed Asbestos Supervisors and an individual certified by the American Red Cross (or equivalent) in Cardio-Pulmonary Resuscitation and basic first-aid are physically present on the job site.
- C. No owner shall allow any person to be exposed to friable asbestos materials when such exposure is a violation of the provisions of the Act, this Part or the indoor non-occupational air exposure standard defined in § 1.5 of this Part.
- D. No building or demolition permit involving asbestos abatement shall be issued by any municipal or state official unless the application for the permit includes a certified copy of an approved abatement plan and a certified copy of the license of the Asbestos Contractor who shall undertake the work.

- E. Individuals certified only for spot repairs in accordance with § 1.19 of this Part shall not undertake any asbestos abatement project which is:
  - 1. Larger than the size limits for a Spot Repair as defined by this Part; or
  - 2. In buildings other than those specifically authorized on their Certification.

#### **1.4.3 Closing of Buildings**

- A. The Director of Health may prohibit and/or limit access to any building or portion of a building in which the Director, after notice and hearing, has found to contain friable asbestos in such condition or amount that there exists a public health danger. Access to such areas shall be limited to individuals designated as competent persons for said area or certified as consultants in accordance with § 1.21 of this Part.
- B. No building or portion thereof to which access has been prohibited and/or limited in accordance with the provisions of § 1.3.3(A) of this Part above shall be reopened to unlimited access until the Director of Health issues a reoccupancy permit.

### **1.5 INDOOR NON-OCCUPATIONAL AIR EXPOSURE STANDARD**

For the purposes of this Part, the Indoor Non-Occupational Air Exposure Standard for asbestos exposure shall be 0.01 fibers per cubic centimeter (f/cc) for fibers greater than five (5) microns in length as measured by OSHA-NIOSH phase contrast optical microscopic methods and calculated as an eight (8) hour time weighted average (or 300 nanograms per cubic meter).

### **1.6 SUBMISSION OF ASBESTOS ABATEMENT PLANS**

#### **1.6.1 General Requirements**

- A. Any building owner who intends to conduct an asbestos abatement project, except for spot repairs as defined in this Part, must submit an asbestos abatement plan in compliance with the requirements of § 1.17 of this Part and must not proceed with said project until written approval of said plan has been received from the Department.
- B. Any building owner who is notified that the results of a Department evaluation conducted in accordance with § 1.22 of this Part indicate that an asbestos abatement plan is required shall submit said plan to the Department within one hundred twenty (120) days of receipt of said notice.

- C. In addition to the requirements of § 1.22 of this Part, any building owner who is notified that areas have received an Asbestos Hazard Rating greater than ninety (90) shall, within ten (10) days of receipt of said notice, submit to the Department the immediate corrective action(s) to be taken, as well as an Interim Operations and Maintenance Plan in accordance with §§ 1.17(B) and (C) of this Part.

### **1.6.2 Emergency Asbestos Abatement Projects**

- A. The work procedures contained in § 1.14 of this Part will apply to all Emergency Asbestos Abatement Projects unless specific alternative procedures have been approved by the Department.
- B. A building owner shall contact the Department in advance for permission to conduct an Emergency Asbestos Abatement Project in the absence of an approved asbestos abatement plan. Ordinarily permission will be granted only to prevent personnel injury or property damage. However, if the emergency is of such a nature that immediate action is deemed essential, the building owner may proceed to resolve the emergency in the most expeditious manner possible. Nevertheless, all asbestos abatement that is beyond the scope of Spot Repairs, as defined by this Part, must be performed by a licensed asbestos contractor. The building owner shall notify the Department no later than one (1) working day following the beginning of an emergency asbestos abatement project and confirm the name and license number of the Asbestos Contractor, the amount of asbestos containing material involved and the expected length of the abatement project. Within ten (10) working days of completing the project, the building owner shall submit a written report to the Department which includes as a minimum: a narrative description of the area(s) abated, including the type and quantity of asbestos containing material; annotated blueprint(s), floorplan(s) or other engineering drawing(s) which show the location(s) of abated and remaining asbestos containing material; specific work procedures followed during the abatement process; copies of the results of clearance air testing; copies of disposal receipts for all asbestos that was removed; and any other information specifically requested by the Department.
- C. Removal of asbestos containing material from a building ordered demolished by a municipal building official in accordance with R.I. Gen. Laws § 23-27.3-125.5 may be handled as an Emergency Asbestos Abatement Project under the following conditions:
  - 1. All asbestos abatement work is performed by a licensed Asbestos Contractor under the provisions of an Asbestos Abatement Plan previously approved for the demolition of unsafe structures in the jurisdiction of the municipal building official ordering the demolition;

2. The licensed Asbestos Contractor complies with the provisions of §§ 1.6.2(A) and (B) of this Part;
3. The Asbestos Contractor provides the Department with all project specific information required by the approval letter for the previously approved Asbestos Abatement Plan; and
4. All asbestos containing material is removed from the building prior to its demolition.

## **1.7 LICENSING OF ASBESTOS CONTRACTORS, ASBESTOS SUPERVISORS, AND ASBESTOS WORKERS**

### **1.7.1 General Licensing Requirement**

No person shall engage in any asbestos abatement project at a facility unless he or she is licensed to do so by the Department under the provisions of this § 1.7 of this Part.

### **1.7.2 Applicability**

- A. The licensing requirements of § 1.7 of this Part apply to all Asbestos Contractors, as defined in this Part, and each of their Asbestos Supervisors and Asbestos Workers.
- B. Persons who perform only spot repairs are exempted from the licensing requirement contained in § 1.7.2(A) of this Part. However, persons performing spot repairs must be certified in accordance with § 1.19 of this Part.

### **1.7.3 License Application**

- A. To apply for a license, an Asbestos Contractor, Asbestos Supervisor, or Asbestos Worker shall submit a completed application to the Department on forms provided by the Department. The application shall include all information required by the Act, as well as by the form and accompanying instructions.
- B. The Department may at any time after the filing of the original application require further information to enable the Department to determine whether the application should be approved or denied.
- C. Each application for an Asbestos Contractor License shall be signed by the applicant or a person duly authorized to act on behalf of the applicant. Each application for an Asbestos Supervisor or Asbestos Worker License shall be signed by the applicant. All applications shall include a certification by the applicant that his or her License or other authorization to perform asbestos



abatement work has not been suspended or revoked by any other state and that no enforcement actions by any state or federal agency are pending against the applicant.

#### **1.7.4 License Fees and Issuance/Renewal of Licenses**

##### **A. Asbestos Contractors**

1. Pursuant to the provisions of R.I. Gen. Laws § 23-24.5-12(h), the Department shall grant a license to an Asbestos Contractor who meets the licensure requirements set forth in this Part, and upon submission of the licensure fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). Said license shall expire two (2) years from the date of issuance, unless sooner suspended or revoked. Said license may be renewed every two (2) years in accordance with the provisions of § 1.7.8 of this Part and upon payment of the licensure renewal fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).

##### **B. Asbestos Supervisors**

1. Pursuant to the provisions of R.I. Gen. Laws § 23-24.5-12(h), the Department shall grant a license for an Asbestos Supervisor, provided said Asbestos Supervisor meets the licensure requirements set forth in this Part, and upon submission of the licensure fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). Said license shall expire one (1) year from the date of issuance, unless sooner suspended or revoked. Said license may be renewed annually in accordance with the provisions of § 1.7.8 of this Part, upon documentation of compliance with the requirements of § 1.9.1 of this Part, and upon payment of the licensure renewal fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).

##### **C. Asbestos Workers**

1. Pursuant to the provisions of R.I. Gen. Laws § 23-24.5-12(e), the Department shall grant a license for an Asbestos Worker provided said Asbestos Worker meets the licensure requirements set forth in this Part,

and upon submission of the licensure fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). Said license shall expire one (1) year from the date of issuance, unless sooner suspended or revoked. Said license may be renewed annually in accordance with the provisions of § 1.7.8 of this Part, upon documentation of compliance with the requirements of § 1.9.1 of this Part, and upon payment of the licensure renewal fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).

- D. No license shall be issued or renewed until the correct application fee has been remitted. Fees will not be prorated for a period less than the full term of a license.

#### **1.7.5 Denial of Applications**

- A. The Department may deny an application if it determines that the applicant has not demonstrated the ability to comply fully with applicable requirements established by the Act and/or by this Part.
- B. An applicant whose application is denied may request a hearing in accordance with the rules and regulations pertaining to Practices and Procedures Before the Department of Health (Part 10-05-4 of this Title).

#### **1.7.6 Suspension or Revocation of a License and/or Imposition of Civil Penalties**

The Department may, for cause or for violation of this Part, suspend or revoke any license issued under § 1.7 of this Part and/or impose administrative fines in accordance with the Act.

#### **1.7.7 Replacement of Lost or Damaged License**

Application for replacement of a lost or damaged Abatement Supervisor or Abatement Worker License must be made by the licensed individual and must be accompanied by the fee required in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).

#### **1.7.8 Renewal of a License**

Requests for renewal of licenses issued under § 1.7 of this Part must contain all the information requested by § 1.7.3 of this Part without reference to any previously submitted material.

### **1.7.9 Additional Requirements**

The Department may, by rule, regulations, or order, impose upon any licensee such requirements in addition to those established in this Part as it deems appropriate or necessary to minimize danger to public health and safety or property.

### **1.7.10 Communications**

All communications and reports concerning this Part, and applications filed thereunder, should be addressed to the Department at its office located at:

Rhode Island Department of Health

Center for Healthy Homes and Environment

206 Cannon Building Three Capitol Hill

Providence, RI 02908-5097

## **1.8 LICENSEE RECORDKEEPING AND NOTIFICATION**

### **1.8.1 Notification of Asbestos Abatement Projects**

- A. A licensed Asbestos Contractor shall utilize the most current revision of the Department's Form ASB-22 to notify the Department in writing at least ten (10) working days before beginning any on-site work at a planned asbestos abatement project. A licensed Asbestos Contractor may not submit this notification until the building owner has received notification of Department approval for the planned asbestos abatement project. Delivery of the notice by email, facsimile, U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.
- B. A licensed Asbestos Contractor or Asbestos Supervisor shall also notify the Department by telephone when they begin on-site preparation for an approved asbestos abatement project.
- C. In accordance with the provisions of R.I. Gen. Laws § 23-28.4-6.1, a licensed Asbestos Contractor shall also notify the local firefighting authorities, in writing, prior to initiating any activity in conjunction with an approved asbestos abatement project.

- D. The written notice required by § 1.8.1(A) of this Part above shall be updated as necessary, including when the amount of asbestos changes by at least twenty (20) percent.
- E. If an Asbestos Abatement Project will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department as follows:
  - 1. When the Asbestos Abatement Project will begin after the date contained in the notice:
    - a. Notify the Department of the new start date by telephone as soon as possible before the original start date; and
    - b. Provide the Department with a written notice of the new start date as soon as possible before, and no later than, the original start date.
  - 2. When the Asbestos Abatement Project will begin on a date earlier than the original start date, provide the Department with a written notice of the new start date at least ten (10) working days before the Asbestos Abatement Project begins.
  - 3. In no event shall an Asbestos Abatement Project begin on a date other than the date contained in the written notice of the new start date.

### **1.8.2 Retention of Records**

Each licensed Asbestos Contractor shall maintain records of all asbestos abatement projects which it performs and shall make these records available to the Department upon request. The Asbestos Contractor shall retain the records until the Department authorizes their disposition.

### **1.8.3 Required Records**

- A. The Asbestos Contractor shall maintain the following information for each asbestos abatement project at the project site for the duration of the project:
  - 1. The name, address and license number of each Asbestos Supervisor and Asbestos Worker utilized on the project.
  - 2. A complete copy of the approved asbestos abatement plan for the project, including all amendments.
  - 3. Starting and completion dates If completion date differs from that originally scheduled, a statement of reasons for the change must be included.

