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Sequence Number: 05-06-23

Notice ID(s): 3635-3636

File Date: 5/2/2023

Notice of Rulemaking Hearing

Hearings will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, T.C.A. § 4-5-204. For questions and copies of the notice, contact the person listed below.

Agency/Board/Commission:	Environment and Conservation
Division:	Solid Waste Management
Contact Person:	Adrianne White
Address:	William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 14th Floor Nashville, Tennessee 37243
Phone:	(615) 532-0885
Email:	Adrianne.White@tn.gov

Any Individuals with disabilities who wish to participate in these proceedings (to review these filings) and may require aid to facilitate such participation should contact the following at least 10 days prior to the hearing:

ADA Contact:	ADA Coordinator
	William R. Snodgrass TN Tower
	312 Rosa L. Parks Avenue, 22nd Floor
Address:	Nashville, Tennessee 37243
	1-866-253-5827 (toll free) or (615) 532-0200
Phone:	Hearing impaired callers may use the TN Relay Service at 1-800-848-0298.
Email:	kathryn.reitz@tn.gov

Hearing Location(s) (for additional locations, copy and paste table)

Address 1:	Multimedia Room, 3 rd Floor
Address 2:	William R. Snodgrass Tennessee Tower
	312 Rosa L. Parks Avenue
City:	Nashville, Tennessee
Zip:	37243
Hearing Date :	07/11/2023
Hearing Time:	1:00 PM <u>X_CST/CDTEST/EDT</u>

Alternate Hearing Option

Method 1:	You may join electronically via Microsoft Teams.
	Join on your computer, mobile app or room device <u>Click here to join the meeting</u>
	Meeting ID: 297 717 619 874 Passcode: Fz8iby Download Teams Join on the web

Method 2:	Join by phone (audio only) 1-629-209-4396 Access code: 103 813 958#	
	Instructions for Microsoft Teams can be found on the TDEC Public Participation webpage. <u>Click here to view instructions</u>	

Additional Hearing Information:

If it is hard for you to read, speak, or understand English, TDEC may be able to provide translation or interpretation services free of charge. Please contact Janelle Starke at (615-906-2950) for more information.

The Department proposes to repeal Chapter 1200-01-20 Asbestos Accreditation Requirements and move its existing requirements with updates to Chapter 0400-13-02. These updates include:

- (a) Allowing electronic submission of documents to the Department;
- (b) Allowing for training programs to offer online refresher training courses, if appropriately accredited;
- (c) Increasing existing fees and implements new fees;
- (d) Clarifying reasons for disciplinary action and the process for disciplinary action; and
- (e) Cleaning up existing language.

The entire chapter is open for review and comment. An initial set of draft rules has been prepared for public review and comment and may also be accessed for review using at https://www.tn.gov/environment/ppo-public-participation/ppo-public-participation/ppo-waste.

Oral or written comments are invited at the hearing. In addition, written comments may be submitted prior to or after the public hearing to: Tennessee Department of Environment and Conservation, Division of Solid Waste Management; Attention: Adrianne White, William R. Snodgrass TN Tower, 312 Rosa L. Parks Avenue, 14th Floor, Nashville, Tennessee 37243; telephone 615-532-0885, fax 615-532-0886, or email: Adrianne.White@tn.gov. However, such written comments must be received by 4:30 PM CDT, July 14, 2023, to ensure consideration. For further information, please contact Adrianne White at the above address or telephone number or by e-mail at Adrianne.White@tn.gov.

Revision Type (check all that apply):

Amendment

X New

X Repeal

Rule(s) (**ALL** chapters and rules contained in filing must be listed. If needed, copy and paste additional tables to accommodate more than one chapter. Please enter only **ONE** Rule Number/Rule Title per row.)

Chapter Number	Chapter Title
0400-13-02	Asbestos Accreditation Requirements
Rule Number	Rule Title
0400-13-0201	Asbestos Accreditation Requirements: General
0400-13-0202	Accreditation of Training Providers and Training Course(s)
0400-13-0203	Accreditation of Individuals and Firms Engaged in Asbestos Activities
0400-13-0204	Reciprocity
0400-13-0205	Fees
0400-13-0206	Reserved
0400-13-0207	Enforcement and Penalties

Chapter Number	Chapter Title
1200-01-20	Asbestos Accreditation Requirements
Rule Number	Rule Title
1200-01-2001	Asbestos Accreditation Requirements: General

1200-01-2002	Accreditation of Training Providers and Training Course(s)
1200-01-2003	Accreditation of Persons and Firms Engaged in Asbestos Activities
1200-01-2004	Reciprocity
1200-01-2005	Fees
1200-01-2006	Prohibited Acts
1200-01-2007	Suspension or Revocation of Accreditation
1200-01-2008	Implementation of Rule Chapter 1200-01-20 Asbestos Accreditation Requirements

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to http://state.tn.us/sos/rules/1360/1360.htm)

Chapter 1200-01-20 Asbestos Accreditation Requirements

Repeal

Chapter 1200-01-20 Asbestos Accreditation Requirements is repealed.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

Chapter 0400-13-02 Asbestos Accreditation Requirements

New Rules

Table of Contents

0400-13-02-.01 Asbestos Accreditation Requirements: General 0400-13-02-.02 Accreditation of Training Providers and Training Course(s) 0400-13-02-.03 Accreditation of Individuals and Firms Engaged in Asbestos Activities 0400-13-02-.04 Reciprocity 0400-13-02-.05 Fees 0400-13-02-.06 Reserved 0400-13-02-.07 Enforcement and Penalties

0400-13-02-.01 Asbestos Accreditation Requirements: General

(1) General.

- (a) Scope and applicability.
 - These rules contain procedures and requirements for the accreditation of asbestos training programs, individuals, and firms preforming asbestos activities. These rules outline the responsibilities and limitations of each accredited asbestos training program, individual, and firm.
 - 2. These rules apply to all individuals and firms who perform or offer to perform asbestos activities in schools or public and commercial buildings.
 - 3. These rules do not apply to small-scale, short-duration activities conducted in schools or public and commercial buildings.
 - 4. Each department, agency, and instrumentality of executive, legislative, and judicial branches of the federal government and the State of Tennessee having jurisdiction over any property or facility, or engaging in any asbestos activities, and each officer, agent, or employee thereof, shall be subject to, and comply with the requirements of these rules.
 - (i) Inclusions:
 - (I) This chapter does not exempt a Local Education Agency ("LEA") from complying with the requirements outlined in the federal Asbestos Hazard Emergency Response Act and 40 C.F.R. Part 763, Subpart E Asbestos-Containing Materials in Schools regulations;
 - (II) An LEA and its employee(s) shall comply with these rules; and

- (III) Firms, which include general contractors, consultants, staffing services, and subcontractors, hired by a LEA to perform asbestos activities shall comply with the requirements of these rules with no exemptions.
- (ii) Exemptions:
 - (I) LEAs and their employees are exempt from the financial obligation of paying application fees outlined in Rule 0400-13-02-.05 when individuals conducting the asbestos activity or activities are employed directly by LEAs and their school systems to ensure their compliance with AHERA requirements detailed in the Code of Federal Regulations, Title 40, Part 763, Subpart E and these rules.
 - I. The exemption in item (I) of this subpart includes custodial and maintenance employees and designated individuals responsible to ensure that LEAs comply with the AHERA regulations.
 - II. The exemption in item (I) of this subpart does not apply to individuals, even though employed by the LEA, conducting non-LEA asbestos activities.
 - (II) Federal, state, and local regulatory agencies are exempt from this chapter when performing compliance inspections for the purpose of determining adherence to applicable statutes or regulations, and not to locate, assess, or remedy the condition of asbestos-containing building material.
- 5. Nothing in these rules requires the performance of asbestos activities.
- (b) As used in this chapter:
 - Words in the masculine gender also include the feminine and neuter genders;
 - 2. Words in the singular include the plural; and
 - 3. Words in the plural include the singular.
- (c) These rules are organized, numbered, and referenced according to the following outline form:
 - (1) paragraph
 - (a) subparagraph
 - 1. part
 - (i) subpart
 - (I) item
 - I. subitem
 - A. section
 - (A) subsection
- (d) The Commissioner may make forms available electronically or allow these applications or information to be submitted electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter 0400-01-40.
- (2) Definitions.

When used in this chapter, the following terms have the following meanings unless otherwise specified:

- "Accredited" or "accreditation" when referring to an individual, firm, or training provider means that the Commissioner has issued an accreditation certificate to a firm or training provider or issued an accreditation identification card to an individual pursuant to these rules, and when referring to a laboratory means that the laboratory entity is accredited in accordance with 15 U.S.C. § 2646.
- "Act" means the Tennessee Asbestos Contractor Accreditation and Regulation Act, T.C.A. §§ 62-41-101 through -103.
- "Annual" means a one-year period from the initial or refresher accredited training course completion certificate date or the date on the accreditation certificate issued to an individual or firm.
- "Asbestos" means the asbestiform varieties of chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite, and actinolite.
- "Asbestos activities" means providing an initial or refresher asbestos training course(s) or conducting asbestos inspections, asbestos response actions, asbestos project monitoring, preparing asbestos management plans, or preparing asbestos project designs.
- "Asbestos-containing material" or "ACM" means any material or product which contains more than one percent (1%) asbestos.
- "Asbestos-containing building material" or "ACBM" means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM found in or on interior structural members or other parts of a school building or public and commercial buildings.
- "Asbestos Hazard Emergency Response Act" or "AHERA" means the Asbestos Hazard Emergency Response Act of 1986, as amended, and its associated Environmental Protection Agency regulations.
- "Asbestos inspector" or "inspector" means an individual who has successfully completed the required threeday asbestos inspector training course to conduct asbestos inspections in schools and public and commercial buildings to identify all locations of friable and non-friable asbestos-containing building material, identify the type of asbestos-containing building material, and determine its classification and condition.
- "Asbestos management planner" or "management planner" means an individual who has successfully completed the three-day asbestos inspector and two-day management planner training courses to conduct asbestos inspections and risk assessments, determine the appropriate response actions, and to prepare an asbestos management plan for use in schools.
- "Asbestos project designer" or "project designer" means an individual who has successfully completed the three-day asbestos project designer training to design any of the following activities with respect to asbestos-containing building material in schools or public and commercial buildings: response actions other than a small-scale short duration maintenance activity, maintenance activities that disturb asbestos-containing building material other than a small-scale short duration maintenance activity, or response actions for a major fiber release episode.
- "Asbestos project monitor" or "project monitor" means an individual who has successfully completed the five-day asbestos project monitor training to observe response actions performed by a firm or individual and generally serves as a building owner's representative to ensure that abatement work is completed according to the specifications and in compliance with all relevant statutes and regulations. The asbestos project monitor performs the vital role of collecting clearance air samples to confirm the completion of a response action involving friable and non-friable asbestos-containing material and asbestos-containing building material.
- "Asbestos supervisor" or "supervisor" means an individual who has successfully completed the required five-day asbestos supervisor training to provide oversight or supervision of asbestos response actions performed in schools or public and commercial buildings. An accredited supervisor may directly or indirectly supervise, oversee, and provide direction to asbestos workers performing response actions. An asbestos

supervisor may be an individual with the position title of foreman, working foreman, or lead man pursuant to the accredited supervisor's company's policy.

"Asbestos training course" or "training course" means an initial or refresher asbestos training course, including an online refresher asbestos training course, in any of the following disciplines: worker, inspector, management planner, project designer, supervisor, and project monitor.

"Asbestos worker" or "worker" means an individual who has successfully completed the required four-day accredited asbestos worker training course to be responsible in a non-supervisory capacity to carry out the following activities with respect to friable asbestos-containing building material in schools or public and commercial buildings: a response action, other than a small-scale, short duration activity; a maintenance activity that disturbs friable asbestos-containing building material other than a small-scale, short duration activity; or a response action for a major fiber release episode.

"Asynchronous online course" means a course that allows students to view instructional materials at any time they choose at any location and does not include a live video lecture component.

"Audit" means a compliance monitoring inspection conducted by the Commissioner to inspect records required by Rule 0400-13-02-.02 or to attend any asbestos training course for the purpose of verifying that the course is presented in accordance with course accreditation requirements.

"Building" means any structure having two or more walls and a roof/ceiling.

"Building owner" means the person in whom legal title to the premises is vested unless the premises are held in trust, in which instance the building owner means the person in whom beneficial title is vested.

"Business day" means 8:00 a.m. to 4:30 p.m. on Monday through Friday except for Federal and State holidays.

"Business or public entity" means a partnership, firm, association, corporation, sole proprietorship, or other business concern.

"Clearance air samples" mean air samples collected to confirm the completion of removal, encapsulation, or enclosure of ACBM prior to the re-occupancy of the contained work area by the public.

"Commissioner" means the Commissioner of the Tennessee Department of Environment and Conservation or the Commissioner's designee.

"Contained work area" means designated rooms, spaces, or other areas where response actions are being performed, including decontamination area(s), that are separated from the uncontaminated environment by polyethylene sheeting or other materials used in conjunction with the existing floors, ceiling, and walls of the structure or building.

"Course agenda" means an outline of the key topics to be covered during an accredited asbestos training course in the appropriate discipline, which shall include the time allotted to teach each topic, hands-on training and assessment, and the name(s) of the instructor(s).

"Course completion certificate" means a training course certificate issued to a student that successfully completes the requirements outlined in paragraph (4) of Rule 0400-13-02-.02 for a specific discipline and has passed the course examination with a grade of 70% or greater.

"Course student roster" means a list of names of every individual who attended a specific training course and whether they completed, passed, or failed.

"Course test blueprint" means a written document identifying the proportion of the course test questions devoted to each major topic in the course curriculum.

