

Chapter HSS 159

ASBESTOS CERTIFICATION AND TRAINING
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Note: Chapter HSS 159 was created as an emergency rule effective November 3, 1989.

Subchapter I — General Provisions

HSS 159.01 Authority and purpose. This chapter is promulgated under the authority of s. 140.06, Stats., to ensure that persons performing asbestos abatement or asbestos management activities in or on buildings are protected from harm while engaged in those activities and that their activities do not adversely affect the health or safety of other persons. This is accomplished by requiring that before anyone engages in asbestos abatement or asbestos management work, he or she is to successfully complete a training course that meets the requirements of the U.S. environmental protection agency (EPA) and this chapter. This chapter requires that training courses be accredited by the department, applying EPA standards, and that persons engaged in asbestos abatement or management activities have a certification card issued by the department which is evidence that they have successfully completed that training.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.02 Scope. (1) **APPLICABILITY.** (a) 1. This subchapter and subch. II apply to any person performing asbestos abatement or asbestos management activities in or on a school building or other publicly owned or privately owned building, except for a building owned or leased by a private organization other than a school that uses its own employees to remove or manage the asbestos.

2. The effective date of this subchapter and subch. II for any person performing asbestos abatement or asbestos management activities in or on a non-school privately owned building, who is not a public employe, shall be February 1, 1991.

(b) This subchapter, subch. III, and Appendix A apply to any person, school, facility or other organization that conducts asbestos abatement or asbestos management training for inspectors, management planners, supervisors, including air sampling professionals, workers and project designers.

(2) **APPROVED COMPARABLE COMPLIANCE.** The department may approve an alternative to any requirement in this chapter that is not a statutory requirement when the department is provided with satisfactory

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proof that the alternative will achieve results which are closely equivalent to the results of literal application of the requirement.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.03 Definitions. In this chapter:

(1) "Accreditation" means approval of a training course for a specific job classification on the basis of its compliance with the model plan and subch. III.

(2) "ACM" or "asbestos-containing material" means asbestos or any material or product which contains more than one percent of asbestos, as determined by a method approved by the national institute of occupational safety and health (NIOSH), the U.S. environmental protection agency (EPA) or the U.S. occupational safety and health administration (OSHA).

(3) "Air sampling professional" means a person certified as an asbestos supervisor who oversees the progress and condition of a project through air sampling and other acceptable supervisory techniques.

(4) "Asbestos" means chrysotile, crocidolite, amosite, fibrous tremolite, fibrous actinolite or fibrous anthophyllite.

(5) "Asbestos abatement activity" means any activity which disturbs asbestos-containing material, including but not limited to the repair, enclosure, encapsulation or removal of ACM and the renovation or demolition of any part of a building, including the roof and sidings.

(6) "Asbestos inspector" means a person who inspects a building for the presence of ACM or reinspects the building to assess the condition of previously identified asbestos or the presence of other ACM.

(7) "Asbestos management activity" means an inspection for ACM, the design of an asbestos response action or the development of an asbestos management plan.

(8) "Asbestos management plan" means the document which specifies the plan for managing ACM in a building in order to protect the occupants of the building and the environment.

(9) "Asbestos management planner" means a person who develops a plan to manage asbestos in a building and who makes recommendations for the best response actions to be taken to manage ACM in the building.

(10) "Asbestos supervisor" means a person who oversees an asbestos abatement project or functions as an air sampling professional and has the authority to require changes in performance practices or to halt the project.

(11) "Asbestos worker" means a person who sets up containment, repairs, removes, encapsulates, encloses, loads out or disposes of ACM from a building.

(12) "Building" means a structure for support or shelter of persons or property, including a non-occupied structure such as a parking garage, a tower or a tunnel.

(13) "Certification" means the issuance of an identification card to an applicant who has successfully completed a U.S. environmental protection Register, January, 1991, No. 421

tion agency (EPA) or department accredited course in a specific asbestos job classification.

(14) "Contingent approval" means an accreditation status that is provisionally granted based only on a review of training course curriculum and other information and materials.

(15) "Department" means the Wisconsin department of health and social services.

(16) "Encapsulation" means the treatment of ACM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers.

(17) "Enclosure" means an airtight, impermeable, permanent barrier around ACM to prevent the release of asbestos fibers into the air.

(18) "EPA" means the U.S. environmental protection agency.