4. Documentation of compliance with all applicable regulatory requirements. (e.g., Copies of workers' medical monitoring and results of respirator fit testing.)
5. Copies of any correspondence with regulatory agencies concerning the project (e.g. building or demolition permits, notices of violation, etc.).
6. Receipts and/or manifests indicating the date(s) and amount(s) of ACM removed from the abatement project site for disposal, as well as the location(s) to which the ACM has been removed and/or the agent(s) to whom the ACM was transferred.
7. The methodology and results of all air sampling conducted by the Asbestos Contractor during the abatement process. The results of all air sampling required by OSHA 29 C.F.R. § 1926.1101(f) incorporated by reference at § 1.2(A) of this Part shall be maintained in accordance with OSHA 29 C.F.R. § 1926.1101(n) incorporated by reference at § 1.2(A) of this Part.
8. Documentation of current required annual review training for all Asbestos Supervisor(s) and Asbestos Worker(s) utilized on the Asbestos Abatement Project, as well as a list of any other agents working for the Asbestos Contractor.
9. A log of control of access to the work areas.
10. A current copy of this Part.
11. Documentation of adequacy of compressed air systems/respiratory protection systems. This documentation must include a list of compatible components. The maximum number of respirators that may be used with the system and the types of respirators that may be used shall be specified.
12. Copies of the procedures for the utilization of the decontamination enclosure system and/or any other procedures which have been established to prevent contamination of areas outside the work area.
13. Copies of procedures to be followed during medical emergencies, including phone numbers of the nearest hospital and/or rescue squad that will accept individuals with potential asbestos contamination. A 24-hour Emergency Contact Number for the Asbestos Contractor must be posted on site at all times.

14. Asbestos Supervisor and Asbestos Worker licenses must be worn or prominently posted at the project site whenever the licensed individual is being utilized in conjunction with an Asbestos Abatement Project.

## **1.9 LICENSEE TRAINING REQUIREMENTS**

### **1.9.1 General Training Requirement**

- A. Licensed Asbestos Contractors shall not allow any Asbestos Worker or Asbestos Supervisor to participate in asbestos abatement projects until the initial training requirement contained in § 1.9.2 of this Part has been satisfied. The criteria for successful completion of a required training course must include obtaining a passing score on the final course examination, unless the certified training course has been specifically authorized in writing by the Department to use an alternative method of determining successful completion.
- B. Asbestos Workers and Asbestos Supervisors may not continue to work beyond the anniversary of their initial training or last annual review course until a current annual review course has been completed.
- C. Asbestos Contractors shall satisfy the training requirement either by utilizing certified courses offered by outside agents or by establishing an in-house training program and submitting it for certification in accordance with the procedures contained in § 1.18 of this Part.
- D. The Asbestos Contractor shall ensure that personnel designated as Asbestos Supervisor also successfully complete a certified initial training course of at least eight (8) hours duration (exclusive of lunch and break times) as outlined in § 1.9.3 of this Part.
- E. The Asbestos Contractor shall ensure that Asbestos Workers and Asbestos Supervisors successfully complete a certified annual review course of at least eight (8) hours duration (exclusive of lunch and break times) as outlined in § 1.9.4 of this Part.

### **1.9.2 Certification of Training**

Requirements for certification of training courses shall be those contained in § 1.18 of this Part.

### **1.9.3 Content of Initial Training Courses**

- A. The initial training course shall provide, at a minimum, information on the following topics:

1. The physical characteristics of asbestos including fiber size, aerodynamic characteristics and physical appearance;
2. The health hazards of asbestos including, the nature of asbestos related diseases, routes of exposure, dose response relationships, synergism between cigarette smoking and asbestos exposure, latency period for disease and health basis for standards;
3. Asbestos Worker personal protective equipment including: the classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance and storage procedures; methods for field testing of the facepiece-to-face seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g. facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage and handling of launderable clothing, non-slip footwear, gloves, eye protection and hard hats;
4. Medical monitoring procedures and requirements included under OSHA 29 C.F.R. § 1926.1101 incorporated by reference at § 1.2(A) of this Part and 29 C.F.R. § 1910.134 incorporated by reference at § 1.2(C) of this Part, additional recommended procedures and tests, benefits of medical monitoring and employee access to records;
5. Air monitoring procedures and requirements included under OSHA 29 C.F.R. § 1926.1101 incorporated by reference at § 1.2(A) of this Part including a description of equipment and methods, reasons for air monitoring, types of samples and current standards with proposed changes;
6. Additional safety hazards that may be encountered during asbestos abatement activities and how to deal with them including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards, scaffold and ladder hazards, slips, trips and falls, confined spaces and noise;
7. Personal hygiene including entry and exit procedures for the work area, use of showers and prohibition of eating, drinking, smoking and chewing (gum or tobacco) in the work area;
8. State-of-the-art work practices for asbestos abatement activities including purpose, proper construction and maintenance of barriers and decontamination enclosure systems, posting of warning signs, electrical

and ventilation system lock-out, proper working techniques for minimizing fiber release, use of wet methods and surfactants, use of negative pressure ventilation equipment, use of HEPA vacuums and proper clean-up and disposal procedures. Work practice requirements as they apply to removal, repair, enclosure and encapsulation shall be discussed individually; and

9. The requirements, procedures and standards established by OSHA, EPA and the provisions of the Act and this Part.

B. In addition to the training specified in § 1.9.3(A) of this Part, individuals designated as Asbestos Supervisors shall also receive at least six (6) hours of additional training (exclusive of lunch and break times) which shall provide, at a minimum, information on the following topics:

1. Legal responsibilities and potential liabilities of various parties including, but not limited to, contractors, licensees, employers, employees, building owners and suppliers;
2. Insurance and bonding;
3. Establishing a medical surveillance program in accordance with OSHA 29 C.F.R. § 1926.1101 incorporated by reference at § 1.2(A) of this Part;
4. Rhode Island Department of Health, EPA, and OSHA recordkeeping requirements;
5. How to supervise effectively;
6. Additional emphasis on work practices, including purpose, proper construction and maintenance of barriers and decontamination systems, posting of warning signs, electrical and ventilation system lock-out, proper working techniques for minimizing fiber release, use of wet methods and surfactants, use of negative pressure ventilation equipment, use and maintenance of HEPA vacuums, proper clean-up and disposal procedures; and
7. Key elements of contract specifications.

#### **1.9.4 Content of Annual Training Courses**

The yearly review course shall consist of at least eight (8) hours of instruction and shall provide, at a minimum, an adequate review of the topics outlined in § 1.9.3 of this Part, updated information on state-of-the-art procedures and



equipment and reviews of regulatory changes and interpretations. Specific topic coverage may be requested by the Department.

## **1.10 LICENSEE RESPIRATORY PROTECTION**

### **1.10.1 General Requirement**

All license applications from Asbestos Contractors shall include a written respiratory protection program in accordance with the requirements of OSHA 29 C.F.R. § 1910.134(c) incorporated by reference at § 1.2(C) of this Part and 29 C.F.R. § 1926.1101(h) incorporated by reference at § 1.2(A) of this Part. This program shall be posted at all projects requiring asbestos abatement activities over more than a single day.

### **1.10.2 Selection Requirements**

Respirators shall be selected that meet the level of protection requirements contained in OSHA 29 C.F.R. § 1926.1101(h) incorporated by reference at § 1.2(A) of this Part and shall be utilized in accordance with OSHA 29 C.F.R. § 1910.134 incorporated by reference at § 1.2(C) of this Part.

### **1.10.3 Fitting of Respirators**

- A. Each Asbestos Supervisor and Asbestos Worker shall be given an opportunity to try on a variety of respirator styles and sizes and to select a respirator for comfortable fit.
- B. Each Asbestos Supervisor and Asbestos Worker shall be instructed in the performance of positive and negative pressure fit checks and be able to successfully perform them.
- C. Each Asbestos Supervisor and Asbestos Worker shall be fit tested using generally acceptable quantitative fit testing methods or by qualitative fit testing procedures as detailed in the OSHA Construction Industry Standard, 29 C.F.R. § 1910.134 Appendix A incorporated by reference at § 1.2(C) of this Part, and adequately pass the selected fit test procedure.
- D. Asbestos Supervisors and Asbestos Workers shall be provided with the brand name and model number of respirators that they have been fitted for and are trained to use.

### **1.10.4 Prohibited Activity**

- A. No Asbestos Supervisor, Asbestos Worker, or agent shall be permitted in the work area without the respiratory protection required for the level of exposure in

the workplace. This requirement shall be strictly enforced by the Asbestos Contractor.

- B. No personnel with beards, long sideburns or other physical characteristics which interfere with negative pressure respirator faceplate-to-face seal shall be permitted in the work area when respiratory protection is required by the level of exposure.

## **1.11 PROTECTIVE CLOTHING**

Each Asbestos Supervisor and Asbestos Worker shall be provided with personal protective equipment and clothing in accordance with OSHA 29 C.F.R. § 1926.1101(i) incorporated by reference at § 1.2(A) of this Part.

## **1.12 MEDICAL MONITORING**

- A. General Requirement

Asbestos Contractors must ensure that any Asbestos Supervisor, Asbestos Worker or agent who may be exposed to airborne asbestos is medically monitored in accordance with the requirements of OSHA 29 C.F.R. § 1926.1101(m) incorporated by reference at § 1.2(A) of this Part, prior to engaging in any asbestos abatement activity. Monitoring shall include, at a minimum, those elements required by OSHA 29 C.F.R. § 1926.1101(m)(2)(ii) incorporated by reference at § 1.2(A) of this Part.

- B. Asbestos Supervisors and Asbestos Workers must also be given an opportunity to be evaluated by a physician to determine their capability to safely work while breathing through the added resistance of a respirator. Examining physicians should be made aware of the nature of respiratory protective hazards and knowledgeable about the specific types of respirators the Asbestos Supervisor or Asbestos Worker shall be required to wear and the work he will be required to perform. They should also be advised as to special hazards that may exist in the work place (e.g. high temperatures, toxic contaminants).
- C. Chest X-rays shall be taken by a Registered Radiological Technologist and interpreted in accordance with OSHA 29 C.F.R. § 1926.1101 Appendix E incorporated by reference at § 1.2(A) of this Part.
- D. Pulmonary function testing shall be conducted by a NIOSH Certified Pulmonary Technician or other health professional with training in pulmonary function testing.

## **1.13 WORKER AIR MONITORING**

The Asbestos Contractor must provide representative air monitoring, in accordance with OSHA 29 C.F.R. § 1926.1101(f) incorporated by reference at § 1.2(A) of this Part, for Asbestos Supervisors and Asbestos Workers during asbestos abatement activities. Affected Asbestos Supervisors, Asbestos Workers, and agents of the Asbestos Contractor must be notified of the results of air monitoring in accordance with OSHA 29 C.F.R. § 1926.1101(f)(5) incorporated by reference at § 1.2(A) of this Part.

## **1.14 WORK PRACTICE REQUIREMENTS**

### **1.14.1 Applicability**

Any Asbestos Contractor that engages in any Asbestos Abatement Project that involves greater than ten (10) linear feet (three (3) meters) of pipe covered or coated with asbestos containing material or twenty five (25) square feet (three (3) square meters) of asbestos containing material used to cover or coat any surface other than pipe shall comply with the work practices contained in § 1.14 of this Part and any additional work practice requirements contained in the asbestos abatement plan approved for that project by the Director of Health. Specific requirements for Category I and Category II Nonfriable ACM that is not Regulated Asbestos Containing Material (RACM) are contained in §§ 1.14.8 through 1.14.10 of this Part.