"Current certificate" means a training course completion certificate for a training course that an individual completed not more than 12 months before the current date.

"Department" means the Tennessee Department of Environment and Conservation.

"Discipline" means one of the specific types or categories of asbestos activities identified in these rules for which individuals may receive training from accredited training providers and become accredited by the Commissioner. Accredited asbestos "disciplines" are: worker, supervisor, inspector, management planner, project designer, and project monitor.

"Duly authorized representative" means a representative of a firm, training provider, or local educational agency, as appropriate, who, in accordance with corporate procedures, can legally bind the entity and be held responsible for the entity and employee(s) complying with standards, requirements, and prohibitions under state, local, and federal asbestos regulations.

"EPA" means the United States Environmental Protection Agency.

"Employee" means an individual who provides asbestos activity services for a firm, including a subcontracted individual.

"Encapsulation" means the treatment of asbestos-containing building material with a material that coats, binds, surrounds, or embeds asbestos fibers in an adhesive matrix to prevent release of asbestos fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

"Enclosure" means an airtight, impermeable, permanent barrier around asbestos-containing building material to prevent the release of asbestos fibers into the air.

"Firm" means a company, corporation, partnership, sole proprietor, commercial enterprise, business entity, contractor, subcontractor, consultant, commission, state agency, county governmental body, municipality, party, association, staffing service, or any private or public legal entity; any Indian tribe; any interstate body; any departmental agency or instrumentality of the federal government, or two or more individuals or persons which carries on business.

"Friable asbestos-containing material" means any material containing more than 1% asbestos which has been applied on ceilings, walls, structural members, piping, duct work, or any other part of a building which, when dry, may be crumbled, pulverized, or reduced to a powder by hand pressure. The term includes non-friable asbestos-containing material after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

"Friable asbestos-containing building material" means any friable asbestos-containing material that is in or on interior structural members or other parts of a school or public and commercial building. This term also includes previously non-friable ACM that is in or on interior structural members or other parts of a school or public and commercial building after such material becomes damaged to the extent that when dry can be or has been crumbled, pulverized, or reduced to powder.

"Functional space" means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), cafeteria, gymnasium, and hallway(s), that is designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

"Guest instructor" means an individual designated by the accredited training program manager or principal instructor to provide instruction specific to the lecture, hands-on training exercises, or work practice components of a training course.

"Hands-on training assessment" means an evaluation that tests the student's ability to satisfactorily perform the work practices and procedures taught in an accredited asbestos training course.

"Hands-on training exercise" means any activity that requires the student to practice performing a work task or procedure. "Hands-on training exercise" does not include an exercise or activity in which the instructor shows a student how to perform a task without requiring the student to perform the task.

"High-efficiency particulate air" or "HEPA" means a filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3 µm in diameter or larger.

"Homogeneous area" means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.

"Initial training course" means a training course required for initial accreditation in a specific discipline under this chapter.

"Inspection" means an activity undertaken in a school building, or a public and commercial building to determine the presence, location, or assess the condition of friable or non-friable asbestos-containing building material or suspected asbestos-containing building material, whether by visual or physical examination, or by collecting samples of such material. "Inspection" includes re-inspections of friable or non-friable known or assumed asbestos-containing building material which has been previously identified by an accredited inspector. For the purposes of this chapter, "inspection" does not include:

- (a) Periodic surveillance conducted solely for the purpose of recording or reporting a change in the condition of known or assumed asbestos-containing building material;
- (b) Inspections performed by employees or agents of federal, state, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or
- (c) Visual inspections conducted solely for the purpose of determining completion of response actions.

"Learning objective" means the knowledge, skills, abilities, and behaviors a student is expected to obtain from a given instructional activity.

"Local Education Agency" or "LEA" means:

- (a) A public board of education or other public authority legally constituted within a state for either administrative control or direction of, or to perform a service function for, public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a state, or of or for a combination of school districts or counties that is recognized in a state as an administrative agency for its public elementary schools or secondary schools;
- (b) The owner or operator of any non-public, non-profit elementary or secondary school building; and
- (c) The governing authority of any school operated under the defense dependents' education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. §§ 921 to 932).

"Major fiber release episode" means any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission, which involves the falling or dislodging of more than three square or linear feet of friable asbestos-containing building material.

"Management Plan" means a document required by EPA to be developed by local education agencies as set forth in 40 C.F.R. Part 763 Subpart E Asbestos-Containing Materials in Schools that shall be developed by an accredited management planner.

"Minor fiber release episode" means any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission, which involves the falling or dislodging of three square or linear feet or less of friable asbestos-containing building material.

"Miscellaneous material" means interior building material on structural components, structural members, or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation material.

"NESHAP" means the National Emission Standard Hazardous Air Pollutants.

"Non-friable asbestos material" means an asbestos-containing material used in a school or public and commercial building which, when dry, cannot be crumbled, pulverized, or reduced to a powder by hand pressure.

"Online refresher training course" means a refresher training course curriculum presentation taken through Web-based technology that is accessed through a network-enabled system using a computer whereby the student can watch and hear with or without the ability to interact with the instructor while the course is in progress.

"Operation and maintenance program" or "O&M program" means a program of work practices to maintain friable asbestos-containing building material in good condition, ensure clean-up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable asbestos-containing building material disturbance or damage.

"Oversight" means to directly observe an asbestos activity or response action for the purpose of determining compliance with contractual, performance, or regulatory standards.

"Person" means any individual, business entity, governmental body, public entity, or private entity.

"Potential damage" means circumstances in which:

- (a) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities; or
- (b) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.

"Potential significant damage" means circumstances in which:

- (a) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities;
- (b) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices changes in occupancy, or recurrent damage; or
- (c) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or under certain circumstances, vibration, or air erosion.

"Principal instructor" means the individual who has the primary responsibility for organizing and teaching an accredited asbestos training course.

"Project design" means a specific, detailed description of the procedures, processes, and engineering controls that is developed and documented to address an asbestos project, which may include but is not limited to: plans, drawings and specifications that recommend or establish the scope of work, standards of workmanship, equipment specifications or utilization, construction standards, alternative response action, courses of actions, or response action health and safety controls.

"Public and commercial building" means the interior space of any building which is not a school building, except that the term does not include any residential apartment building of fewer than 10 units or detached single-family homes. The term includes but is not limited to: industrial and office buildings, residential apartment buildings and condominiums of 10 or more dwelling units, government-owned buildings, colleges, museums, airports, hospitals, churches, preschools, stores, warehouses, and factories. Interior space includes exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

"Reciprocity" means a written cooperative or interchange of privileges between the State of Tennessee and consenting EPA-authorized states or EPA authorized Indian Tribes.

"Recognized laboratory" means a laboratory entity that is accredited in accordance with 15 U.S.C. § 2646(d).

"Refresher training course" means a training course accredited by the Commissioner as an annual, supplemental training course for an individual engaged in a specific discipline.

"Removal" means the taking out or the stripping of any asbestos-containing building material from a damaged area, a functional space, or a homogeneous area in a school or public and commercial building.

"Repair" means returning damaged asbestos-containing building material to an undamaged condition or to an intact state so as to prevent a fiber release.

"Response action" means a method, including removal, encapsulation, enclosure, repair, and operations, and maintenance, that protects human health and the environment from friable asbestos-containing building material.

"School" means any elementary or secondary school as defined in Section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. § 2854) as of the effective date of this rule.

"School building" means:

- (a) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food;
- (b) Any gymnasium or other facility which is specially designed for student athletic or recreational activities;
- (c) Any other facility used for the instruction or housing of students or for the administration of educational or research programs;
- (d) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in subparagraphs (a), (b), or (c) of this definition;
- (e) Any portico or covered exterior hallway or walkway of any facility described in subparagraphs (a), (b), or (c) of this definition; and
- (f) Any exterior portion of a mechanical system used to condition interior space of any facility described in subparagraphs (a), (b), or (c) of this definition.

"Small-scale, short-duration activities" or "SSSD" means tasks such as, but not limited to:

- (a) Removal of asbestos-containing insulation on pipes;
- (b) Removal of small quantities of asbestos-containing insulation on beams or above ceilings;
- (c) Replacement of an asbestos-containing gasket on a valve;
- (d) Installation of electrical conduits through or proximate to asbestos-containing materials;
- (e) Installation or removal of a small section of drywall;
- (f) Removal of small quantities of asbestos-containing material only if required in the performance of another maintenance activity not intended as asbestos abatement;
- (g) Removal of asbestos-containing thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag;
- (h) Minor repairs to damaged thermal system insulation which does not require removal;

- (i) Repairs to a piece of asbestos-containing wallboard; and
- (j) Repairs, involving encapsulation, enclosure, or removal, to small amounts of friable asbestos-containing material only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed the amounts greater than those which can be contained in a single prefabricated mini-enclosure (e.g., a glove bag). If used, such an enclosure shall conform spatially and geometrically to the localized work area to perform its intended containment function.

"State-of-the-art work practices" means the use of proper work practices for asbestos abatement activities, including: descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of high-efficiency particulate air ("HEPA") vacuums; and proper clean-up and disposal procedures. The term also means proper work practices for: removal, encapsulation, enclosure, and repair of asbestos-containing material; emergency procedures for unplanned releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices. New abatement-related techniques and methodologies may be used.

"Surfacing material" means material in a school or public and commercial building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

"Synchronous online course" means an online course that is delivered live and that students are required to log in and participate in at a specific time.

"Thermal system insulation material" means material in a school or public and commercial building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior components to prevent heat loss or gain, water condensation, or for other purposes.

"Training curriculum" means a course that meets or exceeds the established set of course topics set forth in paragraph (4) of Rule 0400-13-02-.02 for a particular discipline to provide asbestos specialized instructions and hands-on training.

"Training hour" means at least 50 minutes of actual instruction, including but not limited to: time devoted to lecture, learning objectives, small group activities, demonstrations, evaluations, hands-on training exercises, or any combination of lecture, activity, demonstration, evaluation, or hands-on training exercise. Training hours do not include registration, breaks, or meals.

"Training manager" means the individual who is responsible for administering the accredited training program and for monitoring the performance of principal and guest instructors to ensure the training provider's compliance with the requirements of Rule 0400-13-02-.02.

"Training provider" means the individual or firm that applies for or that has received accreditation from the Commissioner to conduct asbestos training in Tennessee and is responsible for complying with the applicable requirements of Rule 0400-13-02-.02.

"TSCA" means the Toxic Substances Control Act, 15 U.S.C. §§ 2601 to 2692.

"Visible emission" means any emission which is visually detected without the aid of instruments and which contains particulates of asbestos material.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

0400-13-02-.02 Accreditation of Training Providers and Training Course(s).

(1) Scope and General Requirements.

- (a) No person shall provide, claim to provide, or offer to conduct an initial or refresher asbestos training course in Tennessee without first applying for and receiving accreditation from the Commissioner and such training course being accredited by the Commissioner in accordance with the requirements of this rule. The requirements of this rule regarding accreditation of a refresher training course apply to both classroom-based training and online training unless otherwise specified. No training provider shall conduct any course in a manner materially different from the manner accredited by the Commissioner.
- (b) A training provider, as a condition of obtaining and maintaining accreditation, shall employ an asbestos training manager and principal instructors whose credentials have been reviewed and approved by the Commissioner.
- (c) A training provider seeking accreditation from the Commissioner to provide initial or refresher training courses shall follow the procedures of paragraph (2) of this rule and comply with the requirements of paragraphs (3) and (4) of this rule. An accredited training provider seeking reaccreditation shall comply with the requirements of paragraph (5) of this rule. Paragraph (6) of this rule addresses the records an accredited training provider shall obtain and maintain. Paragraph (7) of this rule addresses audits of all aspects of a training provider's training program.
- (d) A training provider may seek accreditation to offer accredited initial or refresher asbestos training courses in any of the following disciplines: inspector, management planner, supervisor, project designer, worker, and project monitor.
- (e) A training provider shall confirm that its students possess a current certificate or accreditation from an authorized EPA state or Indian tribe in the appropriate discipline before granting any individual admission to a refresher training course. A training provider offering the initial management planner training course shall verify that students have met the prerequisite of possessing a valid inspector training certificate from the EPA, an EPA-authorized state or Indian tribe, or a current certificate for an initial or refresher inspector training course at the time of course admission.
- (2) Training Provider Accreditation Application Process.

The following are the procedures a training provider shall follow to receive accreditation from the Commissioner before offering or conducting asbestos initial or refresher training courses, and to obtain approval for the training manager and principal instructors:

(a) Initial or refresher training course application.