(19) "Friable" means material that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure, including previously nonfriable material when that material becomes damaged to the extent that when dry it may be crumbled, pulverized or reduced to powder by hand pressure.

(20) "Full approval" means a completed accreditation status granted after on-site monitoring of a training course previously granted contingent approval.

(21) "Job classification" means one of the asbestos abatement or management job classifications listed in s. HSS 159.11(2).

(22) "Model plan" means the EPA Model Contractor Accreditation Plan for States, 40 CFR part 763, subpart E, Appendix C, Sections I and III, adapted as Appendix A to this chapter.

(23) "O & M worker" or "operations and maintenance worker" means any person who is involved in the repair, operation, service or maintenance of a building that will result in the disturbance of ACM in the building or who provides custodial and maintenance services in a building where ACM is present or suspected or assumed to be present but whose activities do not normally result in the disturbance of ACM.

(24) "OSHA" means the U.S. occupational safety and health administration.

(25) "Project designer" means a person who has had explicit training in planning and designing asbestos abatement projects by successfully completing an accredited project design course and who may plan asbestos abatement projects or O & M activities.

(26) "Removal" means the taking out of any or all ACM in or on a building.

(27) "Renovation" means the removing, stripping or disturbing of asbestos material used on any pipe, duct, boiler, tank, reactor, turbine, furnace or structural surface, excluding operations in which load-supporting structural members are wrecked or taken out.

(28) "Repair" means returning damaged ACM to an undamaged condition or to an intact state in order to prevent fiber release.

(29) "Response action" means a method such as removal, encapsulation, enclosure, repair or operations and maintenance for protecting human health and the environment from ACM.

(30) "School" means any local school district, the owner of any non-public, non-profit elementary or secondary school building or any governing authority of any school operated under 20 USC 921 to 932, including a home-based private educational program when the students come from more than one family.

(31) "School building" has the meaning given in 40 CFR 763.83 for a building for students in classes in any grade or grades from kindergarten to grade 12.

(32) "Trainer" means any person, partnership, corporation, institution or any other organization or agency, including an agency of the state or a local government, that seeks or receives accreditation for an asbestos abatement or management training course to be conducted by the trainer.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.04 Penalties. Any person who violates any provision of this chapter shall be subject to a forfeiture of not less than \$25 nor more than \$100 for each violation as provided in s. 140.06(11), Stats.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.05 Appeals. (1) Any denial of an application for certification or accreditation under this chapter or any suspension, revocation or non-renewal of a certification card or an accreditation status is subject to administrative review under ch. 227, Stats.

(2) An appeal shall be in writing and shall take the form of a request for a hearing. The request for a hearing shall be filed with the department's office of administrative hearings no later than 20 calendar days after the date of the denial, suspension or revocation, and is considered filed when received by that office.

Note: The mailing address of the Department's Office of Administrative Hearings is P.O. Box 7875, Madison, WI 53707.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

Subchapter II - Certification of Persons to do Asbestos Abatement or Asbestos Management

HSS 159.10 Certification requirement. (1) ASBESTOS ABATEMENT AND ASBESTOS MANAGEMENT PERSONNEL. Except for an O & M worker, no person subject to this chapter may act independently, under contract or be employed to perform asbestos inspection, abatement, design, management or supervisory activity unless he or she has a valid certification card issued by the department.

(2) OPERATIONS AND MAINTENANCE (O & M) WORKERS. (a) The certification and identification requirements under this subchapter do not apply to O & M workers.

(b) A person functioning as an O & M worker whose O & M activities will result in the disturbance of ACM shall complete 16 hours of training
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described in 40 CFR 763.92(a) and shall have evidence signifying completion of the course.

(c) An O & M worker whose O & M activities will not normally result in the disturbance of ACM in a building where ACM may be present shall receive at least 2 hours of awareness training which shall include but need not be limited to the training described in 40 CFR 763.92(a).

(d) 1. An O & M worker who works in a school building or public building shall complete the training required under par. (b) or (c) by the effective date of this chapter. An O & M worker hired on or after August 1, 1990 shall complete the training within 60 days after being hired.

2. An O & M worker who works in a privately owned non-school building shall complete training required under par. (b) or (c) by February 1, 1991. An O & M worker hired on or after February 1, 1991, shall complete the training within 60 days after being hired.