### **1.14.2 General Requirements for Removal, Encapsulation and/or Enclosure of Regulated Asbestos Containing Material (RACM)**

- A. Barriers to isolate contaminated from uncontaminated areas shall be constructed of polyethylene sheeting attached securely in place.
- B. All surfaces shall be wet cleaned of dust or debris. Wet cleaning of contaminated items shall be performed if necessary. All movable objects shall be removed from the work area. All nonmovable objects in the work area shall be covered with 6-mil polyethylene sheeting secured in place. All openings or penetrations between the work area and uncontaminated areas shall be sealed, including windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers and skylights.
- C. Floor sheeting shall consist of two (2) layers of 6-mil polyethylene sheeting. Floor sheeting shall extend up sidewalls at least twelve (12) inches and be sized to minimize seams. No seams shall be located at wall/floor joints. Floors being abated of resilient floor coverings and associated mastics/adhesives shall be exempt from this requirement.

- D. Wall sheeting shall consist of two (2) layers of 4-mil polyethylene sheeting. It shall be installed to minimize joints and shall extend beyond wall/floor joint at least twelve (12) inches. No seams shall be located at wall/wall joints.
- E. A worker decontamination enclosure system, consisting of a clean room, shower room and equipment room, each separated from each other and from the work area by airlocks and accessible through doorways protected with two (2) overlapping polyethylene sheets, shall be provided in accordance with OSHA 29 C.F.R. § 1926.1101(j) incorporated by reference at § 1.2(A) of this Part. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the work area.
- F. All HVAC equipment in or passing through the work area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape. All system filters shall be replaced after the abatement and disposed of as asbestos waste. The ventilation system ductwork interiors shall be decontaminated whenever necessary.
- G. Posting
  - 1. Warning signs in accordance with OSHA 29 C.F.R. § 1926.1101(k)(7) incorporated by reference at § 1.2(A) of this Part shall be displayed at all approaches to any location where airborne fiber levels can be expected to exceed the Indoor Non-Occupational Air Exposure Standard established by § 1.5 of this Part.
  - 2. Warning signs to advise the public of the location(s) within the building where any asbestos abatement activity is in progress shall be posted at all building entrances and at least one other conspicuous place per floor. These signs shall be of the same dimensions as the Warning/Danger signs required in § 1.14.2(G)(1) of this Part.
  - 3. Warning signs shall be posted on vehicles used to transport Asbestos Containing Waste Materials during loading and unloading of the waste.
- H. Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement. Wet cleaning shall be followed by HEPA vacuuming after surfaces have been allowed to dry. The sequence of wet cleaning and vacuuming shall be repeated at twenty-four (24) hour intervals until no visible residue is observed in the work area.
- I. Negative pressure ventilation units with HEPA filtration, in sufficient number to provide one (1) workplace air change every fifteen (15) minutes, shall be operated continuously from the time of barrier construction through the time

acceptable final clearance air-monitoring results are obtained. These units shall exhaust filtered air to the outside of the building. Filtered air shall not be exhausted to uncontaminated interior spaces.

- J. All Asbestos Containing Waste Materials shall be adequately wetted before being placed into containers for disposal.
- K. Asbestos Containing Waste Materials shall be placed in impermeable containers for disposal. Metal or fiber drums with locking-ring tops shall be used when asbestos waste contains sharp edged components. Double polyethylene bags of at least 6-mil thickness and which can be securely sealed may be used for waste. Large components or structural members may be removed intact and contained in leak-tight wrapping, equivalent to at least two (2) layers of 6-mil polyethylene sheeting, secured with tape for disposal.
- L. All containers, bags, drums and wrapped components shall be labeled so that labels have the appearance of or are constructed in accordance with USDOT 49 C.F.R. 172, Subpart E incorporated by reference at § 1.2(D) of this Part and OSHA 29 C.F.R. § 1926.1101(k)(8) incorporated by reference at § 1.2(A) of this Part. Each container, bag, drum or wrapped component shall also be labeled or tagged with the name and license number of the asbestos contractor generating the waste, as well as the asbestos abatement project number and location at which the waste was generated.
- M. Storage of asbestos waste containers awaiting transport to an authorized disposal facility shall be in a secured location to prevent access by unauthorized personnel.
- N. Transport and disposal of asbestos waste shall be in accordance with the provisions of Appendix D to 40 C.F.R. 763, Subpart E incorporated by reference at § 1.2(E) of this Part and USDOT 49 C.F.R. § 173.1300 incorporated by reference at § 1.2(F) of this Part.
- O. Disposal of Asbestos Containing Waste Materials. All Asbestos Containing Waste Materials shall be deposited as soon as is practical by the waste generator at:
  - 1. A waste disposal site operated in accordance with the provisions of 40 C.F.R. § 61.154, or equivalent regulations promulgated by a state or local NESHAP designee; or
  - 2. An EPA-approved site that converts RACM and Asbestos Containing Waste Materials into nonasbestos (asbestos-free) material according to the provisions of 40 C.F.R. § 61.155.

- P. Access to work areas shall be controlled and posting requirements shall remain in effect until compliance with the air exposure standard has been verified by procedures outlined below:
1. Samples shall be collected and analyzed in accordance with the procedures specified by NIOSH Method 7400 (most current Revision) for asbestos fibers in air or equivalent method;
  2. Air volumes shall be sufficient to accurately determine fiber concentrations to 0.01 fibers/ cubic centimeter of air (f/cc) for fibers greater than five (5) microns in length or 300 nanograms per cubic meter. A minimum air volume of 1000 liters shall be sampled;
  3. Air sampling shall be conducted in representative locations with portable fans circulating air to simulate actual use conditions;
  4. An acceptable airborne fiber concentration, as established by clearance air monitoring shall not exceed 0.01 f/cc for fibers greater than five (5) microns in length or 300 nanograms per cubic meter; and
  5. Air sampling shall be conducted by a representative of the building owner who is not subject to the control or supervision of the Asbestos Contractor for the asbestos abatement plan.
  6. Notwithstanding the requirements contained in § 1.14.2(P) of this Part above, control of access and posting requirements for buildings subject to the AHERA regulations shall remain in effect until compliance with §§ 1.17.3(A)(5) through (8) of this Part has been demonstrated.

**1.14.3 Specific Requirements for Removal of Regulated Asbestos Containing Material (RACM)**

- A. All RACM shall be adequately wetted prior to removal. In addition, all RACM exposed during cutting and disjoining operations shall be adequately wet and all RACM shall be kept adequately wet during stripping operations.
- B. Components shall be removed intact or in large sections whenever possible and carefully lowered to the floor.
- C. RACM shall be removed in small sections and containerized when adequately wet. At no time shall material be allowed to accumulate or become dry. Structural components shall be adequately wetted prior to being contained in leak-tight wrapping for disposal.

- D. Material shall not be dropped or thrown to the floor level. For materials located at heights greater than fifty (50) feet above the floor, a dust-tight, enclosed chute shall be constructed to transport removed material to containers on the floor. RACM may be dropped to a raised scaffold or containerized at elevated levels for disposal. Materials greater than fifteen (15) feet above the floor shall be dropped onto inclined chutes or scaffolding or containerized at elevated levels for eventual disposal.
- E. A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of RACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings.
- F. RACM is not required to be stripped from large facility components such as reactor vessels, large tanks, and steam generators if the following requirements are met:
  - 1. The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
  - 2. The component is encased in a leak-tight wrapping.
  - 3. The leak-tight wrapping is labeled during all loading and unloading operations and during storage.
- G. When the temperature at the point of wetting is below 0 °C (32 °F):
  - 1. The Asbestos Contractor need not comply with the wetting provisions of §§ 1.14.3(A) and (C) of this Part.
  - 2. The Asbestos Contractor shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.
  - 3. During periods when wetting operations are suspended due to freezing temperatures, the Asbestos Contractor must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Department during normal business hours at the asbestos abatement project site. The Asbestos Contractor shall retain temperature records for at least two years.

#### **1.14.4 Specific Requirements for Encapsulation of Regulated Asbestos Containing Material (RACM)**

- A. All loose and hanging RACM shall be removed in accordance with § 1.14.3 of this Part.
- B. Filler material applied to gaps in existing material shall contain no asbestos, adhere well to the substrate and provide an adequate base for the encapsulating agent.
- C. Encapsulants shall be applied using only airless spray equipment with nozzle pressure adjustable between four hundred (400) and fifteen hundred (1500) PSI and in accordance with the manufacturer's recommendations for a particular encapsulant.
- D. Encapsulated materials shall be specially designated by signs, labels, color coding or some mechanism to warn individuals who may be required to disturb the material.
- E. Encapsulants shall not be solvent-based or utilize a vehicle consisting of hydrocarbons.

#### **1.14.5 Specific Requirements for Enclosure of Regulated Asbestos Containing Material (RACM)**

- A. All areas of RACM shall be adequately wetted with wetting agents if they are to be disturbed during the installation of hangers, brackets or other portions of the enclosure.
- B. All loose and hanging RACM shall be removed in accordance with § 1.14.3 of this Part.
- C. Non-asbestos containing substitutes shall be used to patch thermal insulation and fireproofing materials when required and where appropriate.
- D. Enclosures for RACM shall be specially designated by signs, labels, color coding or some mechanism to warn individuals who may be required to disturb or enter the enclosure.

#### **1.14.6 Specific Requirements for Demolition of Structures Containing Asbestos**

- A. Any demolition of a structure or portion of a structure which contains structural members, building materials or structural components composed of or covered by RACM shall be preceded by a removal of all such materials in accordance with §§ 1.14.2 and 1.14.3 of this Part. Said removal must be completed before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. Notwithstanding the foregoing, RACM need not be removed before demolition if:



1. It is Category I nonfriable ACM that is not in poor condition and is not friable; or
  2. It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or
  3. It was not accessible for testing and was, therefore, not discovered until after demolition began and, because of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos contaminated debris must be treated as Asbestos Containing Waste Material and adequately wet at all times until disposed of; or
  4. It is Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.
- B. For Emergency Asbestos Abatement Projects described in § 1.6.2(C) of this Part, adequately wet the portion of the facility that contains RACM during the wrecking operation.
- C. If a facility is demolished by intentional burning, all RACM, including Category I and Category II nonfriable ACM, must be removed in accordance with this Part before burning.
- D. In lieu of the requirements specified in §§ 1.14.2(B), (C), (D), (F) and 1.14.3(E) of this Part, Asbestos Contractors engaging in demolition activities shall comply with the following:
1. Prior to beginning a demolition project, all doors, windows, floor drains, vents and other openings to the outside of the building and to areas within the building that do not contain asbestos materials shall be sealed off with 6-mil polyethylene sheeting and waterproof tape or equivalent acceptable to the Department.
  2. If a structure is to be partially demolished, HVAC equipment in the demolition area or passing through it but servicing areas of the building which will remain, shall be shut down and locked out and thoroughly sealed with 6-mil polyethylene sheeting and waterproof tape.
  3. If the building owner proposes not to conduct clearance air sampling following asbestos abatement activities conducted for demolition purposes, the building owner must submit written justification to the

Department which describes how personnel who must occupy the building prior to demolition will be protected.

4. All other requirements of §§ 1.14.2 and 1.14.3 of this Part, unless specified in § 1.14.6(D) of this Part, shall apply to demolition abatement activities.