A training provider seeking accreditation to offer and conduct initial or refresher asbestos training courses in English or in another language shall submit a completed application to the Commissioner that is signed by a responsible official of the training provider. A training provider may apply for accreditation for a refresher training course concurrently with its application for accreditation of the corresponding initial training course. The application shall contain in one or more notebooks with sections clearly divided and labeled, the following information:

- 1. The training provider's legal business name, physical and mailing address (if different) of the headquarters and training facility site(s), telephone and fax numbers, and current email address(es);
- A list of the initial or refresher asbestos training course or courses for which the training provider is applying for accreditation. For the purposes of this rule, courses taught in different languages and electronic learning courses are considered different courses, and each must independently meet the accreditation requirements;
- 3. A list of any EPA-authorized states and EPA regions in which the training provider currently maintains accreditation to conduct initial or refresher asbestos training courses and dates each accreditation was originally issued and if such accreditations are current;

- 4. (i) The names, qualifications, and copies of credentials acceptable to the Commissioner for principal instructors and the training manager, which may include, but are not limited to:
 - (I) Copies of official academic transcripts, degree, or professional license as evidence of meeting the education requirements;
 - (II) Resumes, letters of reference, and detailed descriptions of work experience, including the number of and dates of projects and jobs, the size of each project and job, descriptions of tasks performed by the individual, and the names and telephone numbers of asbestos supervisors, as evidence of meeting the work experience requirements; and
 - (III) Initial and consecutive refresher course completion certificates, including a current certificate, in the appropriate specific asbestos training course(s) as evidence of meeting the training requirements;
 - (ii) The principal instructors and the training manager identified in subpart (i) of this part shall meet the academic and experience requirements, as required by parts (3)(b)1 and 2 of this rule; and
 - (iii) If the training provider is an individual, general partnership, or other business entity where individuals shall hold the right to all or part of the accreditation, an attestation and documentation for each such individual complying with the requirements of the Eligibility Verification for Entitlements Act, codified at T.C.A. Title 4, Chapter 58, Part 1;
- 5. A description of the facilities and equipment to be used for administering the training courses;
- 6. A legible copy of the student and instructor manuals and any electronic version of such manual, the course agenda, handouts, and other materials to be used for each training course for which the training provider is seeking accreditation;
- 7. For each training course of which the training provider is seeking accreditation, if a published textbook is used as supplemental course material, the author's name, textbook title, publisher, and publication date;
- 8. If a training provider is seeking accreditation to offer a training course in a non-English language, a copy of the student and instructor manuals in both the English language and non-English language versions, and any electronic version of such manuals;
- 9. A statement signed by a duly authorized representative of the training provider certifying that each course the training provider is seeking accreditation to offer, as described in the application, meets the requirements set forth in paragraphs (3) and (4) of this rule, with the following information regarding each training course:
 - (i) Length of training in days, starting times and ending times for each day of training, and the total hours for each course;
 - (ii) Amount and type of hands-on training exercise;
 - (iii) Examination (length, format, and passing score);
 - (iv) Topics covered in the course(s) and time duration of each; and
 - A list of learning objectives for each lecture (topic), class exercise, and hands-on training exercise;

- 10. A copy of each training course examination blueprint, course examination, and examination answer key for each course for which the training provider is seeking accreditation to provide. Any course examination blueprint, course examination, or examination key provided pursuant to this part shall be confidential;
- 11. An example of the uniquely numbered training certificate containing all the requirements of part (3)(b)11 of this rule, which shall be issued to students who successfully complete each training course and pass the examination;
- 12. A copy of the quality control plan as required by part (3)(b)13 of this rule; and
- 13. A course evaluation form developed to receive feedback from students to help determine the strengths and weaknesses of each course or instructor to promote continuous improvement in the delivery of the training course(s) by the instructor(s).
- (b) Upon receipt, the Commissioner will review the application for completeness, and once deemed complete, evaluate the applicant's ability to comply with the requirements of paragraphs (3) and (4) of this rule. The Commissioner will complete the review within 180 days after the application is deemed complete. The Commissioner may request additional information or consider additional information from other sources, including but not limited to a training provider's work history and materials retained by that training provider under paragraph (6) of this rule. In the case of accreditation, an accreditation certificate will be sent to a training provider that identifies the accredited course or courses an accredited training provider may offer. Submitting an incomplete or insufficient application will result in a denial of accreditation, and a letter detailing the deficiencies will be sent to the applicant. If denied, a training provider may reapply for accreditation by filing a new application for accreditation and paying the appropriate application fee(s).
- (c) A training provider may apply for accreditation to offer training courses in as many disciplines as the training provider chooses. A training provider may seek accreditation to offer additional courses at any time provided that the training provider demonstrates that it meets the requirements of this rule. A classroom-based annual refresher training course accreditation does not extend to an online annual refresher training course. Each online annual refresher training course shall be accredited separately.
- (d) A training provider applying for accreditation to offer training courses shall submit with the application the appropriate non-refundable application fee(s) in accordance with Rule 0400-13-02-.05(2)(a), Table 1.
- (e) A training provider's accreditation shall expire after two years on the last day of the month of issuance. If the training provider meets the requirements of paragraph (5) of this rule, the training provider shall be re-accredited provided its accreditation has not been revoked, refused to be re-accredited, or suspended in accordance with Rule 0400-13-02-.07.
- (f) Changes to the training provider's rosters such as the manager and principal instructor list shall be submitted by a training provider to the Commissioner for approval and include, at a minimum, the documentation required by part (a)4 of this paragraph for each individual to be added to the provider's roster. The Commissioner will provide written approval or denial with explanation within 30 days of receipt of the revised program rosters and application review fee set forth in Rule 0400-13-02-.05(2)(a), Table 1. A training provider shall obtain the approval of the Commissioner for the training manager and principal instructors prior to conducting any accredited training course.
- (g) Departmental receipt and deposit of fees submitted via mail or electronic payment is not an indication of accreditation to conduct any asbestos training course or approval of a training manager or principal instructor.
- (h) By applying for and accepting accreditation, a training provider consents to allowing the Commissioner to enter any location where the training provider maintains asbestos training records during regular business hours and any location where an asbestos course is being conducted.
- (3) Requirements for the accreditation of training provider(s) and courses.

- (a) No instructor may receive a course completion certificate for a course for which the individual served as an instructor.
- (b) A training provider shall meet the requirements of this subparagraph to obtain and retain accreditation from the Commissioner:
 - 1. A training provider shall employ a training manager who has:
 - (i) A bachelor's or graduate degree in building construction technology, occupational safety, public health, education, business administration, program management, or related scientific field;
 - (II) A license to practice as a registered architect, engineer, or certified industrial hygienist;
 - (III) At least two years of experience, education, or training in teaching adults;or
 - (IV) At least two years of experience in managing a training program specializing in environmental hazards; and
 - (ii) Demonstrated, to the satisfaction of the Commissioner, experience, education, or training in the construction industry including lead or asbestos abatement, painting, carpentry, renovation, remodeling, or occupational safety and health.
 - 2. A training provider shall ensure that the training manager designates, for each training course, a qualified principal instructor who has:
 - (i) Successfully completed the appropriate EPA-authorized State accredited asbestos training course(s) for each discipline in which the principal instructor is listed to instruct:
 - (ii) Academic credentials (Associate's Degree or high school diploma); and
 - (iii) Experience in teaching adults in lead or asbestos abatement, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene.
 - 3. A training provider shall ensure that the training manager or principal instructor designates qualified guest instructor(s) when needed to provide specific instruction to the lecture, hands-on activities, or work practice components of a course. To be qualified, a guest instructor shall be:
 - (i) A journeyman in a specific trade (inclusive of, but not limited to, journeymen contractors, plumbers, or electricians); or
 - (ii) A professional in a specific discipline (inclusive of, but not limited to, professionals such as lawyers, insurance agents, or doctors).
 - 4. A training provider shall be responsible for the organization of courses and oversight of all teaching materials used to conduct accredited asbestos training courses. A training provider's training manager shall ensure that all topics and objectives covered in each course reflect the current federal, state, and local regulations, standards, and guidelines.
 - 5. A training provider shall ensure the availability of, and provide adequate facilities for, the delivery of the lecture, course examination, hands-on training exercises, and assessment activities. This includes providing and using training equipment that reflects current work practices and maintaining or updating the equipment, training manuals, and facilities as needed.

- 6. A training provider shall ensure that each class is taught in the language in which all students of that particular class are fluent. Written materials shall be correctly translated into the language in which all participating students are fluent. The principal and guest instructor(s) shall be sufficiently fluent in the language in which the class is conducted. Interpreters may not be used to teach or provide instructions in a training course.
- 7. For an initial asbestos training course to be accredited, the training provider shall provide a course that meets the requirements of subparagraph (4)(b) of this rule.
- 8. For a classroom-based refresher training course to be accredited, a training provider shall:
 - (i) Provide a course that meets the following requirements:
 - (I) The inspector refresher course shall last a minimum of four training hours;
 - (II) The management planner refresher course shall last a minimum of four training hours. However, to maintain accreditation as a management planner, an individual shall complete both the inspector refresher course and the management planner refresher course; and
 - (III) The supervisor, project designer, worker, and project monitor refresher courses shall last a minimum of eight training hours;
 - (ii) Include a comprehensive overview of the curriculum requirements contained in paragraph (4) for the discipline covered;
 - (iii) Provide a discipline-specific course as separate and distinct course that is not combined with any other training during the period of the refresher course, except that multiple courses may be taught at different times on the same day; and
 - (iv) Ensure an instructor is physically present in the classroom delivering the lectures.
- 9. For an online asynchronous and synchronous asbestos refresher training course to be accredited, a training provider shall:
 - (i) Submit, as a part of the application required by paragraph (2) of this rule, the instructor's credentials (including the credentials of those who conduct or develop the online annual refresher training course) and provide updates of any subsequent changes in course instructors;
 - (ii) Have systems in place that:
 - (I) Prior to beginning the online annual refresher training, and at intervals during the training, authenticate the identity of the students taking the training and the student's eligibility to enroll in the course and protect the student's personal and sensitive information such as social security number, date of birth, and state asbestos license number by using appropriate encryption technologies;

(Note: Student authentication could be obtained by the student submitting personal and sensitive information to a training provider such as social security number, date of birth, state asbestos license number, and/or special question and answer combination. That information shall be requested prior to beginning the online annual refresher training, and at intermittent, designated intervals during the training. A training provider shall use appropriate encryption technologies to protect the student's sensitive user information. Such systems will help to deter fraud, including the falsification of student identity.)

- (II) Ensure students are focusing on the training material throughout the entire training period by providing a strong interactive component; and
- (III) Prevent students from prematurely skipping ahead by establishing minimum time allotments for each section of the training, and monitor and maintain records of a student's actual time online, including breaks;
- (iii) Have a specific discipline course instructor available to answer questions that students have while they are taking the online refresher training course by providing online threaded discussion, message boards, or a toll-free telephone number available during training periods for a student to call with questions for a specific discipline course instructor regarding the course material;
- (iv) Provide technical support via methods outlined in subpart (iii) of this part to the student during training periods to address any technical problems that arise, such as with the student's computer or with the online application and ensure that if a student is inadvertently logged out of an online session due to technical difficulties, the student is given credit for the portion of the course already completed; and the student is required to make-up the portion of the training missed;
- (v) Provide an online course that meets requirements of part 8 of this subparagraph except for subpart (iv) of that part;
- (vi) Verify the identity of the student taking the examination for an online refresher course in a manner sufficient to prevent fraud and have either a testing center or proctor-based exam for the examination portion of the online training;
- (vii) Ensure that:
 - The examination questions are randomized from course to course so that the same examination is not given repeatedly;
 - (II) An item bank (or a pool of questions used to vary the questions asked) is used to ensure that examination questions are not used repeatedly; and
 - (III) Controls are instituted to ensure that the examination screen cannot be saved, copied, or printed;
- (viii) Include a review and discussion of changes in federal, state, and local regulations that are applicable to Tennessee and clearly identify that the online refresher course is specifically applicable to Tennessee when advertising the course or when registering a student for the course; and
- (ix) Ensure that a course evaluation of the online course is developed for each online refresher course to help determine the strengths and weaknesses of such course and to promote continuous improvement.
- (x) Training providers should implement systems that reduce opportunities for document fraud including a distinct online training certificate that contains all the requirements of part 11 of this subparagraph and that designates the course using the following language: Traditional Classroom, Asynchronous Online, or Synchronous Online.
- 10. General course and examination requirements.
 - (i) For each initial training course offered, the training manager shall require the instructor to conduct a hands-on training assessment, if applicable, for the topic being taught, and a course examination at the completion of each course. The minimum passing score on any, initial or refresher, course examination shall be 70% correct. In order for any student to pass an initial training course the student

shall successfully complete the hands-on training assessment, if applicable, and pass the course examination. The enrollment in any given class shall be limited to 25 students.

- (ii) A training provider is responsible for maintaining the validity and integrity of the applicable hands-on training test to ensure that it accurately evaluates the student's performance of the work practices and procedures associated with the course topics of each discipline contained in paragraph (4) of this rule.
- (iii) A training provider is responsible for maintaining the validity and integrity of an initial or refresher course examination to ensure that it accurately evaluates the student's knowledge and retention of the course topics contained in paragraph (4) of this rule.
- (iv) A closed book course examination shall be developed in accordance with the course blueprint and submitted with the training course accreditation application required by part (2)(a)10 of this rule. A training provider shall administer a closed book examination written for each discipline, except the asbestos worker and supervisor initial or refresher course examination, which may be administered orally to a student, if requested. Each examination shall cover the topics included in the training course for that discipline. A training provider shall document that each individual who receives an initial or refresher-training course completion certificate has achieved a passing score of 70% or higher on the examination. These records shall clearly indicate the date upon which the examination was administered, the training course and discipline for which the examination was given, the name of the individual who proctored the examination, a copy of the examination, and the name and test score of each individual taking the examination. The following are the requirements for examination in each initial and refresher asbestos training course:
 - (I) Worker, Inspector, and Management Planner

Initial: 50 multiple-choice questions Refresher: 25 multiple-choice questions

(II) Supervisor, Project Designer and Project Monitor

Initial: 100 multiple-choice questions Refresher: 25 multiple-choice questions

- 11. (i) A training provider shall issue a unique course completion certificate to each student who successfully completes an initial or refresher training course. For a refresher training course, the certificate shall state whether the refresher training course was in-person or online. A training provider shall maintain records that document the names of all individuals who have attended a course, certificates awarded, their course completion certificate numbers, the discipline for which certification was conferred, training course dates and expiration dates, and the training location. A training provider shall maintain the records in a manner that allows verification by telephone or fax of the required information. The topic and dates of the training course shall correspond to those listed on that individual's course completion certificate. The initial or refresher course completion certificate shall include the following minimum information:
 - (I) A unique certificate number;
 - (II) Name of individual;
 - (III) Discipline of the training course completed;
 - (IV) Dates of the training course;