(e) Repair work that may be performed by an O & M worker is limited to repair work that meets all of the following standards:

1. Removal of ACM is not the primary goal of the repair work;
2. Employes' exposure to asbestos can be kept below the action level as defined in 29 CFR 1926.58(b);
3. The repair work is part of the asbestos maintenance program of an organization that claims exemptions from the requirements of 29 CFR 1926.58(e)(6); and
4. The repair work is non-repetitive and not a series of small-scale jobs that if performed would result in a large-scale removal.

History: *Ct. Register*, July, 1990, No. 415, eff. 8-1-90.

HSS 159.11 Certification procedure. (1) **CONDITIONS FOR CERTIFICATION.** (a) A person wanting to be certified under this subchapter shall complete a department accredited course in the particular job classification under sub.(2) in which certification is sought and pass an examination approved by the department.

(b) An applicant for certification shall submit to the department, along with the application form and photograph required under sub.(5), the fee required under sub.(7) and a notarized photocopy of an original certificate showing successful completion of a department accredited course in the job classification in which certification is being sought. The notary shall attest to the photocopy being an accurate copy of the original certificate.

(2) **JOB CLASSIFICATION.** Certification to perform asbestos abatement or management activities shall be specific for one of the following job classifications:

- (a) Asbestos inspector;
- (b) Asbestos management planner;
- (c) Asbestos supervisor, as either a project supervisor or an air sampling professional;
- (d) Asbestos worker; or,

(e) Project designer.

(3) TRAINING. The department may conduct training or contract for training required to prepare persons for certification or O & M work and may establish fees for the training it conducts. Any fees collected may not exceed the actual cost of training and shall be credited to the appropriation under s. 20.435(1)(gm), Stats., as provided by s. 140.06(8), Stats.

(4) TESTING. The department may design, prepare, administer and revise examinations to test for competency in the areas where training or certification is required.

(5) APPLICATION. A person desiring certification or recertification shall apply on a form provided by the department. When applying, the applicant shall provide a recent identifying photograph for use on the certification card.

Note: For a copy of the application form, write or phone the Asbestos Training and Certification Program, Bureau of Environmental Health, Division of Health, 1414 E. Washington, Madison, WI 53703, telephone (608) 266-9382.

(6) CERTIFICATION CARD ISSUANCE. (a) Within 14 days after receipt of a completed application for certification or recertification, a recent photograph, a notarized copy of the original training certificate and the payment of the fee required under sub.(7), the department shall grant or deny certification. If certification is granted, the department shall issue or arrange for the issuance of a certification card for a specific job classification under sub.(2). Issuance of the card means the person has met certification requirements for that job classification. If certification is not granted, the department shall give the applicant reasons in writing why the application was denied.

(b) Certification shall remain valid for one year from the date of course completion unless sooner suspended or revoked.

(c) The department may suspend, revoke or withhold certification by written notification to the person who applied for or was issued a certification card if it determines that:

1. The person is not qualified to be certified;
2. The person has displayed a pattern of conduct which in the department's judgment constitutes unreasonable risk to the health and safety of persons or the environment; or
3. False information was provided as part of the application process.

(d) The person being certified is responsible for the card issued to him or her. It is not the property of that person's employer. The employer may not confiscate the certification card of the person who has been certified.

(7) FEES. (a) An applicant for certification or recertification under this subchapter shall pay a fee as follows:

1. For certification as an asbestos inspector, a fee of \$150.00;
2. For certification as an asbestos management planner, a fee of \$100.00;
3. For certification as an asbestos worker, a fee of \$50.00;

4. For certification as an asbestos supervisor, a fee of \$100.00; and
 5. For certification as a project designer, a fee of \$150.00.
- (b) If a certification card is lost, stolen, or damaged, the person shall request the department to issue a replacement card and shall include with that request the payment of a fee of \$8.00 and a recent identifying photograph.
- (c) The department shall void the certification status of an applicant if a check tendered to make payment to the state under this subsection is not paid by the bank on which it is drawn.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.12 Recertification. (1) No person may perform asbestos abatement or asbestos management activities after the expiration date on that person's certification card. To continue to perform those activities after that date, the person shall in advance of the expiration date take a refresher course in the job classification specified on the card, apply to the department for recertification, pay the fee, and be recertified by the department.

(2) The person who was certified may take a refresher course up to a year after the expiration of his or her certification. The applicant shall retake the complete course if the time period between expiration and the refresher class is one year or more. In the interim, no asbestos abatement or management work may be performed without current and valid certification.