#### **1.14.7 General Requirements for Use of Glove Bags During Removal and/or Encapsulation of Regulated Asbestos Containing Material (RACM)**

- A. In lieu of the requirements specified in §§ 1.14.2(A) through (F), (H), and (I) of this Part, Asbestos Contractors using glove bags during removal and/or encapsulation of RACM shall comply with the following:
  1. All glove bags must remain stationary during asbestos abatement activities. The use of moving and/or sliding glove bag techniques are prohibited.
  2. Abatement projects which do not exceed the scope of Spot Repairs, as defined by this Part, and which can be contained within one stationary glove bag may be performed in accordance with the glove bag procedures contained in 29 C.F.R. § 1926.1101(g)(5) incorporated by reference at § 1.2(A) of this Part without the use of additional containment or negative pressure ventilation. The clearance air monitoring provisions of § 1.14.2(P) of this Part are waived unless there has been a breach of the glove bag containment.
  3. All other abatement projects that involve less than two hundred and sixty (260) linear feet [eighty (80) meters] of pipe covered or coated with RACM or one hundred and sixty (160) square feet [fifteen (15) square meters] of RACM used to cover or coat any surface other than pipe shall comply with the following requirements:
    - a. All doors, windows, floor drains, vents and other openings to the outside of the building and to areas within the building that do not contain asbestos materials shall be sealed off with 6-mil polyethylene sheeting and waterproof tape or equivalent acceptable to the Department.
    - b. Floor sheeting shall consist of at least one (1) layer of 6-mil polyethylene sheeting. Floor sheeting shall be placed directly beneath the glove bag and shall extend at least ten (10) feet in all horizontal directions. If any wall is less than ten (10) feet from the glove bag, the floor sheeting shall be extended up that wall to at least the height of the glove bag.

- c. HVAC equipment in the abatement area or passing through it but servicing other areas of the building shall be shut down and locked out and thoroughly sealed with 6-mil polyethylene sheeting and waterproof tape.
  - d. Negative pressure ventilation units with HEPA filtration shall be operated continuously from the time of barrier construction through the time acceptable final clearance air-monitoring results are obtained. These units shall exhaust filtered air to the outside of the building. Filtered air shall not be exhausted to uncontaminated interior spaces.
  - e. Manufacturer's instructions concerning preparation, sealing, utilization and removal of glove bags must be followed unless the abatement plan and/or this Part specify more restrictive requirements.
  - f. A worker decontamination enclosure system must be available immediately adjacent to the abatement area. A two-chamber decontamination system may be used if shower facilities are otherwise available on the project site.
4. All abatement projects that involve more than two hundred and sixty (260) linear feet [eighty (80) meters] of pipe covered or coated with RACM or one hundred and sixty (160) square feet [fifteen (15) square meters] of RACM used to cover or coat any surface other than pipe shall comply with the following requirements:
- a. All doors, windows, floor drains, vents and other openings to the outside of the building and to areas within the building that do not contain asbestos materials shall be sealed off with 6-mil polyethylene sheeting and waterproof tape or equivalent acceptable to the Department.
  - b. Floor sheeting shall consist of at least one (1) layer of 6-mil polyethylene sheeting. Floor sheeting shall extend up sidewalls at least twelve (12) inches and be sized to minimize seams. No seams shall be located at wall/floor joints.
  - c. Wall sheeting shall consist of at least one (1) layer of 4-mil polyethylene sheeting. It shall be installed to minimize joints and shall extend from the wall/ ceiling joint to at least twelve (12) inches beyond the wall/floor joint. No seams shall be located at wall/wall joints.

- d. HVAC equipment in the abatement area or passing through it but servicing other areas of the building shall be shut down and locked out and thoroughly sealed with 6-mil polyethylene sheeting and waterproof tape.
  - e. Negative pressure ventilation units with HEPA filtration shall be operated continuously from the time of barrier construction through the time acceptable final clearance air monitoring results are obtained. These units shall exhaust filtered air to the outside of the building. Filtered air shall not be exhausted to uncontaminated interior spaces.
  - f. Manufacturer's instructions concerning preparation, sealing, utilization and removal of glove bags must be followed unless the abatement plan and/or this Part specify more restrictive requirements.
  - g. A three-chamber worker decontamination enclosure system, in accordance with 29 C.F.R. § 1926.1101(j) incorporated by reference at § 1.2(A) of this Part, must be available immediately adjacent to the abatement area.
- 5. All other requirements of §§ 1.14.2 and 1.14.3 of this Part, unless specifically deleted in § 1.14.7(A) of this Part, shall apply to use of glove bags during removal and/or encapsulation of asbestos.
- B. Any requests for additional waivers and/or alternative procedures must be submitted for Department review and approval in accordance with § 1.16 of this Part.

#### **1.14.8 Specific Requirements for Removal of Category I Nonfriable ACM - Asphalt Roofing Products**

- A. All surfaces shall be wet cleaned of dust or debris. All movable objects shall be removed from the roof area. All openings or penetrations on the roof area and at least one level below the roof area shall be sealed, including windows, doorways, drains, ducts, grills, grates, diffusers and skylights.
- B. Floor/ground sheeting shall consist of at least two (2) layers of 6-mil polyethylene sheeting and shall be utilized as follows:
  - 1. If the roof is pitched, sheeting shall be applied to the first horizontal surface below the work area and shall extend from the edge of the building to at least ten (10) feet away from the building. All material being abated shall be confined to the roof area.

2. If the roof is flat, sheeting shall extend at least ten (10) feet away from the perimeter of the work area. When the edge of the roof is less than ten (10) feet from the perimeter of the work area, sheeting shall be applied such that the outer edge of the sheeting is at least ten (10) feet from the perimeter of the work area.
- C. All HVAC intake or exhaust vents on the roof area and at least one level below the roof area shall be shut down and locked out. All intake and exhaust openings, as well as any seams in system components shall be sealed with 6-mil polyethylene sheeting and/or tape.
  - D. A minimum of a two-chambered worker decontamination enclosure system shall be provided on site. Procedures for the utilization of this system shall be established which prevent contamination of areas outside the roof area.
  - E. Warning signs shall be posted in accordance with § 1.14.2(G) of this Part.
  - F. Category I Nonfriable ACM shall be removed in small sections and containerized when wet. At no time shall material be allowed to accumulate or become dry.
  - G. Category I Nonfriable ACM shall not be dropped or thrown to the floor/ground level. For roofs at heights greater than fifty (50) feet above the floor/ground, a dust-tight, enclosed chute shall be constructed to transport removed Category I Nonfriable ACM to containers on the floor/ground. Category I Nonfriable ACM may be dropped to a raised scaffold or containerized at elevated levels for disposal.
  - H. All Category I Nonfriable ACM shall be adequately wetted before being placed into containers for disposal. Disposal shall be in accordance with §§ 1.14.2(K) through (O) of this Part.
  - I. A coating of encapsulating agent shall be applied to any porous surfaces that have been stripped of Category I Nonfriable ACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings.
  - J. Clean-up procedures using HEPA vacuuming and wet cleaning techniques shall be performed following abatement.
  - K. Personnel air monitoring of Asbestos Supervisors and Asbestos Workers, which demonstrates compliance with the provisions of OSHA 29 C.F.R. § 1926.1101(f) incorporated by reference at § 1.2(A) of this Part, may be used in lieu of the clearance air sampling requirements contained in § 1.14.2(P) of this Part.

## **1.15 WORK PRACTICE REQUIREMENTS - SPOT REMOVALS**

### **1.15.1 Applicability**

- A. Individuals performing spot repairs must be certified as a competent person in accordance with § 1.19 of this Part and shall take reasonable precautions to prevent the release of asbestos fibers to the environment. The reasonable precautions required by § 1.15.1 of this Part shall include, but are not limited to the following:
1. Barriers constructed shall be adequate to contain asbestos fibers released within the work area.
  2. Procedures shall be established to prevent asbestos contamination in all areas outside the work area(s).
  3. All asbestos containing material shall be wetted prior to removal and kept wet until containerized.
  4. HEPA vacuum equipment and wet cleaning techniques shall be used to clean up the work area following abatement until there is no visible residue.
  5. Asbestos waste shall be packaged in impermeable containers such as polyethylene sheeting, bags and/or fiber or metal drums and shall be labeled so that labels have the appearance of or are constructed in accordance with USDOT 49 C.F.R. § 172, Subpart E incorporated by reference at § 1.2(D) of this Part and OSHA 29 C.F.R. § 1926.1101 incorporated by reference at § 1.2(A) of this Part. Each container, bag, drum or wrapped component shall also be labeled or tagged with the name and license number of the asbestos contractor generating the waste, as well as the asbestos abatement project number and location at which the waste was generated.
  6. Transport and disposal of asbestos waste shall be in accordance with the provisions of Appendix D to 40 C.F.R. § 763, Subpart E incorporated by reference at § 1.2(E) of this Part and USDOT 49 C.F.R. § 173.1300 incorporated by reference at § 1.2(F) of this Part.

### **1.15.2 Documentation**

- A. Documentation of all spot repairs must be maintained with the permanent building records. This documentation shall include, at a minimum, the identity of the competent person performing the spot repair, the date the spot repair was performed, the specific location that was repaired, the methods used to perform

the spot repair, the quantity of asbestos that was involved in the spot repair and receipts for the disposal of any asbestos waste.

- B. Exposure monitoring shall be in accordance with the provisions of OSHA 29 C.F.R. § 1926.1101(f) incorporated by reference at § 1.2(A) of this Part.

## **1.16 ALTERNATIVE PROCEDURES**

The Department may, on a case-by-case basis, approve an alternative procedure for control of emissions from an asbestos abatement project provided that the building owner submits the alternative procedure to the Department in writing and demonstrates to the satisfaction of the Department that compliance with the prescribed procedures is not practical or not feasible or that the proposed alternative procedures provide equivalent control of asbestos. The Department, following its review, may approve an alternative procedure if it determines that it will minimize the emission of asbestos.

## **1.17 ABATEMENT (MANAGEMENT) PLANS AND OWNER RESPONSIBILITIES**

### **1.17.1 General Requirements**

- A. This section applies to Asbestos Abatement (Management) Plans submitted pursuant to § 1.6 of this Part. All asbestos abatement projects conducted at any facility, except for spot repairs as defined in this Part, must be conducted in accordance with an Asbestos Abatement (Management) Plan which has been submitted by the building owner and approved by the Department.
- B. Asbestos Abatement (Management) Plans shall be submitted on forms provided by the Department. Said forms shall be signed by the building owner or legally authorized agent. Consultants retained to prepare Asbestos Abatement (Management) Plans are not authorized to sign these forms.
- C. An Asbestos Abatement (Management) Plan for any school or school building subject to the AHERA regulations must be prepared by a consultant certified for the proposed scope of abatement work in accordance with §§ 1.21.2(B)(5) and/or 1.21.2(B)(6) of this Part.
- D. An Asbestos Abatement (Management) Plan for any public or private building, other than schools or school buildings subject to the AHERA regulations, must be prepared by the building owner, a full-time employee of the building owner or an Asbestos Project Designer certified in accordance with § 1.21.2(B)(5) of this Part.

### **1.17.2 Contents of an Abatement (Management) Plan**

- A. An Asbestos Abatement (Management) Plan submitted in accordance with § 1.6 of this Part must include all the information required by the forms provided by the Department.
- B. An Asbestos Abatement (Management) Plan must include an interim Operations and Maintenance Program that will be implemented until the asbestos containing material can be abated. Furthermore, any Asbestos Abatement (Management) Plan which does not include complete removal of all asbestos containing material in the area(s) being abated must also include a long-term Operations and Maintenance Program for the remaining asbestos containing material.
- C. An Operations and Maintenance Program must address, as a minimum, the following items:
  - 1. Action(s) to be taken when the monitoring program discovers asbestos containing material in need of abatement;
  - 2. Monitoring the physical conditions of the asbestos containing materials in accordance with § 1.22 of this Part, including a schedule for monitoring and methods for documentation of findings;
  - 3. Educating the building staff and occupants regarding the presence and location of asbestos containing material;
  - 4. Procedures for alerting outside service personnel and others to the presence and location of asbestos containing material, including the Warning Label provisions of 40 C.F.R. § 763.95 incorporated by reference at § 1.2(G) of this Part;
  - 5. Steps to be taken which will minimize the likelihood of asbestos fiber release. (e.g., Modification of maintenance activities, spot repairs, etc.); and
  - 6. Steps to be taken which will minimize the potential of human exposure to asbestos (e.g., Limit access to areas known to contain friable asbestos material in deteriorating condition.)