- (V) Date of the examination and examination score;
- (VI) The training location;
- (VII) An expiration date of one year after the date upon which the individual successfully completed the course and examination;
- (VIII) The name, address, and telephone number of the training provider that issued the course completion certificate; and
- (IX) A statement that an individual receiving a management planner certificate has completed the inspector course prerequisite training for asbestos accreditation.
- (ii) The training course completion certificate issued to a student for an online refresher training course shall specifically reference that the course was taken online and contain the information required by subpart (i) of this part.
- (iii) Training providers shall notify the Commissioner via mail, fax, online submission or e-mail by the fifth day of each month of the name of every student who attended an online refresher training course during the previous calendar month, the refresher training course or courses that each student took, and each student's pass or fail score in each such online refresher training course.
- 12. A training provider offering the initial management planner training course shall request documentation from the student that the student has completed a valid initial or refresher asbestos inspector training course and possesses an inspector course completion certificate before granting course admission.
- 13. A training provider shall develop and implement a quality control plan. The plan shall be used to maintain and improve the quality of the training program. This quality control plan shall contain at least the following elements:
 - (i) Procedures for periodic revision of training materials, hands-on training materials, if applicable, and course examination to reflect innovations in the field;
 - (ii) Procedures for the training provider to annually determine and document all principal, guest, work practice, or hands-on instructors for competence and their awareness of new developments, new regulations, and innovations in the asbestos activities and field testing. All instructors shall be reviewed and evaluated annually by a training provider's training manager;
 - (iii) A requirement that students enrolled in training courses shall not be made to participate in more than eight hours of actual training in a single day;
 - (iv) A requirement that any student who completed a work shift of eight hours or more during a day not exceed four hours of asbestos activity training during that day; and
 - (v) A requirement applicable for all courses that a specific course shall be completed by a student within two weeks of the training course start date.
- 14. Each training provider is responsible for ensuring compliance with all requirements of this rule and for ensuring that its training manager and instructors meet all requirements and responsibilities as set out in this chapter.
- 15. For an initial or refresher training course, a training provider shall:

- (i) On forms designated by the Commissioner, provide a written notification via mail, e-mail, or fax of the start date, location, name of the principal instructor, and the language in which each course will be taught at least 10 days prior to commencement of the first day of instructional training;
- (ii) Give the Commissioner written notice of any changes in the start date, location, principal instructor, or language of a training course. Such notice shall be received by the Commissioner, via mail, e-mail, or fax at least five days prior to commencement of the first day of instructional training; and
- (iii) No later than five days after the conclusion of an initial or refresher training course, provide a written course student roster to the Commissioner on a form provided by the Commissioner. The course student roster shall contain the name of every student who attended the course, their pass or fail score, and location where the class was held and shall be submitted via mail, e-mail, or fax.
- 16. A training provider's failure to provide notifications as required by part 15 of this subparagraph may result in the Commissioner not accepting course completion certificates for that training course.
- 17. The training provider is required to provide students with the student manual submitted to the Commissioner pursuant to subparagraph (2)(a) of this rule. If the student manual will be provided in a format other than print, such as electronically, the training provider shall:
 - (i) Submit a copy of the training manual in the medium to be used to the Commissioner for approval before use; and
 - (ii) Either:
 - (I) Request and ensure that students bring electronic devices that can access the manual to be used in the classroom; or
 - (II) Provide an electronic device that can access the manual for each student's use while taking the specific asbestos training course.
- (4) Minimum training curriculum requirements.
 - (a) General.
 - To obtain and retain accreditation to offer an asbestos course in a specific discipline, a training provider shall ensure that the provider's course of study includes, at a minimum, the course topics listed under each discipline in subparagraph (b) of this paragraph. Requirements marked with an asterisk (*) indicate areas that require hands-on training activities as an integral component of the initial course. Hands-on training shall include working with asbestos-substitute materials, fitting and using respirators, use of glove bags, donning protective clothing, and constructing a decontamination unit, as well as other asbestos work activities.
 - A course review of the key aspects for a specific training course shall be conducted at the end of the course. A closed book examination shall be given at the end of each training course. The closed book examination for the asbestos worker and supervisor disciplines may be written or may be administered orally to a student. All other examinations shall be written.
 - 3. In-person, classroom-based lectures shall be conducted for all initial training courses.
 - 4. Unless demonstrated to the Commissioner as not needed, interactive audiovisual classroom exercises and materials shall be used to complement lectures in training courses, but such interactive exercises and materials shall not entirely substitute for the lectures.

5. The training curriculum for each discipline shall be separate and distinct from the others. An individual seeking accreditation in more than one of the six accredited disciplines included in subparagraph (b) of this paragraph shall not attend more than one training course at a time, but may attend courses sequentially.

(b) Disciplines.

1. Asbestos Inspector.

All individuals who inspect for ACBM in schools or public and commercial buildings shall be accredited as an asbestos inspector prior to engaging or offering to engage in such activities. All individuals seeking accreditation as an inspector shall complete at least a three-day course as outlined in this part. The course shall include lectures, demonstrations, field trip, four hours of hands-on training, individual respirator fit-testing methods, course review of key aspects, and a written examination. Hands-on training shall include conducting a simulated building walk-through inspection and respirator fit-testing.

The asbestos inspector training course shall address the following topics and state-of-theart work practice standards:

(i) Background information on asbestos—

Identification of asbestos and examples and discussion of the uses and locations of asbestos in buildings; and physical appearance of asbestos;

(ii) Potential health effects related to asbestos exposure—

The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency periods for asbestos-related diseases; and a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs;

(iii) Functions/qualifications and role of inspectors—

Discussion of prior experience and qualifications for inspectors and management planners; discussion of the functions of an accredited inspector as compared to those of an accredited management planner; and a discussion of inspection process including inventory of ACM and physical assessment;

(iv) Legal liabilities and defenses—

Responsibilities of the inspector and management planner; a discussion of comprehensive general liability policies, claims-made, and occurrence policies, environmental and pollution liability policy clauses; state liability insurance requirements; bonding and the relationship of insurance availability to bond availability;

(v) Understanding building systems—

The interrelationship between building systems, including: an overview of common building physical plan layout; heat, ventilation, and air conditioning ("HVAC") system types, physical organization, and where asbestos is found on HVAC components; building mechanical systems, their types and organization, and where to look for asbestos on such systems; and inspecting electrical systems, including appropriate safety precautions; reading blueprints and as-built drawings;

(vi) Public/employee/building occupant relations—

Notifying employee organizations about the inspection; signs to warn building occupants; tact in dealing with occupants and the press; scheduling of inspections to minimize disruptions; and education of the building occupants about actions being taken;

(vii) *Pre-inspection planning and review of previous inspection records—

Scheduling the inspection and obtaining access; building record review; identification of probable homogeneous areas from blueprints or as-built drawings; consultation with maintenance or building personnel; review of previous inspection, sampling, abatement records of building; and the role of the inspector in exclusions for previously performed inspections;

(viii) *Inspecting for friable and non-friable ACM and assessing the condition of friable ACM—

Procedures to follow in conducting visual inspections for friable and non-friable ACM; types of building materials that may contain asbestos; touching materials to determine friability; open return air plenums and their importance in HVAC systems; assessing damage, significant damage, potential damage and potential significant damage; amount of suspected ACM, both in total quantity and as a percentage of the total area; type of damage; accessibility; material's potential for disturbance; known or suspected causes of damage or significant damage; and deterioration as assessment factors;

(ix) *Bulk sampling/documentation of asbestos—

Detailed discussion of the "Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a October 1985)"; techniques to ensure sampling in a randomly distributed manner for other than friable surfacing materials; sampling of non-friable materials; techniques for bulk sampling; inspector's sampling and repair equipment; patching or repair of damage from sampling; discussion of polarized light microscopy; choosing an accredited laboratory to analyze bulk samples; and quality control and quality assurance procedures. All bulk samples collected from school or public and commercial buildings shall be analyzed by a laboratory that is accredited under the National Voluntary laboratory Accreditation Program administered by the National Institute of Standards and Technology;

(x) *Inspector respiratory protection and personal protective equipment—

Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit-testing procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and use, storage, and handling of non-disposable clothing;

(xi) *Recordkeeping and writing the inspection report—

Labeling of samples and keying sample identification to sampling location; recommendations on sample labeling; detailing of ACM inventory; photographs of selected sampling areas and examples of ACM condition; and information required for inclusion in the management plan required for school buildings under 40 C.F.R. § 763.93. It shall be the state of the art for asbestos inspectors that standardized forms be used for recording the results of inspections in schools or public or commercial buildings, and that the course curriculum includes an example of a standardized form;

(xii) Regulatory review—

The following topics shall be covered: NESHAP (40 C.F.R. Part 61, Subparts A and M); EPA Worker Protection Rule (40 C.F.R. Part 763, Subpart G); OSHA Asbestos Construction Standard (29 C.F.R. § 1926.1101); OSHA Respiratory Protection (29 C.F.R. § 1910.134); the Asbestos-Containing Materials in School Rule (40 C.F.R. Part 763, Subpart E); and applicable state and local regulations, and differences between federal and state requirements where they apply, and the effects, if any, on public and nonpublic schools or commercial or public buildings;

(xiii) *Field trip-

This includes a field exercise, including a walk-through inspection; on-site discussion about information gathering and the determination of sampling locations; on-site practice in physical assessment; and classroom discussion of field exercises;

(xiv) Course review—

A review of key aspects of the training course; and

(xv) Written examination.

2. Asbestos Management Planner.

All individuals who prepare management plans for schools shall be accredited as an asbestos management planner prior to engaging or offering to engage in such activities. An individual performing the management planner role in public and commercial buildings is not required to be accredited under this chapter. All individuals seeking accreditation as management planners shall complete the required three-day inspector training course as outlined in part 1 of this subparagraph and a two-day management planner training course covering the topics contained in this part. Possession of a current initial or refresher inspector accredited training course completion certificate shall be a prerequisite for admission to the management planner training course. The management planner training course shall include lectures, demonstrations, course review and a written examination.

The management planner training course shall address the following topics and state-of-the-art work practice standards:

(i) Course overview—

The role and responsibilities of the management planner; operations and maintenance programs; setting work priorities; and protection of building occupants:

(ii) Evaluation/interpretation of survey results—

Review of the TSCA Title II requirements for inspection and management plans for school buildings as given in 40 C.F.R. § 763.93; interpretation of field data and laboratory results; and a comparison of field inspector's data sheet with laboratory results and site survey;

(iii) Hazard assessment—

Amplification of the difference between physical assessment and hazard assessment; the role of the management planner in hazard assessment; explanation of significant damage, damage, potential damage, and potential significant damage; use of a description (or decision tree) code for assessment of ACM; assessment of friable ACM; and relationship of accessibility, vibration

sources, use of adjoining space, and air plenums and other factors to hazard assessment:

(iv) Legal implications—

Liability; insurance issues specific to planners; liabilities associated with interim control measures, in-house maintenance, repair, and removal; and the use of results from previously performed inspections;

(v) Evaluation and selection of control options—

Overview of encapsulation, enclosure, interim operations and maintenance, and removal; advantages and disadvantages of each method; response actions described via a decision tree or other appropriate method; work practices for each response action; staging and prioritizing of work in both vacant and occupied buildings; and the need for containment barriers and decontamination in response actions;

(vi) Role of other professionals—

Use of industrial hygienists, engineers, and architects in developing technical specifications for response actions; any requirements that may exist for architect sign-off of plans; and a team approach to design of high-quality job specifications;

(vii) *Developing an operations and maintenance (O&M) plan—

Purpose of the plan; discussion of applicable EPA guidance documents; what actions should be taken by custodial staff; proper cleaning procedures; steam cleaning and HEPA vacuuming; reducing disturbance of ACM; scheduling O&M for off-hours; rescheduling or canceling renovation in areas with ACM; boiler room maintenance; disposal of ACM; in-house procedures for ACM-bridging and penetrating encapsulants; pipe fittings, metal sleeves; polyvinyl chloride, canvas, and wet wraps; muslin with straps, fiber mesh cloth; mineral wool, and insulating cement; discussion of employee protection programs and staff training; and a case study in developing an O&M plan (development, implementation process, and problems that have been experienced);

(viii) Regulatory review—

The following topics shall be covered: NESHAP (40 C.F.R. Part 61, Subparts A and M); OSHA Asbestos Construction Standard (29 C.F.R. § 1926.1101); EPA Worker Protection Rule (40 C.F.R. Part 763, Subpart G); TSCA Title II; and applicable state regulations;

(ix) Recordkeeping for the management planner—

Use of field inspector's data sheet along with laboratory results; on-going recordkeeping as a means to track asbestos disturbance; and procedures for recordkeeping. The standardized form that is to be used shall be incorporated into the initial training course for management planners;

(x) Assembling and submitting the management plan—

Plan requirements for schools in accordance with 40 C.F.R. § 763.93; and the management plan as a planning tool;

(xi) Financing abatement actions—

Economic analysis and cost estimates; development of cost estimates; present costs of abatement versus future operation and maintenance costs; and Asbestos School Hazard Abatement Act grants and loans;

(xii) Course review—

A review of key aspects of the training course; and

- (xiii) Written examination.
- 3. Asbestos Supervisor.

An individual shall be accredited as an asbestos supervisor prior to supervising (directly or indirectly) or offering to supervise any of the following activities with respect to friable ACBM in a school or public and commercial buildings: a response action other than an SSSD activity, a maintenance activity that disturbs friable ACBM other than an SSSD activity, or a response action for a major fiber release episode.

All individuals seeking accreditation as an asbestos supervisor shall complete at least a five-day training course as outlined in this part. The training course shall include lectures, demonstrations, a minimum of 14 hours of hands-on training, individual respirator fittesting, course review, and a written examination. Hands-on training shall permit asbestos supervisors to have actual experience performing tasks associated with asbestos abatement.