(3) As a condition of recertification, the department may require a person to pass an examination.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.13 Reciprocity for certification. (1) If a person residing in another state holds a valid certification issued by a state other than Wisconsin, and that certification was issued based on successful completion of an EPA-accredited training course or a training course accredited by a state under a system at least as stringent as the model plan, the person may be deemed to have satisfied the training requirement of s. HSS 159.11(1)(a).

(2) In order to be eligible for Wisconsin certification under this section, the person shall present to the department a notarized photocopy of the certificate issued by the other state, a recent identifying photograph, pay the fee required under s. HSS 159.11(7), and, if required by the department, successfully complete an examination. If the department approves the application, the department shall issue a certification card pursuant to s. HSS 159.11(6).

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.14 Abatement notification. (1) Any person proposing to undertake an asbestos abatement activity in a school building or other public or private building, except for O & M work in s. HSS 159.10(2)(e), shall notify the department not less than 10 days prior to the start of the activity. Notification shall be made by submitting a copy of the form used to notify the department of natural resources of the intent to demolish or renovate a building facility, structure or installation containing asbestos material.

Note: For a copy of the notification form, write or phone the Asbestos Training and Certification Program, Bureau of Environmental Health, Division of Health, 1414 E. Washington, Madison, WI 53703, telephone (608) 266-9382, or write the Asbestos Coordinator, Department of Natural Resources, Box 7921, Madison, WI 53707.

(2) The date of postmark by U.S. mail shall be the official date of notification. The department's date of receipt stamp shall be the official date for notification by means other than the U.S. mail.

(3) In an emergency, notification shall be by telephone before the work is done followed by a written notice sent to the department within 48 hours after the handling of the emergency.

(4) The department shall consider the emergency notification procedure in sub.(3) as compliance to the abatement notification requirement for contracts or activities that develop in a period of less than 10 days. The written notice shall be sent to the department within 48 hours after the notification by telephone.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.15 Enforcement. (1) The department may enter, at any reasonable time, any property, premises or place in which any person required to have a certification card is engaged in any asbestos abatement activity to determine if that person has a valid certification card.

(2) No person may refuse entry or access to any representative of the department authorized by the department to act under this chapter if that representative requests entry for purposes of determining compliance with this subchapter, provided that the representative presents a valid identification issued by the department and complies with all the health and safety procedures established by law for persons engaged in asbestos abatement activities.

(3) Only a Wisconsin asbestos certification card is valid in this state for asbestos abatement or asbestos management activities described in this subchapter. A card for each person engaged in asbestos abatement activities shall be on the job site during work periods.

(4) An asbestos supervisor certified by the department shall be at the asbestos abatement site at all times while abatement work is being done.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

Subchapter III — Accreditation of Training Courses

HSS 159.20 General requirements (1) No person may advertise or conduct asbestos abatement or asbestos management training in this state if the training course is not accredited by the department.

(2) To obtain accreditation for a training course, a trainer shall comply with subch. I, this subchapter and Section III of Appendix A, and the training course shall be in compliance with Section I of Appendix A.

(3) No trainer may deny training to any person solely on account of sex, race, color, creed, national origin, ancestry, sexual orientation or disability.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.21 Accreditation procedure. (1) **SUBMISSION.** Any person seeking accreditation of training courses under this subchapter shall submit Register, January, 1991, No. 421

to the department the information and materials specified in Section III of Appendix A, any other information and materials requested by the department and the fee required under sub. (3). Application shall be made on a form provided by the department.

Note: For a copy of the application form, write or phone the Asbestos Training and Certification Program, Bureau of Environmental Health, 1414 E. Washington Ave., Madison, WI 53703, telephone (608) 266-9379.

(2) **COURSE APPROVAL.** (a) *Contingent approval.* The department shall review all information and materials submitted under sub. (1) for compliance with Appendix A and this subchapter. If the department determines that the information and materials are acceptable, the department shall grant contingent approval and notify the trainer in writing within 60 days after receiving all required information and materials.

(b) *Full approval.* After the department grants contingent approval to a training course, a department representative shall monitor the course on-site to ascertain whether or not full approval should be granted. The department shall notify the trainer in writing of approval or of disapproval within 60 days after monitoring the course. If accreditation is not granted, the department shall give the trainer reasons in writing for the denial.