### **1.17.3 Post Abatement Requirements**

- A. Clearance Air Sampling. Clearance air sampling for all buildings subject to the AHERA regulations shall be conducted in accordance with §§ 1.17.3(A)(5) through (8) of this Part. Clearance air sampling for all other buildings shall be conducted in accordance with §§ 1.17.3(A)(1) through (4) of this Part.



1. Clearance air sampling shall be conducted and reviewed for compliance with the Indoor Non-Occupational Air Exposure Standard established by § 1.5.1 of this Part prior to dismantling the containment barriers and prior to reoccupancy of the abated area.
2. Clearance air samples shall be collected by a representative of the building owner in accordance with the requirements of § 1.14.2(P) of this Part. This representative shall be an independent agent who is not subject to the Asbestos Contractor's control or supervision. All such clearance air samples shall only be analyzed by an Asbestos Analytical Service certified for this activity in accordance with § 1.20 of this Part.
3. The building owner shall review the results of clearance air sampling prior to dismantling the containment barriers and prior to reoccupancy of the abated area. If sampling results exceed the Indoor Non-Occupational Air Exposure Standard established by § 1.5 of this Part, the area shall be recleaned in accordance with §§ 1.7 through 1.16 of this Part and the clearance air sampling shall be repeated. Cleaning and resampling shall be repeated at no less than twenty-four (24) hour intervals until the abated area follows the Indoor Non-Occupational Air Exposure Standard established by § 1.5.1 of this Part.
4. Within three (3) working days of receipt of clearance air sampling results for an abated area, the building owner shall notify the Department either by telephone or in writing of the completion of the asbestos abatement project and the results of the clearance air sampling. The building owner shall also submit to the Department a certified copy of results of all clearance air sampling conducted in the abatement area and each area adjacent to the abatement area indicating each area follows the Indoor Non-Occupational Air Exposure Standard established by § 1.5 of this Part.
5. Clearance air sampling shall be conducted in accordance with 40 C.F.R. §§ 763.90(i)(2) through (i)(8) incorporated by reference at § 1.2(H) of this Part and reviewed for compliance with the average asbestos concentration established by 40 C.F.R. §§ 763.90(i)(3) through (i)(7) incorporated by reference at § 1.2(H) of this Part prior to dismantling the containment barriers described in the approved asbestos abatement plan and prior to reoccupancy of the abated area.
6. Clearance air samples shall be collected by a representative of the building owner in accordance with the requirements of 40 C.F.R. § 763.90(i)(2) incorporated by reference at § 1.2(H) of this Part. This representative shall be an independent agent who is not subject to the Asbestos Contractor's control or supervision. All such clearance air

samples shall only be analyzed by an Asbestos Analytical Service certified for this activity in accordance with § 1.20 of this Part. Notwithstanding the preceding, the requirement to use only Department certified laboratories for samples analyzed via Transmission Electron Microscopy (TEM) is waived until the Department has established requirements for the certification of such facilities.

7. The building owner shall review the results of clearance air sampling prior to dismantling the containment barriers and prior to reoccupancy of the abated area. If sampling results exceed the average asbestos concentration established by 40 C.F.R. § 763.90(i)(3) through (i)(7) incorporated by reference at § 1.2(H) of this Part, the area shall be recleaned in accordance with §§ 1.7 through 1.16 of this Part and the clearance air sampling shall be repeated. Cleaning and resampling shall be repeated at no less than twenty-four (24) hour intervals until the abated area follows the average asbestos concentration established by 40 C.F.R. §§ 763.90(i)(3) through (i)(7).
  8. Within three (3) working days of receipt of clearance air sampling results for an abated area, the building owner shall notify the Department either by telephone or in writing of the completion of the asbestos abatement project and the results of the clearance air sampling. The building owner shall also submit to the Department a certified copy of results of all clearance air sampling conducted in the abatement area and each area adjacent to the abatement area indicating each area follows the Indoor Non-Occupational Air Exposure Standard established by § 1.5 of this Part and/or the average asbestos concentration established by 40 C.F.R. §§ 763.90(i)(3) through (i)(7) incorporated by reference at § 1.2(H) of this Part, as appropriate.
- B. Confirmation of Disposal of Asbestos. For all Asbestos Containing Waste Material transported off the Asbestos Abatement Project Site, the Asbestos Contractor shall:
1. Maintain waste shipment records, using the most current revision of Agency Form ASB-23 to provide the following information:
    - a. The name, address, and telephone number of the Asbestos Contractor.
    - b. The approximate quantity in cubic yards (cubic meters).
    - c. The name and telephone number of the disposal site operator.
    - d. The name and physical site location of the disposal site.

- e. The date transported.
  - f. The name, address, and telephone number of the transporter(s).
  - g. A certification that the contents of this consignment are fully and adequately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.
2. Provide a properly completed copy of Agency Form ASB-23 to the disposal site owners or operators at the same time as the Asbestos Containing Waste Material is delivered to the waste disposal site.
  3. Provide the building owner with the original (white) copy of Agency Form ASB-23 signed by the owner or operator of the designated disposal site. Said original copy shall be transmitted to the Department by the building owner within five (5) working days of receipt.
  4. For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the Asbestos Contractor within thirty-five (35) days of the date the waste was accepted by the initial transporter [i.e. the date the waste left the abatement project site], contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.
  5. Report in writing to the Department if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the Asbestos Contractor within forty-five (45) days of the day the waste was accepted by the initial transporter. Include in the report the following information:
    - a. A copy of the waste shipment record for which a confirmation of delivery was not received; and
    - b. A cover letter signed by the Asbestos Contractor explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.
  6. Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least two (2) years.

#### **1.17.4 Revocation of Department Approval for an Asbestos Abatement (Management) Plan**

- A. The Department may revoke any Asbestos Abatement (Management) Plan approval issued pursuant to this Part if the granting of said approval was based upon statements which prove to be false or based on misrepresentation of fact.
- B. Any aggrieved party shall have the right to a hearing on any such revocation. Said request for a hearing shall be in writing and shall be made within ten (10) days of notification of said revocation.

#### **1.17.5 Expiration of Department Approval for an Asbestos Abatement (Management) Plan**

- A. An Asbestos Abatement (Management) Plan approval issued by the Department pursuant to this Part shall become invalid unless the work authorized by said approval shall have been commenced within six (6) months after its issuance and been completed within twelve (12) months after its issuance.
- B. The six (6) month limit provided for by § 1.17.5(A) of this Part above may be extended, for cause, up to an additional ninety (90) days. Written justification for such an extension must be submitted for Department review prior to the approval expiration date. All Department approvals for such an extension must be in writing.
- C. The six (6) month limit provided for by § 1.17.5(A) of this Part above shall not apply to any suspension or abandonment of an Department approved abatement project when the suspension or abandonment is due to a court order prohibiting such work as authorized by said approval.

#### **1.17.6 Asbestos Abatement (Management) Plan Fees**

- A. The application fee must accompany the Asbestos Abatement (Management) Plan and shall be in the form of a check made payable to General Treasurer, State of Rhode Island. This fee is nonrefundable and will not be returned if the Asbestos Abatement (Management) Plan is denied or otherwise not approved by the Department. The application fee also includes the inspection fee, authorized by R.I. Gen. Laws § 23-24.5-7(d), for any inspections of said Asbestos Abatement Project which are deemed necessary by the Department.
- B. The application fee is based on the number of NESHAP units of ACM involved in the abatement project. One (1) NESHAP unit equals two hundred and sixty (260) linear feet [eighty (80) meters] of ACM or one hundred and sixty (160) square feet [fifteen (15) square meters] of ACM or thirty-five (35) cubic feet [one (1) cubic meter] of ACM off facility components where the length or area could not

be measured previously. If any combination of linear, square or cubic feet is involved, the sum of the fractions must be used to determine the actual number of NESHAP units involved in the asbestos abatement project. The application fees are as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).

- C. Any amendments to the Asbestos Abatement (Management) Plan which increase the scope of work into a higher fee category will be reassessed. The difference in the two fees shall be submitted to the Department in the form of a check made payable to General Treasurer, State of Rhode Island.
- D. Any amendments to the Asbestos Abatement (Management) Plan which request additional waivers and/or variances under the provisions of § 1.16 of this Part will be assessed a flat fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). Said fee shall be submitted to the Department in the form of a check made payable to General Treasurer, State of Rhode Island. However, said fee will be waived if the amendment(s) to the Asbestos Abatement (Management) Plan also include a request for an increase in the scope of work which would result in the fee difference in accordance with § 1.17.6(C) of this Part being assessed.
- E. All other amendments to the Asbestos Abatement (Management) Plan, including those involving only minor changes that can receive Department approval over the telephone, will not be charged a fee.
- F. Waiver and/or exemption of Asbestos Abatement (Management) Plan Fees: The application fee shall be waived for any Asbestos Abatement (Management) Plan which is eligible for loans or grants in accordance with the provisions of R.I. Gen. Laws § 23-24.5-19 and/or any rules or regulations promulgated by the Rhode Island Department of Administration pursuant to the authority conferred by R.I. Gen. Laws § 23-24.5-19. State agencies shall be exempt from application fees associated with the submittal of Asbestos Abatement (Management) Plans.

#### **1.17.7 Recordkeeping Requirements for AHERA Management Plans**

All records required by 40 C.F.R. § 763.94 incorporated by reference at § 1.2(I) of this Part for school buildings subject to the AHERA regulations shall be maintained in a centralized location in the administrative office of both the school building and the Local Education Agency (LEA) and shall be considered a part of the AHERA management plan(s) for all such buildings. These records shall be maintained until their disposal is specifically authorized in writing by the Department unless a shorter retention period is specifically authorized by 40

C.F.R. § 763.94 incorporated by reference at § 1.2(l) of this Part for that type of record.

## **1.18 CERTIFICATION OF ASBESTOS ABATEMENT TRAINING COURSES**

### **1.18.1 General Requirement**

- A. Training courses offered and conducted for the purpose of meeting the training requirements of this Part must be certified in accordance with § 1.18 of this Part. Applicants, in order to obtain certification for a training course, must submit an application which demonstrates compliance with the requirements of § 1.18 of this Part.
- B. Notwithstanding the requirements of § 1.17.1(A) of this Part, initial or review training courses for Asbestos Inspectors, Asbestos Project Designers or Asbestos Management Planners that are currently certified by other jurisdictions in accordance with the EPA Model Accreditation Program (MAP) will be considered as having been certified in accordance with § 1.18 of this Part.
- C. The criteria for successful completion of a required training course must include obtaining a passing score on the final course examination, unless the certified training course has been specifically authorized in writing by the Department to use an alternative method of determining successful completion.
- D. The training provider shall notify the Department of all scheduled, canceled, and completed asbestos training courses within seven (7) days of scheduling and completion. When implemented, the use of the Department's electronic training reporting system constitutes compliance with these notification requirements.

### **1.18.2 Application for Certification of Training Courses**

- A. An applicant for certification of any asbestos abatement training course shall submit the following information for Department review at least forty-five (45) days prior to the first scheduled course date:
  - 1. The name and address of the person(s), consulting firm, union, trade association, governmental agency, educational institution or other entity which proposes to conduct the training course, background information about the course sponsors, the name of the responsible individual and his/her telephone number.
  - 2. The type of course(s) for which certification is being requested.