Asbestos supervisors include those individuals who provide supervision and direction to asbestos workers performing response actions. Asbestos supervisors may include those individuals with the position title of foreman, working foreman, or lead man pursuant to collective bargaining agreements.

The asbestos supervisor training course shall address the following topics and state-of-the-art work practice standards:

(i) The physical characteristics of asbestos and asbestos-containing materials—

Identification of asbestos; aerodynamic characteristics; typical uses; physical appearance; a review of hazard assessment considerations; and a summary of abatement control options;

(ii) Potential health effects related to asbestos exposure—

The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; synergism between cigarette smoking and asbestos exposure; and the latency period for diseases;

(iii) *Employee personal protective equipment—

Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures for respirators; methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit-testing procedures; variability between field and laboratory protection factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; the use, storage, and handling of non-disposable clothing; and regulations covering personal protective equipment;

(iv) *State-of-the-art work practices—

Proper work practices for asbestos abatement activities, including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of HEPA vacuums; proper clean-up and disposal procedures; work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for unplanned releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices (New abatement-related techniques and methodologies may be discussed.);

(v) *Personal hygiene—

Entry and exit procedures for the work area; use of showers; and the avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area (Potential exposures, such as family exposure, shall be included.);

(vi) *Additional safety hazards—

Hazards encountered during 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, and confined spaces;

(vii) Medical monitoring—

OSHA and EPA Worker Protection Rule requirements for physical examinations, including a pulmonary function test, chest X-rays, and a medical history for each employee;

(viii) Air monitoring—

Procedures to determine airborne concentrations of asbestos fibers, including descriptions of aggressive air sampling, sampling equipment and methods, reasons for air monitoring, types of samples, and interpretation of results. It shall be the state-of-the-art work practices for asbestos supervisors to ensure that transmission electron microscopy ("TEM") is used for analysis of final clearance samples in schools and performed by laboratories that are accredited by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program; ensure air samples collected for clearance in a school when the area is greater than a small-scale, short-duration activities and less than or equal to 160 square feet or 260 linear feet shall be analyzed by phase contrast PCM using a laboratory enrolled in the American Industrials Hygiene Association Proficiency Analytical Testing Program; and ensures that air samples collected for clearance in a public or commercial building are analyzed by PCM when the area is greater than or equal to 160 square feet or 260 linear feet by an accredited laboratory.

- (ix) Relevant federal, state, and local regulatory requirements, procedures, and standards, including requirements of the TSCA Title II; National Emission Standards for Hazardous Air Pollutants (40 C.F.R. part 61), Subparts A (General Provisions) and M (National Emission Standard for Asbestos); OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respirator protection (29 C.F.R. § 1910.134); OSHA Asbestos Construction Standard (29 C.F.R. § 1926.1101); EPA Worker Protection Rule (40 C.F.R. Part 763, Subpart G); and applicable state and local asbestos regulatory requirements;
- (x) Respiratory protection programs and medical monitoring programs;
- (xi) Insurance and liability issues—

Supervisor or contractor issues; firm issues; worker's compensation coverage and exclusions; third-party liabilities and defenses; insurance coverage and exclusions;

(xii) Recordkeeping for asbestos abatement projects—

Records required by federal, state, and local regulations; records recommended for legal and insurance purposes;

(xiii) Supervisory techniques for asbestos abatement activities—

Supervisory practices to enforce and reinforce the required work practices and discourage unsafe work practices;

(xiv) Contract Specifications—

Discussions of key elements that are included in a contract specifications;

(xv) Course review—

A review of key aspects of the training course; and

- (xvi) Written examination.
- Asbestos Project Designer.

An individual shall be accredited as an asbestos project designer prior to designing or offering to design any of the following activities with respect to friable ACBM in a school or public and commercial building: (i) a response action other than a SSSD maintenance activity, (ii) a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, (iii) or a response action for a major fiber release episode. All individuals seeking accreditation as an asbestos project designer shall complete at least a minimum three-day training course as outlined in this part. The project designer course shall include lectures, demonstrations, a field trip, course review and a written examination.

The abatement project designer training course shall address the following topics and state-of-the-art work practice standards:

(i) Background information on asbestos—

Identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; and the physical appearance of asbestos;

(ii) Potential health effects related to asbestos exposure—

The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; the synergistic effect between cigarette smoking and asbestos exposure; the latency periods for asbestos-related diseases; and a discussion of the relationship between asbestos exposure and asbestosis, lung cancer, mesothelioma, and cancers of other organs;

(iii) Overview of abatement construction projects—

Abatement as a portion of renovation projects; OSHA requirements for notification of other contractors on a multi-employer site (29 C.F.R. § 1926.1101);

(iv) *Safety system design specifications—

Design, construction, and maintenance of containment barriers and decontamination enclosure systems; positioning of warning signs; electrical and

ventilation system lock-out; proper working techniques for minimizing fiber release; entry and exit procedures for the work area; use of wet methods; proper techniques for initial cleaning; use of negative-pressure exhaust ventilation equipment; use of HEPA vacuums; proper clean-up and disposal of asbestos; work practices as they apply to encapsulation, enclosure, and repair; and the use of glove bags and a demonstration of glove bag use;

(v) *Field trip—

A visit to an abatement site or other suitable building site, including on-site discussions of abatement design and building walk-through inspection. Include discussion of rationale for the concept of functional spaces during the walk-through;

(vi) *Employee personal protective equipment—

Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit-testing procedures; variability between field and laboratory protection factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and the use, storage, and handling of non-disposable clothing;

(vii) Additional safety hazards—

Hazards encountered during abatement activities and how to deal with them, including electrical hazards, heat stress, air contaminants other than asbestos, fire and explosion hazards;

(viii) Fiber aerodynamics and control—

Aerodynamic characteristics of asbestos fibers; importance of proper containment barriers; settling time for asbestos fibers; wet methods in abatement; aggressive air monitoring following abatement; and aggressive air movement and negative-pressure exhaust ventilation as a clean-up method;

(ix) Designing abatement solutions—

Discussion of removal; enclosure; encapsulation methods; and asbestos waste disposal;

(x) Final clearance process—

Discussion of the need for a written sampling rationale for aggressive final air clearance; requirements of a complete visual inspection; and the relationship of the visual inspection to final air clearance. It shall be the state of the art for asbestos project designers to ensure that transmission electron microscopy ("TEM") is used for analysis of final clearance samples in schools; or to analyze samples using phase contract microscopy in areas equal to or greater than 160 square feet or 260 linear feet;

(xi) Budgeting/cost estimating—

Development of cost estimates; present costs of abatement versus future operation and maintenance costs; and setting priorities for abatement jobs to reduce costs;

(xii) Writing abatement specifications—

Preparation of and need for a written project design; means and methods specifications versus performance specifications; design of abatement in occupied buildings; modification of guide specifications for a particular building; worker and building occupant health/medical considerations; and replacement of ACM with non-asbestos substitutes;

(xiii) Preparing abatement drawings—

Significance and need for drawings, use of as-built drawings as base drawings; use of inspection photographs and on-site reports; methods of preparing abatement drawings; diagramming containment barriers; the relationship of drawings to design specifications; and particular problems related to abatement drawings;

- (xiv) Contract preparation and administration;
- (xv) Legal/liabilities/defenses—

Insurance considerations; bonding; hold-harmless clauses; use of abatement contractor's liability insurance; and claims made versus occurrence policies;

(xvi) Replacement—

Replacement of asbestos with asbestos-free substitutes;

(xvii) Role of other consultants-

Development of technical specification sections by industrial hygienists or engineers; the multi-disciplinary team approach to abatement design;

(xviii) Occupied buildings—

Special design procedures required in occupied buildings; education of occupants; extra monitoring recommendations; staging of work to minimize occupant exposure; and scheduling of renovation to minimize exposure;

- (xix) Relevant federal, state and local regulatory requirements, procedures, and standards, including, but not limited to requirements of TSCA Title II; National Emission Standards for Hazardous Air Pollutants (40 C.F.R. Part 61), Subparts A (General Provisions) and M (National Emission Standard for Asbestos); OSHA Respiratory Protection (29 C.F.R. § 1910.134); OSHA Asbestos Construction Standard (29 C.F.R. § 1926.1101); EPA Worker Protection Rule (40 C.F.R. Part 763, Subpart G); OSHA Hazard Communication Standard (29 C.F.R. § 1926.59);
- (xx) Course Review—

A review of key aspects of the training course; and

- (xxi) Written examination.
- 5. Asbestos Worker.

An individual shall be accredited as an asbestos worker prior to carrying out or offering to carry out any of the following activities with respect to friable ACBM in a school or public and commercial building: a response action other than a SSSD activity, a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, or a response action for a major fiber release episode. All individuals seeking accreditation as an asbestos worker shall complete at least a four-day course as outlined in this part.

The asbestos worker training course shall include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit-testing, course review and a written examination to the class as whole or an oral examination to an individual student if requested. Hands-on training shall permit workers to have actual experience performing tasks associated with asbestos abatement. An individual who is otherwise accredited as an asbestos supervisor may perform in the role of an asbestos worker without possessing a separate state accreditation certification as an asbestos worker.

The asbestos worker training course shall address the following topics and state-of-the-art work practice standards:

(i) The physical characteristics of asbestos—

Identification of asbestos, aerodynamic characteristics, typical uses, physical appearance, and a summary of abatement control options;

(ii) Potential health effects related to asbestos exposure—

The nature of asbestos-related diseases; routes of exposure; dose-response relationships and the lack of a safe exposure level; synergistic effect between cigarette smoking and asbestos exposure; and latency period for asbestos-related diseases; and a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs;

(iii) *Employee personal protective equipment—

Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit-testing procedures; variability between field and laboratory protection factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and use, storage, and handling of non-disposable clothing; and regulations covering personal protective equipment;

(iv) *State-of-the-art work practices—

Proper work practices for asbestos abatement activities, including descriptions of proper construction; maintenance of barriers and decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of HEPA vacuums; proper clean-up and disposal procedures; work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices (new abatement techniques and methodologies may be discussed);

(v) *Personal hygiene—

Entry and exit procedures for the work area; use of showers; avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area; and potential exposures, such as family exposure;

(vi) *Additional safety hazards—

Hazards encountered during 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; and confined spaces;

(vii) Medical monitoring—

OSHA and EPA Worker Protection Rule requirements for physical examinations, including a pulmonary function test, chest X-rays and a medical history for each employee;

(viii) Air monitoring—

Procedures to determine airborne concentrations of asbestos fibers, focusing on how personal air sampling is performed and the reasons for it;

(ix) Relevant federal, state and local regulatory requirements, procedures and standards—

With particular attention directed at relevant EPA, OSHA, and state regulations concerning asbestos abatement workers;

- (x) Establishment of respiratory protection programs;
- (xi) Course review—

A review of key aspects of the training course; and

- (xii) A written or individual oral examination.
- 6. Asbestos Project Monitor.

An individual shall be accredited as an asbestos project monitor prior to engaging in or offering to engage in observing abatement activities performed by contractors, firms, or supervisors and generally serving as a building owner's representative to ensure that abatement work is completed according to specification and in compliance with all relevant statutes and regulations. The project monitor may also perform the vital role of air monitoring for purposes of determining final clearance.

All individuals seeking accreditation as an asbestos project monitor shall complete a minimum five-day training course, which consists of lectures and demonstrations, at least six hours of hands-on training, course review of key aspects and a written examination. The hands-on training component shall be satisfied by having the student simulate participation in or performance of any of the relevant job functions or activities (or by incorporation of the workshop component described in subpart (xiv) of this part).