(c) *Only training courses.* The department does not give accreditation to an overall training program or to a training institution. Departmental accreditation is only for a specific training course designed for a person seeking certification or recertification in the job classification for which he or she is being trained. A trainer may only list training courses as department or EPA accredited if those courses are accredited and relate to asbestos certification or recertification.

(3) **Fees.** (a) The department shall charge a fee of \$750 for the accreditation of each training course and a fee of \$250 for each refresher course.

(b) The department shall void the accreditation status of a training course if a check tendered to make payment to the state is not paid by the bank on which it is drawn.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.22 Training notification. (1) A trainer shall notify the department whenever the trainer has scheduled a training course to begin. Notification shall be at least 3 weeks in advance of the starting date. In an emergency, the trainer shall notify the department by telephone of any change in the submitted schedule at least 24 hours before the start of the course. The trainer shall notify the department as soon as possible if a course is cancelled.

Note: To notify the department about a change in the schedule, phone (608) 266-9379.

(2) The trainer shall permit department representatives to attend, evaluate and monitor any training course and have access to records of training courses at any reasonable time without charge or hindrance to the department.

(3) The trainer shall notify the department before an unevaluated training staff member or faculty member not previously included in an application for accreditation will teach a training course. Notification to the department shall be at least one week before the start of the course.

(4) If subsequent to approval by the department a training course is altered, modified, or changed in regard to teaching staff, curriculum, training materials or content, the training course remains subject to the requirements of this subchapter and the model plan and shall be resubmitted to the department for approval.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.23 Periodic evaluation. The department may audit a training course on-site on a periodic and unannounced basis for the purpose of ascertaining whether or not the training course continues to meet accreditation requirements.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

HSS 159.24 Enforcement. The department may deny, revoke or suspend accreditation of a training course by written notification to the trainer for a reason including but not limited to:

(1) The course or course alteration fails to meet requirements found in Appendix A:

- (2) Deceptive use of training course certificates;
- (3) Misrepresentation of a training course; or
- (4) The violation of any provision of subch. I or this subchapter.

History: Cr. Register, July, 1990, No. 415, eff. 8-1-90.

Appendix A

WISCONSIN MODEL ACCREDITATION PLAN AND TRAINING COURSE APPROVAL PROCEDURES

(adapted from 40 CFR 763, Subpart E, Appendix C)

1. Wisconsin Model Accreditation Plan

The Wisconsin Model Accreditation Plan has six components:

- (1) Initial training;
- (2) Examinations;
- (3) Refresher training course;
- (4) Qualifications;
- (5) Decertification requirements; and
- (6) Reciprocity

For purposes of certification requirements in Chapter HSS 159, the duration is specified in number of days. A day of training equals a maximum of 8 class hours.

In several instances, initial training courses for a specific job classification (e.g., workers, inspectors) require hands-on training. For asbestos supervisors and workers, hands-on training should include working with asbestos-substitute materials, fitting and using respirators, use of glovebags, donning protective clothing, constructing a decontamination unit as well as other abatement work activities. Hands-on training must permit supervisors and workers to have actual experience performing tasks associated with asbestos abatement. For inspectors, hands-on training should include conducting a simulated building walk-through inspection and respirator fit testing.

1. INITIAL TRAINING

The following are the initial training course requirements for persons required to have certification under s. 140.06, Stats.

A. Asbestos Inspectors. All persons seeking certification as inspectors shall complete a 3-day training course as outlined below. The 3-day program shall include lectures, demonstrations, 4-hours of hands-on training, individual respirator fit testing, course review and a written examination. The department recommends the use of audiovisual materials to complement lectures, where appropriate.

The inspector training course shall adequately address the following topics:

(a) *Background information on asbestos.* Identification of asbestos, and examples and discussion of the uses and locations of asbes-

tos in buildings; and physical appearance of asbestos.

(b) *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 period for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancer of other organs.

(c) *Functions/qualifications and role of inspectors.* Discussions of prior experience and qualifications for inspectors and management planners; discussions of the functions of a certified inspector as compared to those of a certified management planner; discussion of inspection process including inventory of ACM and physical assessment.

(d) *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.

(e) *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; inspecting electrical systems, including appropriate safety precautions; reading blueprints and as-built drawings.

(f) *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 disruption; and education of building occupants about actions being taken.

(g) *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 and abatement records of a building; the role of the inspector in exclusions for previously performed inspections.