3. A detailed outline of the course curriculum including the amount of time allotted to each topic, the name and training/qualifications of the individual(s) responsible for developing the instruction program for each topic and the name of the instructor(s) for each topic.
4. A description of the teaching methods to be used to present each topic including, where appropriate, lectures, discussions, demonstrations and audio-visual materials. When applicable, include the name, producer and date of production of audio-visual materials to be used.
5. Copies of written materials to be distributed. All materials submitted in conjunction with the application shall be typewritten or machine printed.
6. Evidence demonstrating that the applicant has employed or contracted as instructors, either on a full time or temporary basis, enough persons (a minimum of two) who meet the training and experience criteria contained in § 1.18.3 of this Part. Resumes describing special training and education and/or prior experience may be submitted for providing this evidence.
7. A list of the types, brand names and quantities of respirators to be used to demonstrate and fit test or flow test respirators.
8. A description of the type and quantity of protective clothing to be used during practice exercises and demonstrations.
9. A description of the materials to be used for hands-on practice exercises and demonstrations, including hand tools, ladders, plastic sheeting and other barrier construction supplies, negative air filtration units, water spray devices and decontamination facilities.
10. A detailed description of the site of the training course including address where demonstrations and hands-on practice exercises will be conducted.
11. Any restrictions on attendance (language, degree of literacy required, union or group association, etc.).
  - a. Oral final examinations are not permitted unless specifically requested by the applicant and authorized in writing by the Department. The applicant must specifically identify the circumstances under which an oral final examination will be used. If oral final examinations are to be given in a language other than English, the applicant must outline the procedure used to ensure the integrity of the examination process.

- b. Only Initial and Annual Review courses for Asbestos Workers and Competent Persons may be presented in a foreign language. Where such foreign language courses are offered, the applicant must translate all the course materials into the foreign language and submit them to the Department. The applicant must certify to the Department that the translations have been adequately checked for accuracy and provide the qualifications of the person(s) making the translation.
  - c. Written final examinations must be administered in the same language in which the other course materials were presented.
  - d. Department approval of an English language Asbestos Worker Initial or Annual Review course does not constitute approval to offer that course in any other language. Each foreign language version of an Asbestos Worker Initial or Annual Review course must receive specific Department approval. Department approval to present Asbestos Worker Initial or Annual Review courses in a foreign language must be issued prior to its initial offering and will not be retroactive.
- 12. Instructor to student ratio for the hands-on practice exercises and demonstrations. Written justification must be submitted for student to instructor ratios greater than ten to one (10:1).
- 13. Copies of typical final examination questions/answers, including the typical number and distribution of questions among the various subject areas, as well as the minimum grade which must be obtained for a trainee to successfully complete the course. Final examinations for Asbestos Inspector, Asbestos Management Planner and Asbestos Worker training courses must consist of at least fifty (50) multiple choice questions. Final examinations for Asbestos Project Designer and Asbestos Contractor/Supervisor training courses must consist of at least one-hundred (100) multiple choice questions. Final examinations for all Annual Review and Competent Person training courses, as well as any other Department approved training course containing up to fourteen (14) instructional hours, must consist of at least fifteen to twenty-five (15-25) multiple choice questions, depending on the length of the training course. The minimum passing grade must be at least seventy percent (70%).
- 14. The Department shall be immediately notified in writing of any significant changes in any information submitted by the applicant. These changes may not be implemented until they have been approved by the Department.



15. Appropriate course content and duration, as defined by § 1.18.8 of this Part.
16. The mechanism(s) that the applicant will use to ensure that all prospective students have successfully completed the appropriate initial training course(s) before being allowed to enroll in the respective annual review course(s), and that all prospective students have successfully completed any prerequisites for an initial training course (e.g., Inspector initial training is required for Management Planner).

### **1.18.3 Criteria for Instructors**

- A. To be eligible for certification of any training course, two (2) or more course instructors shall be employed. Enough instructors shall be hired to ensure that all the education and experience criteria for instructors set forth below are met:
  1. An instructor shall have experience in both the design, field performance and evaluation of air monitoring programs and the design and implementation of respiratory protection programs.
  2. To qualify to teach the sections of the course concerning the health effects of asbestos, a qualified health professional shall be employed.
  3. To qualify to teach the sections of the course covering the hands-on practice sessions, an instructor shall be employed with experience as an asbestos contractor or experience as an on-site foreman or supervisor of asbestos workers. This person shall have had direct experience in all phases of asbestos abatement work including work area preparation, construction of barriers, the use of personal protective equipment, engineering controls, work practices, clean-up, disposal and decontamination.
  4. An instructor shall have experience in designing, implementing and evaluating either employee educational programs in occupational health and safety or vocational educational programs.

### **1.18.4 Recordkeeping Requirements**

The training entity shall maintain documentation of each certified course offered which shall include as a minimum: type of course, date(s) and location(s) of course, class roster and results of any final examination/evaluation, as well as the unique certificate number, for each student enrolled. The training entity shall retain all required records for a period of at least ten (10) years and shall make this information available to the Department upon request.

### **1.18.5 Suspension or Revocation of Certification**

- A. The Department may suspend or revoke any certification issued under § 1.18 of this Part for:
  - 1. Submitting false information on an application;
  - 2. Failure to comply with this Part;
  - 3. Incompetence and/or negligence; or
  - 4. Any good cause within the meaning and purpose of this Part or the Act.

### **1.18.6 Asbestos Training Course Fees and Issuance/Renewal of Certificates**

- A. An application fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title) must accompany the application and shall be in the form of a check made payable to General Treasurer, State of Rhode Island. This fee is non-refundable and will not be returned if the application is denied or otherwise not approved by the Department.
- B. Pursuant to the provisions of R.I. Gen. Laws § 23-24.5-14(c), the Department shall grant a certificate to an Asbestos Training Course which meets the certification requirements set forth in this Part, and upon submission of the certification fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). Said certificate shall expire two (2) years from the date of issuance unless sooner suspended or revoked. Said certificate may be renewed every two (2) years in accordance with the provisions of § 1.18.7 of this Part and upon payment of the renewal application fee and the appropriate certification fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).
- C. Amendments to Asbestos Training Courses will not be charged a fee.
- D. Waiver of Asbestos Training Course Fees. The application and certification fees shall be waived for any Asbestos Training Course which is conducted by a Rhode Island state college or university and/or any agency of the State of Rhode Island or its political subdivisions.

### **1.18.7 Renewal of Certification**

- A. Requests for renewal of certifications issued under § 1.18 of this Part must contain all the information requested by § 1.18.2 of this Part without reference to any previously submitted material.
- B. In any case in which the responsible individual of a training course with complete certification, not less than 30 days prior to expiration of its existing complete certification, has filed an application in proper form for renewal, such existing complete certification shall not expire until final action on the application has been taken by the Department.

#### **1.18.8 Certified Training Courses - Types, Content and Duration**

- A. The initial training course for all Asbestos Workers and Asbestos Supervisors shall conform to the content specified by § 1.9.3(A) of this Part, shall consist of at least thirty-two (32) hours over a period of at least four (4) days. The course shall include a minimum of eight (8) hours conducting practice exercises which demonstrate that the participant can:
  - 1. Properly perform all aspects of asbestos abatement work; and
  - 2. Prevent unnecessary asbestos exposure to the general public and co-workers by properly constructing and maintaining temporary plastic barriers, by properly using respiratory protection, protective clothing and other protective equipment, and by using proper work area clean-up, decontamination and waste disposal techniques.
- B. The additional training for all Asbestos Supervisors shall conform to the content specified by § 1.9.3(B) of this Part and shall consist of at least eight (8) hours of instruction.
- C. The annual review course for all Asbestos Workers and Asbestos Supervisors shall consist of the one (1) day (at least eight (8) hours of instruction) training course specified by § 1.9.4 of this Part.
- D. The initial training course for Competent Persons required by § 1.19.1 of this Part shall consist of at least sixteen (16) hours of instruction and must contain the material required by § 1.19.2(A) of this Part.
- E. The initial training for all individuals providing Asbestos Inspection Services shall consist of a three (3) day (twenty-four (24) hours in duration) training course. Lectures, demonstrations and field exercise(s) shall provide, at a minimum, all of the information required for initial training of Inspectors by the EPA Model Accreditation Plan (40 C.F.R. Part 763, Subpart E, Appendix C, incorporated by reference at § 1.2(B) of this Part). The initial training course must also include

specific training in the asbestos assessment protocol contained in § 1.22 of this Part.

- F. The annual review course for all individuals providing Asbestos Inspection Services shall consist of the one-half (1/2) day (at least four (4) hours of instruction) training course which shall provide, at a minimum, an adequate review of the topics specified by § 1.18.8(E) of this Part, updated information on state-of-the-art procedures and equipment, and reviews of regulatory changes and interpretations. Specific topic coverage may be requested by the Department.
- G. The initial training for all individuals providing Asbestos Project Designer Services shall consist of a three (3) day (twenty-four (24) hours in duration) training course. Lectures, demonstrations and field trip(s) shall provide, at a minimum, all of the material required for initial training of Abatement Project Designers by the EPA Model Accreditation Plan (40 C.F.R. 763, Subpart E, Appendix C, incorporated by reference at § 1.2(B) of this Part).
- H. The annual review course for all individuals providing Asbestos Project Designer Services shall consist of the one (1) day (at least eight (8) hours of instruction) training course which shall provide, at a minimum, an adequate review of the topics specified by § 1.18.8(G) of this Part, updated information on state-of-the-art procedures and equipment, and reviews of regulatory changes and interpretations. Specific topic coverage may be requested by the Department.
- I. The initial training for all individuals providing Asbestos Management Planner Services shall consist of both the three (3) day (twenty-four (24) hours in duration) training course for Asbestos Inspectors specified by § 1.18.8(E) of this Part and an additional two (2) day (sixteen (16) hours in duration) training course specifically for Asbestos Management Planners. This additional training course shall consist of lectures, demonstrations and field trip(s) and shall provide, at a minimum, all of the material required for initial training of Asbestos Management Planners by the EPA Model Accreditation Plan (40 C.F.R. Part 763, Subpart E, Appendix C, incorporated by reference at § 1.2(B) of this Part).
- J. The annual review for all individuals providing Asbestos Management Planner Services shall consist of one half (1/2) day (at least four (4) hours of instruction) training course specifically for Asbestos Management Planners which shall provide, at a minimum, an adequate review of the topics specified by § 1.18.8(I) of this Part, updated information on state-of-the-art procedures and equipment, and reviews of regulatory changes and interpretations. Specific topic coverage may be requested by the Department.

## **1.19 CERTIFICATION OF COMPETENT PERSONS**

### **1.19.1 General Requirement**

- A. Any designated public employee, designated public maintenance person, maintenance worker in the private sector, teacher and/or parent representative who desires to be certified as competent in the basic aspects of asbestos inspections and abatement process evaluations, as defined by the Act, or to perform spot repairs within the jurisdiction of the applicant's agency, municipality or building(s) must file an application with the Department which includes evidence of successful completion of a certified training course of at least sixteen (16) hours duration (exclusive of lunch and break times) as outlined in § 1.19.2 of this Part.
- B. Maintenance personnel in the private sector, including but not limited to plumbers, electricians and oil burner repairmen, who perform asbestos abatement activities that are subject to this Part in conjunction with their primary profession must be certified as a Competent Person for Spot Repair in accordance with § 1.19.1(A) of this Part.