The project monitor training course shall address the following topics and state-of-the-art work practice standards:

(i) Roles and responsibilities of the project monitor—

Definition and responsibilities of the project monitor, including regulatory/ specification compliance monitoring; air monitoring; conducting visual inspections; and final clearance monitoring;

(ii) Characteristics of asbestos and asbestos-containing materials—

Typical uses of asbestos; physical appearance of asbestos; review of asbestos abatement and control techniques; and presentation of the health effects of asbestos exposure, including routes of exposure, dose-response relationships, and latency periods for asbestos-related diseases;

(iii) Federal asbestos regulations—

Overview of pertinent EPA regulations including: NESHAP (40 C.F.R. Part 61, subparts A and M); AHERA, 40 C.F.R. Part 763, (Subpart E – Asbestos-Containing Materials in Schools); and the EPA Worker Protection Rule (40 C.F.R. Part 763, Subpart G). Overview of pertinent OSHA regulations, including: Construction Industrial Standard for Asbestos (29 C.F.R. § 1926.1101); Respirator Protection Standard (29 C.F.R. § 1910.134); the Hazard Communication Standard (29 C.F.R. § 1926.59); applicable state and local asbestos regulatory requirements; and regulatory interrelationships;

(iv) Understanding building construction and building systems—

Building construction basics, building physical plan layout; understanding building systems (HVAC, electrical, etc.); layout and organization, where asbestos is likely to be found on building systems; renovations and the effect of asbestos abatement on building systems;

(v) Asbestos abatement contracts, specifications, and drawing—

Basic provisions of the contract; relationships between principal parties, establishing chain of command; types of specifications, including means and methods, performance, and proprietary and nonproprietary; reading and interpreting records and abatement drawings; discussion of change orders; and common enforcement responsibilities and authority of project monitors;

(vi) Response actions and abatement practices—

Pre-work inspections; pre-work considerations, pre-cleaning of the work area, removal of furniture, fixtures, and equipment; shutdown/modification of building systems; construction and maintenance of containment barriers, proper demarcation of work areas; work area entry/exit, hygiene practices; determining the effectiveness of air filtration equipment; techniques for minimizing fiber release, wet methods, continuous cleaning; abatement methods other than removal; abatement area clean-up procedures; waste transport and disposal procedures; and contingency planning for emergency response;

(vii) Asbestos abatement equipment—

Typical equipment found on an abatement project; air filtration devices, vacuum systems, negative pressure differential monitoring; HEPA filtration units, theory of filtration, design / construction of HEPA filtrations units, qualitative and quantitative performance of HEPA filtrations units, sizing the ventilation requirements, location of HEPA filtration units, qualitative and quantitative tests of containment barrier integrity; and best available technology;

(viii) Personal protective equipment—

Proper selection of respiratory protection; classes and characteristics of respirator types; limitations of respirators; proper use of other safety equipment; protective clothing selection, the use and proper handling of hard/bump hats and safety shoes; breathing air systems, high pressure vs. low pressure; testing for Grade D air; and determining proper backup air volumes;

(ix) Air monitoring strategies—

Sampling equipment; sampling pumps (low vs. high volume); flow regulating devices (critical and limiting orifices); the use of fibrous aerosol monitors on abatement projects; sampling media; types of filters; types of cassettes; filter orientation; storage and shipment of filters; calibration techniques; primary

calibration standards; secondary calibration standards; temperature/ pressure effects: frequency of calibration: recordkeeping and field work documentation: calculations; air sample analysis; techniques available and limitations of AHERA on their use; transmission electron microscopy (background to sample preparation and analysis, air sample conditions which prohibit analysis, the state's recommended technique for analysis of final air clearance samples); phase contrast microscopy (background to sample preparation, and AHERA's limits on the use of phase contrast microscopy), and what each technique measures; analytical methodologies, AHERA TEM protocol, NIOSH 7400, OSHA reference method (non-clearance), the Commissioner's recommendation for clearance (TEM); sampling strategies for clearance monitoring, types of air samples (personal breathing zone vs. fixed station area) sampling location and objectives (pre-abatement, during abatement, and clearance monitoring), number of samples to be collected; minimum and maximum air volumes; clearance monitoring (post-visual-inspection) (number of samples required, selection of sampling locations, period of sampling, aggressive sampling, interpretations of sampling results, calculations); quality assurance; and special sampling problems, crawl spaces, acceptable samples for laboratory analysis, sampling in occupied buildings (barrier monitoring);

(x) Safety and health issues other than asbestos—

Confined-space entry; electrical hazards; fire and explosion concerns; ladders and scaffolding; heat stress; air contaminants other than asbestos; fall hazards; and hazardous materials on abatement projects;

(xi) Conducting visual inspections—

Inspections during abatement, visual inspections using the ASTM E1368 document; conducting inspections for completeness of removal; discussion of "how clean is clean?":

(xii) Legal responsibilities and liabilities of project monitors—

Specification enforcement capabilities; regulatory enforcement; licensing; powers delegated to project monitors through contract documents;

(xiii) Recordkeeping and report writing-

Developing standardized project logs/daily logs (what should be included, who sees them); final report preparation; recordkeeping in accordance with 40 C.F.R. § 763.94; and

- (xiv) *Workshops (six hours spread over three days)—
 - (I) Contracts, specifications, and drawings:

This workshop shall consist of each participant being issued a set of contracts, specification, and drawings and then being asked to answer questions and make recommendations to a project architect, engineer or to the building owner based on given conditions and these documents.

(II) Air monitoring strategies/asbestos abatement equipment:

This workshop shall consist of simulated abatement sites for which sampling strategies would have to be developed (i.e., occupied buildings, industrial situations). Through demonstrations and exhibition, the project monitor may also be able to gain a better understanding of the function of various pieces of equipment used on abatement projects (air filtration

units, water filtration units, negative pressure monitoring devices, sampling pump calibration devices, etc.).

(III) Conducting visual inspections:

This workshop shall consist ideally, of an interactive video in which a participant is "taken through" a work area and asked to make notes of what is seen. A series of questions will be asked which are designed to stimulate an individual's recall of the area. This workshop could consist of a series of two or three videos with different site conditions and different degrees of cleanliness;

(xv) Course review—

A review of key aspects of the training course; and

- (xvi) Written examination.
- (5) Re-accreditation of training providers.
 - (a) If a training provider meets the requirements of this paragraph, the training provider's accreditation to provide a training course shall be re-accredited provided the training provider's accreditation has not been revoked, refused to be re-accredited, or suspended in accordance with Rule 0400-13-02-07. A training provider's re-accreditation to offer asbestos initial or refresher-training course(s) shall expire after two years on the last day of the month of issuance.
 - (b) A training provider seeking re-accreditation and training course re-accreditation shall submit a complete application and the appropriate fee to the Commissioner no later than 45 days before the accreditation expires.
 - (c) A training provider's application for re-accreditation shall include:
 - 1. The training provider's name, physical address of the headquarters and training facility, mailing address, if different from the physical address, and telephone number;
 - 2. A list of asbestos initial or refresher courses for which the training provider is applying for re-accreditation;
 - 3. A description of any changes to the training facility, equipment, or training course material revisions (revision dates should be listed on the material), training manager, or principal instructor(s) since the training provider's last application;
 - 4. A statement signed by the training provider stating that the training provider will comply at all times with all requirements of Rule 0400-13-02-.02; and
 - 5. A payment of the appropriate application fee in accordance with Rule 0400-13-02-.05(2)(a), Table 1.
- (6) Training Provider recordkeeping requirements.
 - (a) A training provider shall maintain and make available to the Commissioner, upon request, the following records:
 - 1. All documents that demonstrate the instructor qualifications listed in parts (3)(b)1 and 2 of this rule for the training manager and principal instructors;
 - 2. Copies of all instructional materials such as: current and past curriculum (course) materials, course agenda, course test blueprint, course examinations, learning objectives for each lecture, exercises, hands-on training exercise, examinations, course evaluations, and other

documents used in the delivery of the classroom training. Documentation of revision(s) shall also be maintained:

- 3. Documentation that each individual who receives a course completion certificate for a training course has achieved a passing score on the examination. These records must clearly indicated the date upon which the examination was administered, the training course and discipline for which the examination was given, the name of the individual who proctored the examination, a copy of the examination, and the name and test scored of each individual taking the examination. The topic and dates of the training course must correspond to those listed on that individual's course completion certificate;
- 4. Records that document the names of all individuals who have been awarded course completion certificates, their certificate numbers, the disciplines for which the course completion certificate was conferred, training and expiration dates, and the training location. A training provider shall maintain records in a manner that allows verification by telephone of the required information; and
- 5. Any other records which were submitted to the Commissioner for the accreditation of an asbestos training course or courses, training manager, and principal and guest instructors.
- (b) 1. A training provider shall retain a record required under subparagraph (a) of this paragraph for at least three years after the creation of the record.
 - 2. Notwithstanding part 1 of this subparagraph, if a training provider is not re-accredited, has its accreditation revoked, or closes its business, the training provider shall retain all records that were not at least three years old at the time of such failure to be re-accredited, revocation, or closure for at least three years following the failure to be re-accredited, revocation, or closure.
 - 3. The retention period for all records required under this subparagraph is extended automatically during the course of any unresolved enforcement action regarding the firm or as requested by the Commissioner.
- (c) Upon request, the Commissioner shall be allowed to review appropriate documents to determine a training provider's compliance with this rule.
- (d) If a training provider ceases to conduct training, the training provider shall provide the Commissioner written notification at least 30 days prior and give the Commissioner the opportunity to take possession of the training provider's applicable Tennessee asbestos training records.
- (7) Training provider compliance monitoring inspection audits.
 - (a) The Commissioner may conduct unannounced audits of a training provider's records and an initial or refresher (classroom-based or online) asbestos training course in any discipline to ensure compliance with the requirements of these rules.
 - (b) For audit purposes, a training provider shall, at no charge, allow the Commissioner to attend and have access to all or any part of an initial or refresher asbestos training course or courses in any discipline to determine compliance with the requirements of these rules. A training provider shall not restrict the Commissioner's access to any part of a training program and shall make records required to be maintained by these rules available for review, inspection or copying.
 - (c) Unless a training provider notifies the Commissioner of changes in a training course site or course cancellation at least five days prior to the date of the course, the Commissioner may assess all costs to that training provider for reimbursement. The actual costs incurred will be assessed using the State of Tennessee Finance and Administration's "General Reimbursement Rate Schedule" policy.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

0400-13-02-.03 Accreditation of Individuals and firms engaged in asbestos activities.

- (1) Scope and applicability.
 - (a) Paragraph (2) of this rule contains the requirements an individual must meet in order conduct asbestos activities in Tennessee and to obtain an accreditation from the Commissioner.
 - (b) Paragraph (3) of this rule establishes the minimum education and experience required for an individual to be accredited by the Commissioner.
 - (c) Paragraph (4) of this rule contains the work practice standards for each discipline.
 - (d) Paragraph (5) establishes the requirements an individual must meet to be re-accredited.
 - (e) A firm seeking accreditation shall comply with the requirements of paragraph (6) of this rule.
 - (f) No application presented for review by an individual or firm will be processed without the applicable supporting documentation and payment of the appropriate nonrefundable application fee. If an application for accreditation of an individual or firm under this rule is denied, the individual or firm may reapply upon filing a new, complete application and paying the appropriate, nonrefundable application fee.
 - (g) Receipt and deposit of fees does not indicate approval of the application or guarantee the issuance of accreditation.
 - (h) All required applications and supporting documentation shall be submitted via mail or through the State of Tennessee online internet application submission portal, if such a portal is available, in accordance with subparagraph (1)(d) of Rule 0400-13-02-.01.
- (2) Accreditation of an individual.
 - (a) 1. An individual shall not perform or offer to perform any asbestos activities in schools or public and commercial buildings in or for the State of Tennessee without first applying for and receiving accreditation from the Commissioner and possessing a valid photo identification accreditation card in accordance with the requirements of this rule.
 - 2. (i) Unless suspended, refused to be re-accredited, or revoked, in accordance with Rule 0400-13-02-.07, an individual's accreditation in a discipline and photo identification accreditation identification card shall remain valid until the expiration date of the current certificate of the individual's most recent initial training course or refresher training course in the discipline.
 - (ii) If an individual ever does not have on file with the Commissioner a current certificate in the appropriate discipline then the individual's accreditation shall be invalid and the individual shall not engage in any activity requiring accreditation in that discipline or represent themselves as holding a valid accreditation in that discipline, including presenting a photo identification accreditation card, until such time as the individual has a new, current certificate in that appropriate discipline on file with the Commissioner.
 - (iii) If an individual does not have a current certificate in the appropriate discipline on file with the Commissioner for more than 365 consecutive days, including while the accreditation is expired or suspended, the accreditation shall be permanently invalid and the individual shall re-take any appropriate initial training course and file a new, complete application for initial accreditation accompanied by the appropriate, nonrefundable application fee.
 - 3. Individuals performing any asbestos activities in schools or public and commercial buildings in or for the State of Tennessee shall be in possession of a valid State of

Tennessee issued photo identification accreditation identification card while at the work site

- 4. To receive a replacement accreditation identification card during the term of an accreditation, the individual shall, at least 30 days prior to the expiration of the current certificate in the appropriate discipline on file with the Commissioner, file, along with any form required by the Commissioner, a new current certificate and pay the fee for a replacement accreditation identification card. Upon confirmation that the individual has the required current certificates on file, the Commissioner shall issue the individual a replacement accreditation identification card. The expiration date of this replacement accreditation identification card shall be the earlier of the individual's accreditation expiration or the expiration date of the new current certificate.
- (b) An individual seeking accreditation by the Commissioner to engage in asbestos activities in schools or public and commercial buildings shall:
 - Submit to the Commissioner a completed application on forms provided by the Commissioner and completed in accordance with the instructions accompanying the form, along with the following:
 - (i) Proof, to satisfaction of the Commissioner, of meeting the training requirements of paragraph (3) of this rule, which may include, but is not limited to, the following documents:
 - (I) Copy of official academic transcripts or diploma, as evidence of meeting the education requirements;
 - (II) Resumes, letters of reference, or documentation of work experience, as evidence of meeting the work experience requirements; and
 - (III) Course completion certificates from a Commissioner-accredited or recognized asbestos training program for the appropriate discipline(s), as evidence of meeting the training requirements. Except as otherwise allowed by Rule 0400-13-02-.04, course completion certificates issued by an asbestos training provider that was not currently accredited by the Commissioner at the time the course completion certificate was issued shall not be accepted;
 - (ii) The applicable nonrefundable application fee in Rule 0400-13-02-.05(2)(a), Table 3:
 - (iii) A copy of a current certificate for an initial or refresher training course in the appropriate discipline(s), and the certificate from the previous year, if applicable;
 - (iv) In addition to the requirements of subparts (i), (ii) and (iii) of this part, an individual seeking accreditation as a management planner shall also submit both the applicable accredited inspector training course completion certificate and management planner training course completion certificate;
 - (v) One standard color passport photograph with each application for the asbestos discipline for which accreditation is sought; and
 - (vi) An attestation and documentation complying with the requirements of the Eligibility Verification for Entitlement Acts, codified at T.C.A. Title 4, Chapter 58, Part 1.
- (c) After an individual submits a complete application demonstrating compliance with all of the requirements of subparagraph (b) of this paragraph, the Commissioner will accredit or decline to accredit the individual's request within 60 days of the application being deemed complete. The Commissioner will review the completed application and any additional information, including but not limited to work history from other sources, and either approve that application for accreditation

and issue the individual an accreditation identification card with an expiration date of the individual's current certificate in the appropriate discipline, or issue the individual a letter describing any deficiency or reason for denial.