Appendix

(h) *Inspecting for friable and non-friable asbestos-containing material (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.

(i) *Bulk sampling/documentation of asbestos in schools.* 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; sampling equipment the inspector should use; patching or repair of damage done in sampling; an inspector's repair kit; discussion of polarized light microscopy; choosing an accredited laboratory to analyze bulk samples; quality control and quality assurance procedures.

(j) *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 facepiece-to-mouth seal (positive and negative pressure fitting tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of non-disposable clothing.

(k) *Recordkeeping and writing the inspection report.* Labeling of samples and keying sample identification to sampling location; recommendations on sample labeling; detailing of ACM condition; photographs of selected sampling areas and examples of ACM inventory; information required for inclusion in the management plan by TSCA Title II section 203(i)(1).

(l) *Regulatory review.*

(1) EPA Worker Protection Rule, 40 CFR Part 763, Subpart G;

(2) TSCA Title II;

(3) OSHA Asbestos Construction Standard, 29 CFR 1926.58;

(4) OSHA respirator requirements, 29 CFR 1910.134;

(5) Friable ACM in Schools Rule, 40 CFR Part 763, Subpart F;

(6) Applicable state and local regulations and differences in federal/state requirements where they apply and the effects, if any, on public and non-public schools.

(m) *Field trip.* To include a field exercise including a walk-through inspection; on-site discussion on information gathering and determination of sampling locations; on-site practice in physical assessment; classroom discussion of field exercise.

(n) *Course review.* Review of key aspects of the training course.

B. Asbestos Management Planners. All persons seeking certification as management planners shall complete an inspection training course as outlined above and a 2-day management planning training course. The 2-day training program shall include lectures, demonstrations, course review, and a written examination. The department recommends the use of audiovisual materials to complement lectures, where appropriate.

The management planner training course shall adequately address the following topics:

(a) *Course overview.* The role of the management planner; operations and maintenance programs; setting work priorities; protection of building occupants.

(b) *Evaluation/interpretation of survey results.* Review of TSCA Title II requirements for inspection and management plans as given in section 203(i)(1) of TSCA Title II; summarized field data and laboratory results; comparison between field inspector's data sheet with laboratory results and site survey.

(c) *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; relationship of accessibility, vibration sources, use of adjoining space, and air plenums and other factors to hazard assessment.

(d) *Legal implications.* Liability; insurance issues specific to planner; liabilities associated with interim control measures, in-house maintenance, repair, and removal; use of results from previously performed inspections.

(e) *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; the need for containment barriers and decontamination in response actions.

(f) *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 plans; team approach to design of high-quality job specifications.

(g) *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 high efficiency particulate aerosol (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 (PVC), canvas, wet wraps, muslin with straps, fiber mesh cloth, mineral wool, and insulating cement; discussion of employee protection programs and staff training; case study in developing an O&M plan (development, implementation process, and problems that have been experienced).

(h) *Regulatory review.*

(1) OSHA Asbestos Construction Standard, 29 CFR 1926.58;

(2) National Emission Standard for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61, Subparts A (General Provisions) and M (National Emission Standard for Asbestos);

(3) EPA Worker Protection Rule, 40 CFR 763, Subpart G;

(4) TSCA Title II;

(5) Applicable state regulations.

(i) *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; procedures for recordkeeping.

(j) *Assembling and submitting the management plan.* Plan requirements in TSCA Title II section 203(i)(1); the management plan as a planning tool.

(k) *Financing abatement actions.* Economic analysis and cost estimates; development of cost estimates; present costs of abatement versus future operations and maintenance costs; Asbestos School Hazard Abatement Act grants and loans.

(l) *Course review.* Review of key aspects of the training course.

C. *Asbestos Supervisors.* All persons seeking certification as asbestos supervisors shall complete a 4-day training course as outlined below. The training course shall include lectures, demonstrations, at least 6 hours of hands-on training, individual respirator fit testing, course review, and a written examination. The department recommends the use of audiovisual materials to complement lectures, where appropriate.

For the purposes of s.140.06, Stats., asbestos supervisors include those persons who provide supervision and direction to workers engaged in asbestos removal, encapsulation, enclosure, and repair. Supervisors may include those individuals with the position title of foreman, working foreman, or leaderperson pursuant to collective bargaining agreements. Under this Model Plan as adapted from 40 CFR 763, Subpart E, Appendix C, at least one supervisor is required to be at the worksite at all times while work is in progress. Asbestos workers must have access to certified supervisors throughout the duration of the project.