### **1.19.2 Content of Competent Person Training Courses**

- A. The initial training course for Competent Person shall consists of at least sixteen (16) hours of instruction and shall provide, at a minimum, information on the following topics:
  - 1. The training for maintenance and custodial employees required by 40 C.F.R. § 763.92(a)(1) and (a)(2) incorporated by reference at § 1.2(J) of this Part;
  - 2. The requirements, procedures and standards established by this Part, particularly those sections dealing with spot repairs (§ 1.15 of this Part) and the inspection and evaluation criteria for asbestos in public buildings (§ 1.22 of this Part); and
  - 3. At least four (4) hours of hands-on instruction in state-of-the-art spot repair techniques.
- B. The yearly review course shall consist of at least eight (8) hours of instruction and shall provide, at a minimum, information on the following topics:
  - 1. An adequate review of the topics outlined in § 1.19.2(A) of this Part;
  - 2. Updated information on state-of-the-art procedures and equipment;

3. Reviews of regulatory changes and interpretations;
  4. Specific topic coverage as requested by the Department; and
  5. At least four (4) hours of hands-on instruction in state-of-the-art spot repair techniques.
- C. Notwithstanding the requirements of § 1.19.2(B)(5) of this Part above, certified annual review courses may include a mechanism for trainees to demonstrate proficiency in the hands-on portion of said course, in lieu of repeating the four (4) hours of hands-on instruction.
- D. Any annual review course that proposes to include the proficiency test provided for by § 1.19.2(C) of this Part must also submit a detailed description of how said proficiency test will be administered. This description shall include, as a minimum, the skills that will be evaluated, the types of evaluations that will be conducted, the name(s) and qualifications of the instructor(s) that will conduct the evaluation, the degree of proficiency that will be necessary to pass this evaluation, and additional training that will be required before a trainee can be retested after failing any portion of the evaluation.

### **1.19.3 Suspension or Revocation of Competent Person Certification and/or Imposition of Civil Penalties**

- A. The Department may suspend or revoke any Competent Person certification issued under § 1.19 of this Part for:
1. Failure to maintain appropriate proficiency in the required areas.
  2. Incompetence and/or negligence.
  3. Submitting false information on an application.
  4. Failure to comply with this Part; or
  5. Any good cause within the meaning and purpose of this Part or the Act.
- B. Civil Penalties

Any person certified only for spot repairs who undertakes any asbestos abatement project larger than the size limits for a Spot Repair as defined by this Part or who does not follow the work practices for Spot Repairs contained in § 1.15.2 of this Part shall be subject to a fine of no more than five hundred dollars (\$500) per violation. This provision shall also be applicable to the employers of said persons.

#### **1.19.4 Expiration of Certification**

- A. Unless sooner revoked or suspended by the Department in accordance with the provisions of § 1.19.3 of this Part, certification as a Competent Person shall expire one (1) year from the date of the issuance of the certification.
- B. Notwithstanding the requirements of § 1.19.4(A) of this Part, Competent Person certifications issued prior to 1 August 1990 shall expire on the date indicated on said certification. However, individuals holding said Competent Person certifications are subject to the annual review requirements contained in § 1.19.2(B) of this Part.

#### **1.19.5 Renewal of Certification**

Requests for renewal of certifications issued under § 1.19 of this Part must contain evidence that the applicant has successfully completed a certified annual review course, as described in § 1.19.2(B) of this Part.

### **1.20 CERTIFICATION OF ASBESTOS ANALYTICAL SERVICES**

#### **1.20.1 General Requirement**

Asbestos analytical services offered for meeting the requirements of this Part must be certified in accordance with § 1.20 of this Part. Applicants, to obtain certification for asbestos analytical services, must submit an application which demonstrates compliance with the requirements of § 1.20 of this Part.

#### **1.20.2 Application for Certification of Asbestos Analytical Services**

- A. An applicant for certification of any asbestos analytical service shall submit the following information for Department review:
  - 1. The name, address and phone number of the facility and person in charge;
  - 2. The names, duties and dates of employment of the personnel who will be performing and/ or certifying the asbestos analysis;
  - 3. The type(s) of asbestos analysis for which the person is requesting certification;
  - 4. For analysis of air samples: Evidence that the National Institute for Occupational Safety and Health (NIOSH) has rated the applicant's laboratory facility as "Proficient (P)" in the Proficiency Analytical Testing (PAT) program's most recent round for asbestos evaluation.

5. For analysis of bulk asbestos samples: Evidence that the applicant's laboratory facility is currently accredited for Polarized Light Microscopy (PLM) in the Asbestos Fiber Analysis Program administered by the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology (NIST).
  6. Evidence that any analyst who is proposed to certify results of asbestos analysis conducted by Phase Contrast Microscopy (PCM) and/or Polarized Light Microscopy (PLM) has successfully completed:
    - a. A formal course in PCM and/or PLM analysis of asbestos which is acceptable to the Department and conducted by a center recognized for training personnel to perform PCM and/or PLM analysis of asbestos; or
    - b. An in-house training program, acceptable to the Department, under the supervision of an individual who meets the requirements of § 1.20.2(A)(6)(a) of this Part.
  7. A copy of the quality control procedures for asbestos analysis established by the applicant's laboratory. If the document is lengthy, a summary of the essential elements may be submitted.
  8. For analysis of asbestos samples by Transmission Electron Microscopy (TEM): Evidence that the applicant's laboratory facility is currently accredited for TEM in the Asbestos Fiber Analysis Program administered by the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology (NIST).
  9. Evidence that any analyst who is proposed to certify results of asbestos analysis conducted by Transmission Electron Microscopy (TEM) has successfully completed:
    - a. A formal course in TEM analysis of asbestos which is acceptable to the Department and conducted by a center recognized for training personnel to perform TEM analysis of asbestos; or
    - b. An in-house training program, acceptable to the Department, under the supervision of an individual who meets the requirements of § 1.20.2(A)(9)(a) of this Part.
- B. In addition to the requirements contained in § 1.20.2(A) of this Part, the person shall also submit:



1. Evidence of licensure as an analytical laboratory by the Rhode Island Department of Health, Division of Laboratories or, for facilities located outside of Rhode Island, evidence of licensure/certification by an equivalent state, county or municipal agency if said jurisdiction requires licensure/certification; and
2. Evidence that the facility has previous experience in successful asbestos analysis utilizing NIOSH Method 7400 (most current Revision), the EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples or alternative methods acceptable to the Department.
3. Evidence that the facility has previous experience in successful asbestos analysis utilizing the method contained in 40 C.F.R. Part 763, Subpart A, Appendix A incorporated by reference at § 1.2(B) of this Part or alternative methods acceptable to the Department. [Applicable only to facilities requesting certification for Transmission Electron Microscopy (TEM).]

#### **1.20.3 Suspension or Revocation of Laboratory Certification**

- A. The Department may suspend or revoke any laboratory certification issued under § 1.19 of this Part for:
  1. Failure to maintain proficiency and/or accreditation in the required proficiency testing programs outlined in §§ 1.20.2(A)(4), (5), and/or (8) of this Part.
  2. Submitting false information on an application.
  3. Failure to comply with this Part.
  4. Any good cause within the meaning and purpose of this Part or the Act; or
  5. Failure to perform asbestos analysis in accordance with prevailing methods of practice.

#### **1.20.4 Asbestos Analytical Services Fees and Issuance/Renewal of Certificates**

- A. An application fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title) must accompany the application and shall be in the form of a check made payable to General Treasurer, State of Rhode Island. This fee is non-refundable and will not be returned if the application is denied or otherwise not approved by the Department.

- B. Pursuant to the provisions of R.I. Gen. Laws § 23-24.5-14(c), the Department shall grant a certificate to an Asbestos Analytical Service which meets the certification requirements set forth in this Part, and upon submission of the certification fee as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title). All prospective analysts that meet Department training requirements will be included on this certification. Said certificate shall expire one (1) year from the date of issuance unless sooner suspended or revoked. Said certificate may be renewed each year in accordance with the provisions of § 1.20.5 of this Part and upon payment of the renewal application and certification fees as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title).
- C. Amendments to Asbestos Analytical Service certificates will not be charged a fee.

### **1.20.5 Renewal of Certification**

Requests for renewal of certifications issued under § 1.20 of this Part must contain all the information requested by § 1.20.2 of this Part without reference to any previously submitted material.

## **1.21 CERTIFICATION OF CONSULTANTS**

### **1.21.1 General Requirement**

Asbestos consultant services offered for meeting the requirements of this Part must be certified in accordance with § 1.21 of this Part. Applicants, to obtain certification for asbestos consultant services, must submit an application which demonstrates compliance with the requirements of § 1.21 of this Part.

### **1.21.2 Certification of Consultants**

- A. Any individual requesting certification as an asbestos consultant must submit a completed application to the Department on forms provided by the Department. The application shall include all information required by the Act, this Part, as well as by the form and accompanying instructions. The appropriate fee(s) required in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title) must also be submitted with the application.
- B. In addition to the requirements contained in § 1.21.2(A) of this Part, the individual shall also submit evidence of competence in the activity being requested. The

following are minimum criteria for establishing competence in the various activities:

1. Asbestos Inspection Services. Successful completion of a Department certified training course covering state-of-the-art techniques in Asbestos Inspection specified by § 1.18.8(E) of this Part.
2. Asbestos Project Designer Services. Successful completion of a Department certified training course covering state-of-the-art techniques in Asbestos Project Design specified by § 1.18.8(G) of this Part.
3. Asbestos Management Planner Services. Successful completion of a Department certified training course covering state-of-the-art techniques in Asbestos Management Planning specified by § 1.18.8(I) of this Part.

#### **1.21.3 Suspension or Revocation of Consultant Certification**

- A. The Department may suspend or revoke any consultant certification issued under § 1.21 of this Part for:
  1. Failure to maintain appropriate proficiency in the required areas, including failure to successfully complete the annual training requirement specified by § 1.21.7 of this Part.
  2. Incompetence and/or negligence.
  3. Submitting false information on an application.
  4. Failure to discharge activities in accordance with statutory and regulatory provisions contained in this Part.
  5. Failure to discharge activities in a manner consistent with prevailing standards of practice; or
  6. Any good cause within the meaning and purpose of this Part or the Act.

#### **1.21.4 Asbestos Consultant Fees and Issuance/Renewal of Certificates**

- A. Pursuant to the provisions of R.I. Gen. Laws § 23-24.5-14(c), the Department shall grant a certificate to an Asbestos Consultant who meets the certification requirements set forth in this Part, and upon submission of the certification fee(s) as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title), made payable by check to the General Treasurer, State of Rhode Island. Said certificate shall expire one (1) year from the date of issuance unless sooner suspended or revoked. Said certificate may

be renewed each year in accordance with the provisions of § 1.21.5 of this Part, upon documentation of compliance with the requirements of § 1.21.7 of this Part, and upon payment of the renewal certification fees as set forth in the rules and regulations pertaining to the Fee Structure for Licensing, Laboratory and Administrative Services Provided by the Department of Health (Part 10-05-2 of this Title), made payable by check to the General Treasurer, State of Rhode Island.

- B. Waiver of Asbestos Consultant Fees. Full time employees of a Local Education Agency (LEA) that maintain Asbestos Inspector or Asbestos Management Planner certificates solely because of requirements contained in the AHERA regulations may receive a waiver of application and certification fees under the following conditions:
1. Each LEA will be limited to three (3) fee waivers for Asbestos Consultant certificates during any twelve (12) consecutive month period. An application for certification as an Asbestos Inspector, Asbestos Management Planner, or Asbestos Project Designer shall be considered as separate fee waivers.
  2. The applicant's initial or renewal application must be accompanied by a written statement from the LEA Superintendent (or equivalent official) that said applicant's assigned duties require possession of the specified certificate(s).
  3. The certificate(s) will limit authorized activities to those buildings owned by, or under the direct control of, the LEA, and will terminate before the stated expiration date if the certificate holder is no longer a full-time employee of the LEA.
- C. Amendments to Asbestos Consultant certificates will not be charged a fee.

### **1.21.5 Renewal of Certification**

Requests for renewal of certifications issued under § 1.21 of this Part must contain all the information requested by § 1.21.2 of this Part without reference to any previously submitted material. All applications for renewal of certification must also include documentation of compliance with the provisions of § 1.21.7 of this Part regarding successful completion of required annual review training.

### **1.21.6 Assessment Criteria**

Inspection Services certified under § 1.21 of this part shall use the assessment criteria established by § 1.22 of this Part unless the Service is authorized by the Department, in writing, to utilize other assessment criteria.