- (d) If an individual has filed an incomplete application for accreditation, the Commissioner will issue a letter to the individual stating the materials and information needed to complete the application. If the individual does not provide all materials and information needed to complete the application within 30 days of the letter, the Commissioner may deny the application.
- (3) Requirements for accreditation of an individual in the appropriate discipline.

To become accredited by the Commissioner as an asbestos inspector, asbestos management planner, asbestos supervisor, asbestos project designer, asbestos worker, or asbestos project monitor an individual shall:

- (a) Successfully complete a Commissioner-accredited initial training course and pass the course's closed book examination, consistent with 40 C.F.R. Part 763, Appendix C, for the appropriate discipline that meets the requirements outlined in subparagraph (4)(b) of Rule 0400-13-02-.02;
- (b) Meet or exceed the following experience and educational requirements:
 - 1. Inspectors.

A high school diploma (or equivalent).

- 2. Management Planner.
 - (i) Successfully completed an accredited inspector training course and an accredited management planner training course; and have:
 - (ii) Current credentials as a registered architect, certified industrial hygienist, licensed professional engineer, or certification in a related engineering/health/environmental field (e.g., safety professional, environmental scientist);
 - (II) A bachelor's degree and one year of experience in a related field (e.g., asbestos, lead, or environmental remediation work, or building construction);
 - (III) An associate degree and two years of experience in a related field (e.g., asbestos, lead, or environmental remediation work, or building construction); or
 - (IV) A high school diploma and four years of experience in a related field (e.g., environmental remediation work, asbestos, lead, or in the building construction trades).
- 3. Supervisor.
 - (i) Have at least one year of experience as an accredited asbestos worker (no specific level of education is required); or
 - (ii) Have at least two years of experience in a related field (e.g., environmental remediation work, asbestos, lead) or in the building construction trades.
- 4. Project Designer.
 - (i) Currently hold credentials as a registered architect, certified industrial hygienist, licensed professional engineer, or certification in a related engineering, health, or environmental field (e.g., safety professional, environmental scientist);

- (ii) Have a bachelor's degree and one year of experience in a related field (e.g., asbestos, lead, or environmental remediation work, or building construction); or
- (iii) Have an associate degree and two years of experience in a related field (e.g., asbestos, lead, or environmental remediation work, or building construction).
- 5. Worker. No additional experience or education requirements.
- 6. Project Monitor.
 - (i) Currently hold credentials as a registered architect, certified industrial hygienist, licensed professional engineer or certification in a related engineering, health, or environmental field (e.g., safety professional, environmental scientist);
 - (ii) Have a bachelor's degree and one year of experience in a related field (e.g., asbestos, lead, or environmental remediation work, or building construction);
 - (iii) Have an associate degree and two years of experience in a related field (e.g., asbestos, lead, or environmental remediation work, or building construction); or
 - (iv) Have a high school diploma and four years of experience in a related field (e.g., environmental remediation work, asbestos, lead, or in the building construction trades and designs); and
- (c) Submit the documentation as requested by the Commissioner to demonstrate, to the satisfaction of the Commissioner, that the requirements subparagraphs (a) and (b) of this paragraph.
- (4) An individual conducting asbestos activities shall comply with the work practice standards in subparagraphs (a) through (f) of this paragraph specific to the discipline for which that individual is accredited. An accredited individual shall not conduct asbestos activities appropriate to other disciplines for which accreditation or reaccreditation has not been obtained.
 - (a) Asbestos Inspector.
 - 1. An accredited asbestos inspector inspects, identifies, and provides written assessments of all friable known or assumed ACBM in schools and public and commercial buildings.
 - 2. For each inspection and re-inspection, an accredited asbestos inspector shall sign and date the assessment and include the inspector's Commissioner-issued accreditation number on all reports.
 - 3. An accredited asbestos inspector shall classify and give reasons in the written assessment for classifying the ACBM, suspected ACBM, and assumed to be ACM in schools and public and commercial buildings into one of the following categories:
 - (i) Damaged or significantly damaged thermal system insulation ACM;
 - (ii) Damaged friable surfacing ACM;
 - (iii) Significantly damaged friable surfacing ACM;
 - (iv) Damaged or significantly damaged friable miscellaneous ACM;
 - (v) ACBM with potential for damage;
 - (vi) ACBM with potential for significant damage; or
 - (vii) Any remaining friable ACBM or friable suspected ACBM.

- 4. An accredited asbestos inspector's assessment must include the following considerations:
 - (i) Location and the amount of the material, both in total quantity and as a percentage of the functional space; and
 - (ii) Condition of the material, specifying:
 - (I) Type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage);
 - (II) Severity of damage (e.g., major flaking, severely torn jackets, as opposed to occasional flaking, minor tears to jackets); and
 - (III) Extent or spread of damage over large areas or large percentages of the homogeneous area.
- 5. An accredited asbestos inspector shall determine whether the material is accessible.
- 6. An accredited asbestos inspector shall determine the material's potential for disturbance.
- 7. An accredited asbestos inspector shall determine the known or suspected causes of damage or significant damage (e.g., air erosion, vandalism, vibration, water).
- 8. An accredited asbestos inspector shall determine preventive measures which might eliminate the reasonable likelihood of undamaged ACM from becoming significantly damaged.
- (b) Accredited Asbestos Management Planner.
 - 1. An accredited asbestos management planner develops management plans to review the results of each inspection, re-inspection, and assessment for the school building and to conduct any other necessary activities to recommend in writing to the local education agency appropriate response actions.
 - 2. An accredited asbestos management planner shall sign and date the recommendation and include the asbestos management planner's Commissioner-issued accreditation number in the management plan.
- (c) Accredited Asbestos Supervisor.
 - An accredited asbestos supervisor may conduct OSHA requirements for which they are properly trained and provides supervision (directly or indirectly) for the following activities with respect to friable ACBM in schools and public and commercial buildings:
 - (i) Conducting a response action other than a SSSD activity;
 - (ii) A maintenance activity that disturbs friable ACBM other than a SSSD activity; or
 - (iii) A response action for a major fiber release episode.
 - 2. An accredited asbestos supervisor shall use state-of-the-art work practices:
 - (i) Proper work practices for asbestos abatement activities, including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of HEPA vacuums; and proper clean-up and disposal procedures. Work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for

- unplanned releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices; and
- (ii) New asbestos abatement-related techniques and methodologies may be used.
- 3. (i) One accredited asbestos supervisor is required to be at the worksite at all times while response actions are being conducted; and
 - (ii) Accredited asbestos workers shall have access to an accredited asbestos supervisor throughout the duration of the project.
- 4. An accredited asbestos supervisor shall include the supervisor's Commissioner-issued accreditation number on all reports.
- (d) Accredited Asbestos Project Designer.
 - An accredited asbestos project designer produces written specifications and designs for any of the following asbestos activities with respect to friable ACBM in a school or public and commercial building:
 - (i) Any response action other than a SSSD maintenance activity;
 - (ii) A maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity; or
 - (iii) A response action for a major fiber release episode.
 - 2. An accredited asbestos project designer shall sign and date the written specification packet and include the project designer's Commissioner-issued accreditation number.
 - 3. Duties of an accredited project designer are inclusive of, but not limited to the following activities: determination of the scope of work; work sequence; performance standards for response actions, including preparation of specifications, plans; contract documents used with respect to the handling of friable and non-friable ACBM (The project design also includes: techniques for completing an initial cleaning of the work area; the rationale behind establishment of functional spaces; written diagrams and methods of diagramming all containment barriers; a written rationale for air clearance; and the clarification of what constitutes a complete visual clearance.).
- (e) Accredited Asbestos Worker.
 - 1. An accredited asbestos worker is responsible for carrying out any of the following activities with respect to friable ACBM in schools and public and commercial buildings:
 - (i) A response action other than a SSSD maintenance activity;
 - (ii) A maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity; or
 - (iii) A response action for a major fiber release episode.
 - 2. An accredited asbestos worker shall provide the worker's Commissioner-issued accreditation upon request.
- (f) Accredited Asbestos Project Monitor.
 - 1. An accredited asbestos project monitor monitors response actions performed by the supervisors and generally serves as the building owner's representative to ensure compliance with contract/job specifications and regulatory requirements, except for

projects that are of SSSD. The functional role of an asbestos project monitor is specific to a particular response action and are inclusive of:

- (i) Performing visual audits of a job site before, during and after a response action is undertaken; and
- (ii) Performing air monitoring as a part of a response action or for purpose of clearing a response action.
- 2. An accredited asbestos project monitor shall sign and date the written report, and include the asbestos project monitor's Commissioner-issued accreditation number.
- 3. An accredited asbestos project monitor performs the vital role of determining completion of response actions. At the conclusion of any response action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, the accredited project monitor shall conduct the following activities to determine the completion of a response action:
 - (i) Visually inspect each functional space where such action was conducted to determine whether the action has been properly completed; and
 - (ii) Collect clearance air samples using aggressive sampling in accordance with 40 C.F.R. Part 763 Subpart E (Asbestos-Containing Materials in Schools) Appendix A to Subpart E (Interim Transmission Electron Microscopy Analytical Methods Mandatory and Non-Mandatory and Mandatory Section to Determine Completion of Response Actions), to determine completion of response actions involving ACBM or material assumed to be ACBM, other than small-scale, short-duration activities. Samples shall be analyzed for asbestos using one of the following:
 - (I) Transmission Electron Microscopy ("TEM") using laboratories accredited by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program; or
 - (II) Phase contrast microscopy ("PCM") for monitoring samples collected for clearance purposes to confirm completion of response action (removal, encapsulation, or enclosure) of ACBM or materials assumed to be ACBM that is greater than SSSD and less than or equal to 160 square feet or 260 linear feet. To determine the amount of ACBM affected add the total square or linear footage of ACBM within the containment barriers used to isolate the functional space for the action to remove, encapsulate, or enclose the ACBM or materials assumed to be ACBM (Contiguous portions of material subject to such action conducted concurrently or at approximately the same time within the same school building shall not be separated to qualify under this item.
- 4. When the clearance air samples are collected in accordance with subitem 3(ii)(I) of this subparagraph, an accredited asbestos project monitor shall not consider the response action complete until:
 - (i) The average concentration of asbestos of five air samples collected within the affected functional space and analyzed by TEM method, that is not statistically significantly different, as determined by the Z-test calculation found in 40 C.F.R. Part 763, Appendix A of subpart E, from the average asbestos concentration of five air samples collected at the same time outside the affected functional space and analyzed in the same manner, and the average asbestos concentration of the three field blanks described in 40 C.F.R. Part 763, Appendix A of subpart E is below the filter background level, as defined in 40 C.F.R. Part 763, Appendix A of subpart E, of 70 structures per square millimeter [70 s/mm²]; or
 - (ii) If the volume of air drawn for each of the five samples collected within the affected functional space is equal to or greater than 1,199 liters (L) of air for a 25 mm filter

or equal to or greater than 2,799 L of air for a 37 mm filter and the average concentration of asbestos as analyzed by the TEM method in 40 C.F.R. Part 763, Appendix A of subpart E, for the five air samples does not exceed the filter background level, as defined in Appendix A, of 70 s/mm². If the average concentration of asbestos of the five air samples with the affected functional space exceeds 70 s/mm², or if the volume of air in each of the samples is less than 1,199 L of air for a 25 mm filter or less than 2,799 L of air for a 37 mm filter, the action shall be considered complete only when the requirements of subitems I or III of this item are met.

- 5. When the clearance air samples are collected in accordance with subitem 3(ii)(II) of this subparagraph, an accredited asbestos project monitor shall not consider the response action complete until the results of samples collected in the affected functional space and analyzed by phase contrast microscopy (PCM) using the National Institute for Occupational Safety and Health ("NIOSH") Method 7400 entitled "Fibers" published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987, show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantitation for PCM (0.01 fibers per cubic centimeter (0.01 f/cm³) of air).
- 6. (i) In a school or public and commercial building air samples shall be analyzed by TEM by a laboratory accredited by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program;
 - (ii) In a school when the area is greater than a small-scale, short-duration activity and less than or equal to 160 square feet or 260 linear feet, air samples shall be analyzed by PCM using the NIOSH Method 7400 by a laboratory enrolled in the American Industrials Hygiene Association Proficiency Analytical Testing Program; and
 - (iii) In a public or commercial building when the area is greater than or equal to 160 square feet or 260 linear feet, air samples shall be analyzed by PCM using a laboratory enrolled in the American Industrials Hygiene Association Proficiency Analytical Testing Program.
- (5) Re-accreditation for Individuals.
 - (a) To maintain accreditation in a particular discipline, an accredited person shall complete the requirements of subparagraphs (c), (d) and (e) of this paragraph for the appropriate discipline(s) within 60 days prior to the expiration date of their current accreditation.
 - (b) 1. An individual who wishes to be re-accredited in an asbestos discipline shall file a complete re-accreditation application, which shall include all information required for initial accreditation in the respective asbestos discipline, accompanied by a re-accreditation fee, if applicable under Rule 0400-13-02-.05, proof of a current refresher training completion certificate in the respective asbestos discipline, and such other documentation as the Commissioner may require no later than 45 days before the expiration of the accreditation.
 - 2. Upon receiving the information required by part 1 of this subparagraph, the Commissioner shall issue the individual a new accreditation identification card that expires on the expiration date of the current certificate filed with the individual's re-accreditation.
 - (c) A person shall submit to the Commissioner a re-accreditation application with a legible copy of the accredited refresher asbestos training course completion certificate or certificates.
 - (d) An individual applying re-accreditation in a discipline shall also submit to the Commissioner one standard two inch by two-inch color passport photograph with each application for re-accreditation.
 - (e) An individual shall also submit the appropriate nonrefundable re-accrediation application fee with each application in accordance with Rule 0400-13-02-.05(2)(a), Table 3.

- (6) Accreditation and Re-accreditation of Firms.
 - (a) A firm shall not perform or offer to perform any asbestos activity in schools or public and commercial buildings in Tennessee, unless that firm is accredited by the Commissioner.
 - (b) A firm seeking accreditation or re-accreditation shall submit to the Commissioner:
 - 1. A completed application on forms provided by the Commissioner;
 - 2. The appropriate nonrefundable application fee in accordance with Rule 0400-13-02-.05(2)(a), Table 2;
 - 3. A letter attesting that when conducting asbestos activities in schools or public and commercial buildings, the firm shall:
 - (i) Only employ appropriately Tennessee-accredited individuals;
 - (ii) Ensure that these appropriately accredited individuals perform only the tasks specific to their respective accredited disciplines; and
 - (iii) Ensure that while performing these tasks, the firm complies with the work practice standards of paragraph (4) of this rule; and
 - 4. For an initial accreditation, if the firm is an individual, general partnership, or other business entity where individuals shall hold the right to all or part of the accreditation, an attestation and documentation for each such individual complying with the requirements of the Eligibility Verification for Entitlements Act, codified at T.C.A. Title 4, Chapter 58, Part 1.
 - (c) Following the submission of a complete firm application in accordance with subparagraph (b) of this paragraph, the Commissioner will approve or disapprove a firm's request for accreditation within 60 days following the application being deemed complete. The Commissioner will review the completed application and any additional information, including but not limited to work history from other sources, and respond with an Accreditation Certificate or a letter describing any deficiency. The Commissioner will not approve a firm's application if the Commissioner determines that the requirements are not met or the regulatory or environmental compliance history of the firm, its principals, or its key employees demonstrates an unwillingness or inability to maintain compliance with the applicable statutes or regulations. The Commissioner will send the firm a letter giving the reason for not approving the application. A firm may reapply for accreditation at any time by filing a new, complete application that includes the application fees.
 - (d) A firm shall maintain the following records for three years: personnel employment, contracts for performance, final asbestos abatement reports, personnel and clearance air monitoring reports, etc. The retention period for all records required under this subparagraph is extended automatically during the course of any unresolved enforcement action regarding the firm or as requested by the Commissioner.
 - (e) Upon request, the Commissioner shall be allowed to review appropriate documents to determine a firm's compliance with these rules.
 - (f) Unless the Commissioner revokes or suspends the accreditation of a firm to perform asbestos activities, the accreditation shall be valid for three years from the last day of the month of issuance the following year. A firm's initial accreditation or re-accreditation may be suspended or revoked, in accordance with Rule 0400-13-02-.07.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

0400-13-02-.04 Reciprocity

- (1) The Commissioner may recognize an accredited initial or refresher asbestos training course or training provider, approved by an EPA authorized state or Indian tribe provided the Commissioner has a written reciprocity agreement with that state or tribe.
- (2) The Commissioner may establish reciprocity agreements with EPA authorized states or Indian tribes for individuals or entities that hold valid accreditations in those jurisdictions to obtain accreditation in Tennessee.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

0400-13-02-.05 Fees.

- (1) All individuals, firms, and training providers seeking accreditation or re-accreditation shall pay the appropriate nonrefundable application fee, except as provided otherwise by item (1)(a)4(i)(II) of Rule 0400-13-02-.01.
- (2) Application Fees for Asbestos Accreditation.
 - (a) Initial accreditation and re-accreditation fees as specified in the following Tables:

Table 1
Training Provider Application Fees

Training Course and Modifications	Initial Two-Year Accreditation Fees	Re-Accreditation (every two years) Application Fees
Initial Course & Minimum Time Required		
Worker – 4-day course Project Monitor - 5-day course Inspector - 3-day course Supervisor - 5-day course Project Designer - 3-day course Management Planner 2-day management training course	\$1,700 \$2,125 \$1,275 \$2,125 \$1,275 \$ 850	\$1,200 \$1,600 \$ 975 \$1,600 \$ 975 \$ 650
Classroom-based and Online Asynchronous and Synchronous Refresher Course & Minimum Time Required		
Worker - 1-day Project Monitor - 1-day Inspector - 1/2-day Supervisor - 1-day Project Designer - 1-day Management Planner - 1/2-day	\$450 \$450 \$250 \$450 \$450 \$250	\$450 \$450 \$250 \$450 \$450 \$250
Modification of Rosters	Application Review Fee for Modification of Roster	
To Change or Add an individual, as the Training Manager and Principal Instructor(s)	\$25	

Type of Accreditation	Three Year Application Fee	
Firm Accreditation	\$500	

Table 3
Application Fees for an Individual

Individual Accreditation	Initial Annual Accreditation Fee	Individual Re- Accreditation Annual Fee
Worker	\$100	\$100
Project Monitor	\$110	\$110
Inspector	\$160	\$160
Management Planner	\$233	\$233
Inspector/Management Combined	\$367	\$367
Supervisor	\$167	\$167
Project Designer	\$184	\$184

(b) Application/Payment Procedure.

Application forms and instructions can be obtained from the Toxic Substances Program, Tennessee Department of Environment and Conservation by calling 1-888-771-5323 toll free.

(3) Accreditation Card or Certificate Replacement.

An individual seeking an accreditation identification card replacement or a firm or training provider seeking a replacement accreditation certificate shall complete the applicable portions of the appropriate application in accordance with the instructions provided and submit the application to the Commissioner with a nonrefundable \$50 replacement fee. The types of applications include:

- (a) Individual— "Application for a Person to Conduct Asbestos Activities."
- (b) Firm— "Application for a Firm to Conduct Asbestos Activities."
- (c) Training Provider— "Accreditation Application for Training Providers."

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

0400-13-02-.06 Reserved.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

0400-13-02-.07 Enforcement and Penalties.

- (1) The Commissioner may suspend, refuse to re-accredit, or revoke the accreditation for any accredited individual, firm, or training provider, or may refuse to issue any accreditation for which any person has applied for accreditation, for any violation of this chapter, including but not limited to:
 - (a) Engaging or offering to engage in any activity in Tennessee requiring accreditation as a training provider, firm, or in any discipline without being so accredited;
 - (b) Misrepresenting the contents of an asbestos initial or refresher-training course or training hour requirements, if the person is a training provider;

- (c) For a training provider, misrepresenting the extent of a training course's accreditation by the Commissioner:
- (d) For a training provider, failing to comply with the training course requirements of Rule 0400-13-02-.02;
- (e) Obtaining documentation of asbestos training or examinations through fraudulent means;
- (f) Gaining admission to or completing an accredited asbestos training course through misrepresentation of admission requirements;
- (g) Obtaining accreditation through misrepresentation of accreditation requirements or submitting false, fraudulent, or misleading documentation or evidence dealing with the person's education, training, professional registration, or experience as part of the person's application for accreditation or re-accreditation;
- (h) Performing asbestos activities requiring accreditation at a job site without being in physical possession of a current state-issued accreditation identification card available at the job site for inspection;
- (i) Permitting the duplication or use of an individual's own asbestos accreditation certificate or accreditation identification card by another individual;
- (j) Allowing an approved principal instructor or other individual with supervisory authority over the delivery of a training course to not comply with a requirement or any provision of this chapter, if the person is a training provider;
- (k) Failing to maintain any records as required under this chapter;
- (I) Failing to submit required information or notifications under this chapter in a timely manner;
- (m) Failing to comply with any rule in this chapter or an order of the Commissioner, or failing to perform any activity for which the person is accredited under this chapter with the prudence and caution of a reasonable person so accredited;
- (n) Practicing fraud, deception, gross negligence, or misrepresentation during the performance of the person's duties as an accredited individual, firm, or training provider;
- (o) Charging the owner or operator of a building for unapproved work or work which was not performed;
- (p) Performing a non-approved action which causes a release of asbestos;
- (q) Submitting false or misleading information or statements to the Commissioner, including but not limited to in any application for accreditation or re-accreditation:
- (r) Failing to timely submit information requested by the Commissioner;
- (s) For a firm, performing asbestos activities requiring accreditation using an individual who is not properly accredited by the Commissioner;
- (t) For a firm, allowing an individual with supervisory authority at the work site to violate a requirement or any applicable provision of these rules;
- (u) Being convicted, or entering a plea of guilty or no contest, in a court of competent jurisdiction to any crime involving fraud, deception, performing asbestos activities in schools or public and commercial buildings, or reflecting on a person's ability to uphold the requirements of this chapter, or to any felony. Such a conviction of or entry of a plea by an individual owning 10 percent or more of a firm or training provider or serving as an officer of a firm or training provider shall constitute grounds for such action against the firm or training provider;

- (v) Having been found liable in a civil proceeding involving fraud, deception, performing asbestos activities in schools or public and commercial buildings, or reflecting on a person's ability to uphold the requirements of this chapter. Such a finding of liability against an individual owning 10 percent or more of a firm or training provider or serving as an officer of a firm or training provider shall constitute grounds for such action against the firm or training provider;
- (w) Having a compliance history demonstrating an unwillingness or inability to maintain compliance with the law. An individual owning 10 percent or more of a firm or training provider or serving as an officer of a firm or training provider having such a compliance history shall constitute grounds for such action against the firm or training provider;
- (x) Losing any another professional license, certification, or authorization through applicable procedures of revocation or suspension, including but not limited to federal debarment;
- (y) Failure of an individual to use applicable state-of-the-art work practices;
- (z) Failing or refusing to establish and maintain records or reports as required by this chapter, to provide copies of reports or records to the Commissioner as required by this chapter, or to permit access to records or reports by the Commissioner as required by this chapter; or
- (aa) Failing or refusing to permit entry or inspection by the Commissioner to ensure compliance with these rules.
- (2) The Commissioner may suspend or revoke the accreditation of a training provider for some or all of the accredited training courses where an approved training course instructor, or other individual with supervisory authority over the delivery of training, has been found to have committed any act for which the Commissioner could suspend, revoke, or take disciplinary action against the training provider.
- (3) The Commissioner may take any action authorized under this rule against a firm based on any actions of any employee, principal, or agent in violation of this chapter performed on behalf of the firm.
- (4) Enforcement of the provisions of this chapter and penalties for violations shall be as set forth in T.C.A. § 62-41-102 pursuant to the compliance requirements outlined in Title II of the federal Toxic Substances Control Act (15 U.S.C. § 2646).
- (5) In addition to, or in lieu of, any lawful action the Commissioner may assess a civil penalty of not more than \$5,000 against any training provider, firm, or individual, for any violation of this chapter, including any act for which the Commissioner could revoke an accreditation or for engaging in any activity that requires accreditation without such accreditation. Each day of a continuing violation shall constitute a new violation.
- (6) In assessing civil penalties, the Commissioner may consider any reasonable factors, including:
 - (a) Whether the amount imposed will be a substantial economic deterrent to the violator;
 - (b) The circumstances leading to the violation;
 - (c) The severity of the violation and the risk of harm to the public;
 - (d) The economic benefits gained by the violator as a result of noncompliance; and
 - (e) The interest of the public.
- (7) The Commissioner may serve a person alleged to have violated this chapter by certified mail, or in accordance with Tennessee statutes authorizing service of process in civil actions, a notice that the Commissioner intends to assess civil penalties against such person. This notice shall include the action that the Commissioner intends to take, the alleged grounds for the action, and how the person receiving the notice can contest the intended action.
- (8) Any person served a notice of violation pursuant to paragraph (7) of this rule:

- (a) May provide the Commissioner with a copy of the notice of violation signed by the person named on the notice of violation accepting the proposed disciplinary action and admitting to the violations alleged in the notice of violation. The signed notice of violation shall be sent to the address provided on the notice of violation and include payment in the amount of the civil penalty designated in the notice of violation. The person may also accept the terms of the notice of violation and provide payment in any other manner acceptable to the Commissioner. If a person signs and returns a notice of violation without paying all or part of a civil penalty, then any remaining, unpaid amount shall be immediately due and collectable;
- (b) May contest the notice of violation and request a hearing by sending written notice of the person's request for a hearing to the address listed for such a contest on the notice of violation. A request for a hearing under this subparagraph must be received by the Commissioner or be postmarked within 14 calendar days of service of the notice of violation pursuant to paragraph (7) of this rule. Upon timely filing of a written notice contesting a notice of violation under this subparagraph, the proposed disciplinary action shall not be taken as set out in the notice of violation and, instead, the Commissioner may institute a contested case hearing to take any lawful action. Such a hearing may result in greater disciplinary action than proposed in the original notice of violation; or
- (c) May accept the terms of the notice of violation by not filing a request for a hearing under subparagraph (b) of this paragraph. If a person does not timely request a hearing as set out in subparagraph (b) of this paragraph, then the notice of violation shall be entered finding the facts alleged therein and taking the disciplinary action contained within the notice of violation.
- (9) Any hearing to revoke, suspend, or refuse to re-accredit or to issue civil penalties against any person under this chapter shall be conducted in accordance with the Uniform Administrative and Procedures Act, T.C.A. Title 4, Chapter 5, Part 3.
- (10) Nothing in this rule shall be construed to require the Commissioner to issue a notice of violation prior to instituting a contested case proceeding to take any lawful disciplinary action or to prevent the Commissioner from seeking any other remedy or action provided by law or rule.

Authority: T.C.A. §§ 11-1-101, 62-41-101 et seq., and 4-5-201 et seq.

I certify that the information included in this filing is an accurate and complete representation of the intent and scope of rulemaking proposed by the agency.

Date: May 1, 2023

Signature

Name of Officer: Lisa A. Hughey

Title of Officer: Director of the Division of Solid Waste Management

Department of State Use Only

Filed with the Department of State on:

5/2/2023

Tre Hargett Secretary of State

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May 02 2023, 10:14 am

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