### **1.21.7 Annual Training Requirement**

- A. Consultants certified in accordance with § 1.21 of this Part must successfully complete the annual training requirements specified below:
  - 1. An individual certified for Asbestos Inspection Services must successfully complete the certified annual review course specified by § 1.18.8(F) of this Part.
  - 2. An individual certified for Asbestos Project Designer Services must successfully complete the certified annual review course required by § 1.18.8(H) of this Part.
  - 3. An individual certified for Asbestos Management Planner Services must successfully complete the certified annual review course required by § 1.18.8(J) of this Part.

## **1.22 HAZARD ASSESSMENT CRITERIA**

### **1.22.1 Inspection of Buildings**

- A. General Requirement. Inspections of buildings for making the following determinations shall be conducted in accordance with the requirements contained in § 1.22 of this Part: the asbestos content of materials; conducting information surveys for asbestos containing materials.
- B. Establishing the Asbestos. Content of Materials Bulk sampling of materials suspected of containing asbestos shall be conducted in accordance with the procedures contained in § 1.23 of this Part. Analysis of bulk samples shall be performed by a laboratory certified in accordance with § 1.20 of this Part.
- C. Conducting Information. Surveys for Asbestos Containing Materials Asbestos inspections for schools subject to the AHERA regulations shall be in accordance with 40 C.F.R. § 763.85 incorporated by reference at § 1.2(K) of this Part and 763.86 incorporated by reference at § 1.2(L) of this Part. In all other cases, information to be collected for the evaluation of asbestos hazards in buildings shall be conducted on forms required by the Department.
- D. Determining the Degree of Hazard Posed by Asbestos Containing Materials. The degree of hazard posed by asbestos containing materials in school buildings subject to the AHERA regulations shall be evaluated in accordance with 40 C.F.R. § 763.88 incorporated by reference at § 1.2(M) of this Part. In all other cases, the degree of hazard posed by asbestos containing materials in buildings shall be evaluated using the following algorithm:

1. Range or Extent of Material Condition Deterioration/Damage.
  - a. None: Score 0
  - b. Moderate/Small Area: Score 2
  - c. Moderate/Large Area: Score 3
  - d. Severe/Small Area: Score 4
  - e. Severe/Large Area: Score 5
  - f. For the purposes of §§ 1.21.1(D)(1)(b) through (e) of this Part:
    - (1) Moderate means any uncovered pipe and/or delamination, crack, etc. in a surface that is basically intact.
    - (2) Severe means obvious deterioration or physical separation that is not easily repaired.
    - (3) Small Area means any area less than or equal to ten (10) liner feet for pipes or twenty-five (25) square feet for surfaces other than pipes.
    - (4) Large Area means any area greater than ten (10) liner feet for pipes or twenty-five (25) square feet for surfaces other than pipes.
2. Material Condition Rating.
  - a. Water Damage:
    - (1) None: Score 0
    - (2) Damage over Small Area or No Damage but with flat roof immediately overhead: Score 1
    - (3) Damage over Small Area with flat roof immediately overhead or Damage to Large area regardless of roof type: Score 2
  - b. Exposed Surface Area
    - (1) Not exposed (i.e. located above suspended ceiling and/or not visible without removing panels or ceiling sections: Score 0
    - (2) 10% or less of the material is exposed: Score 1

(3) 10%-100% of the material is exposed: Score 4

3. Accessibility.

- a. Not accessible: Score 0
- b. Low (access requires removal of temporary barrier such as drop-ceiling: Score 1
- c. Low-Moderate (accessible only with devices or equipment not common to the area: Score 2
- d. Moderate (accessible only with devices or equipment common to the area: Score 3
- e. High (accessible with no additional devices or equipment: Score 4

4. Activity and Movement.

- a. None or Low (sedentary activities only): Score 0
- b. Moderate (ordinary movement, more walking than sitting): Score 1
- c. High (elevated levels of physical activity such as running, jumping, or manual labor): Score 2

5. Air Plenum or Direct Air Stream.

- a. None: Score 0
- b. Present: Score 1

6. Friability.

- a. Not Friable: Score .1
- b. Potentially Friable (difficult but possible to damage by hand and/or material that has been properly encapsulated or enclosed): Score 1
- c. Moderately Friable (easy to dislodge and crush): Score 2
- d. Highly Friable (fluffy, spongy, or flaking and/or pieces hanging and/or falls apart when touched): Score 3

7. Asbestos Content.

- a. Trace to <1%: Score 0

- b. 1% to 50%: Score 2
  - c. 50% to 100%: Score 3
- 8. Occupancy and Use.
  - a. Low Priority Buildings: Score 0
  - b. Low Priority Areas: Score 0
  - c. Restricted Use Areas: Score 0
  - d. High Priority Areas of Intermediate Priority Buildings: Score 8
  - e. High Priority Areas of High Priority Buildings: Score 12
- 9. Total Degree of Hazard shall equal the sum of the scores for §§ 1.21.1(D) (1) through (5) of this Part, multiplied by the score for § 1.21.1(D)(6) of this Part, multiplied by the score for § 1.21.1(7) of this Part, plus the score for § 1.21.1(D)(8) of this Part.
- 10. Notwithstanding the requirements of §§ 1.22.1(C) and 1.22.1(D) of this Part, assessments of schools shall also be conducted in accordance with § 1.22.1(D) of this Part for determining eligibility for funding in accordance with R.I. Gen. Laws § 23-24.5-19 and regulations adopted thereunder.

### **1.22.2 Development of Asbestos Abatement Remedies**

#### **A. General Requirement**

- 1. Areas of buildings receiving a score greater than zero from the hazard assessment conducted in accordance with § 1.22.1(D) of this Part will require some type of asbestos abatement (management) plan. This asbestos abatement plan must be developed by the building owner in accordance with § 1.17 of this Part and submitted for Department review.
- 2. Decisions regarding the abatement remedies that may be proposed to the Department as part of an asbestos abatement plan are the responsibility of the building owner. These strategies may range from simple operations and maintenance plans to complete removal. The remedies proposed in the asbestos abatement plan will be governed by the nature and extent of the hazards that have been identified, as reflected by the numerical score determined in accordance with § 1.22.1(D) of this Part. The acceptability of proposed abatement remedies will be reviewed by the Department during the plan approval process in accordance with § 1.17 of this Part.



### **1.22.3 Reinspection of Schools and School Buildings**

General Requirement. All schools and school buildings, as defined by the AHERA regulations, must have all friable and nonfriable known or assumed ACM reinspected at least once every three (3) years in accordance with 40 C.F.R. § 763.85(b) incorporated by reference at § 1.2(K) of this Part.

## **1.23 SAMPLING PROTOCOL FOR HAZARD ASSESSMENT**

- A. Number of Samples. Samples of suspect asbestos containing materials must be taken for laboratory analysis. The number of samples to be taken is dependent upon the type of material to be sampled.
1. Friable or Potentially Friable Surfacing Material A consultant certified for Asbestos Inspection Services in accordance with § 1.21.2(B)(5) of this Part or a Competent Person certified in accordance with § 1.19 of this Part shall collect bulk samples, in a statistically random manner that is representative of each homogeneous area, as follows:
    - a. At least three (3) bulk samples from each homogeneous area that is one thousand (1000) square feet or less, except as provided in §§ 1.23(A)(1)(d) and (e) of this Part.
    - b. At least five (5) bulk samples from each homogeneous area that is greater than one thousand (1000) square feet but less than five thousand (5000) square feet, except as provided in §§ 1.23(A)(1)(d) and (e) of this Part.
    - c. At least seven (7) bulk samples from each homogeneous area that is greater than five thousand (5000) square feet, except as provided in §§ 1.23(A)(1)(d) and (e) of this Part.
    - d. A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one (1) sample collected from that area shows that asbestos is present in an amount greater than one percent (1%).
    - e. A homogeneous area is considered not to contain ACM only if the results of all samples required to be collected from that area show asbestos in amounts of one percent (1%) or less.
  2. Thermal System Insulation. A consultant certified for Asbestos Inspection Services in accordance with § 1.21.2(B)(5) of this Part or a Competent Person certified in accordance with § 1.19 of this Part shall collect bulk

samples, in a statistically random manner that is representative of each homogeneous area, as follows:

- a. At least three (3) bulk samples from each homogeneous area that is damaged, except as provided in §§ 1.22(A)(1)(d) and (e) of this Part.
- b. At least one (1) bulk sample from each homogeneous area of patched thermal system insulation if the patched section is less than six (6) linear or square feet, except as provided in §§ 1.23(A)(1)(d) and (e) of this Part.
- c. In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system where cement is used on tees, elbows or valves, except as provided in §§ 1.23(A)(1)(d) and (e) of this Part.

3. Miscellaneous and Non-Friable Material

A consultant certified for Asbestos Inspection Services in accordance with § 1.21(B)(5) of this Part or a Competent Person certified in accordance with § 1.19 of this Part shall collect bulk samples from each homogeneous area in a manner sufficient to determine whether the material is ACM or not ACM, except as provided in §§ 1.23(A)(1)(d) and (e) of this Part.

4. Homogeneous Areas Assumed to Contain ACM

Notwithstanding the requirements of §§ 1.23(A)(1), (2), and (3) of this Part above, any homogeneous area that is assumed to be ACM in accordance with 40 C.F.R. §§ 763.85(a)(4)(iii) and (iv) incorporated by reference at § 1.2(K) of this Part does not have to be sampled if the remaining elements of the assessment required by 40 C.F.R. § 763.85(a)(4)(v) incorporated by reference at § 1.2(K) of this Part and/or § 1.22 of this Part are completed.

B. Sampling Procedures

1. Materials

- a. Clean, dry small jar (35 mm film canister or small, wide-mouthed glass jar) with screw-on lid
- b. Knife (optional)
- c. Core borer (optional)

- d. Half-face cartridge respirator with two screw-in canisters; NIOSH approval number TC-23C-153 (Mine Safety Appliance chemical cartridge: approved for organic volatiles, chlorine, sulfur dioxide and hydrogen chloride; with dust, fume, mist (high efficiency) filter.

## 2. Sampling Methods

- a. The material should be sampled when the area is not in use.
- b. Only those persons needed for sampling should be present.
- c. The sampler should wear an approved respirator.
- d. The material to be sampled should be lightly misted with water to minimize fiber release.
- e. Gently twist the open end of the container into the material, penetrating the depth of the material until material falls into the container. Use a knife or core borer to take the sample of cementitious materials and then empty the material into the container.
- f. Close the container tightly and wipe off the exterior with a damp cloth. Tape the lid to prevent accidental opening during shipment or handling.
- g. Label the sample container with a unique identification number, the name of the building, initials of the person who sampled, and the date of sample collection.
- h. Make a record of each sample by noting the date the sample was taken, location of material sampled (including room or area), and the sample ID number.
- i. Wet mop or wipe-up with a wet cloth any material which may have fallen on the floor.
- j. Spray the area sampled with a clear shellac, varnish or similar material to minimize the potential for fiber release.
- k. Clean the knife or core borer, if used, with water.
- l. Submit samples to a laboratory certified by the Department to analyze asbestos.

- m. Request that results be reported as type and percent asbestos by a method capable of determining asbestos content with a minimum detection level of 1% by weight.

## **1.24 NESHAP REQUIREMENTS**

Federal facilities and such other persons who are not otherwise subject to these regulations shall comply with EPA's NESHAP requirements, 40 C.F.R. § 61, Subpart M incorporated by reference at § 1.2(N) of this Part.

**216-RICR-50-15-1**

**TITLE 216 - DEPARTMENT OF HEALTH**

**CHAPTER 50 - ENVIRONMENTAL HEALTH**

**SUBCHAPTER 15 - HEALTHY ENVIRONMENT**

**PART 1 - Asbestos Control (216-RICR-50-15-1)**

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