The supervisor's training course shall adequately address the following topics:

(a) *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.

(b) *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; latency period for disease.

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

(d) *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, electrical and ventilation system lockout; proper working

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techniques for minimizing fiber release; use of wet methods; use of negative pressure ventilation equipment; use of high efficiency particulate air (EPA) vacuums; proper clean-up and disposal procedures; work practices for removal, encapsulation, enclosure, and repair; emergency procedures for sudden releases; potential exposure situations, transport and disposal procedures, and recommended and prohibited work practices; discussion of new abatement-related techniques and methodologies.

(e) *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; potential exposures, such as family exposure.

(f) *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.

(g) *Medical monitoring.* OSHA requirements for a pulmonary function test, chest X-rays and a medical history for each employee.

(h) *Air monitoring.* Procedures to determine airborne concentrations of asbestos fibers: a description of aggressive sampling, sampling equipment and methods, reasons for air monitoring, types of samples, and interpretation of results, specifically from analysis performed by polarized light, phase-contrast, and electron microscopy analyses.

(i) *Relevant federal, state and local regulatory requirements.* Procedures and standards, including:

(1) TSCA Title II;

(2) National Emission Standards for Hazardous Air Pollutants, 40 CFR 61, Subparts A (General Provisions) and M (National Emission Standard for Asbestos);

(3) OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respiratory protection, 29 CFR 1910.134;

(4) OSHA Asbestos Construction Standard, 29 CFR 1926.58;

(5) EPA Worker Protection Rule, 40 CFR Part 763, Subpart G.

(j) *Respiratory protection programs and medical surveillance programs.*

(k) *Insurance and liability issues.* Contractor issues; worker's compensation coverage and exclusions; third-party liabilities and defenses; insurance coverage and exclusions.

(l) *Recordkeeping for asbestos abatement projects.* Records required by federal, state,

and local regulations; records recommended for legal and insurance purposes.

(m) *Supervisory techniques for asbestos abatement activities.* Supervisory practices to enforce and reinforce the required work practices and discourage unsafe work practices.

(n) *Contract specifications.* Discussion of key elements that are included in contract specifications.

(o) *Course review.* Review of key aspects of the training course.

D. Asbestos Workers. All persons seeking certification as asbestos workers shall complete a 3-day training course as outlined below. The worker training course shall include lectures, demonstrations, at least 6 hours of hands-on training, individual respirator fit testing, course review, and an examination. The Department recommends the use of audiovisual materials to complement lectures, where appropriate.

The training course shall adequately address the following topics:

(a) *Physical characteristics of asbestos.* Identification of asbestos, aerodynamic characteristics, typical uses, physical appearance, and a summary of abatement control options.

(b) *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 a latency period for disease.

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

(d) *State-of-the-art work practices.* Proper asbestos abatement activities including descriptions of proper construction and maintenance of barriers and decontamination enclosure systems; positioning of warning signs, electrical and ventilation system lock-out; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure ventilation equipment; use of high efficiency particulate air (HEPA) vacuums; proper clean-up and disposal procedures; work practices for removal, encap-

sulation, enclosure, and repair; emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices.

(e) *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.

(f) *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.

(g) *Medical monitoring.* OSHA requirements for a pulmonary function test, chest X-rays and a medical history for each employee.

(h) *Air monitoring.* Procedures to determine airborne concentrations of asbestos fibers, focusing on how personal air sampling is performed and the reasons for it.

(i) *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.

(j) *Establishment of respiratory protection programs.*

(k) *Course review.* Review of key aspects of the training course.

E. Project Designers. All persons seeking certification as project designers shall complete a 3-day project designer training course as outlined below. The 3-day project designer training program shall include lectures, demonstrations, a field trip, course review, and a written examination. The department recommends the use of audiovisual materials to complement lectures, where appropriate.

The 3-day project designer training course shall adequately address the following topics:

(a) *Background information on asbestos.* Identification of asbestos; examples and discussion of the uses and locations of asbestos in buildings; physical appearance of asbestos.

(b) *Potential health effects related to asbestos exposure.* 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 period of asbestos-related diseases; a discussion of the relationship between asbestos exposure and asbestosis, lung cancer, mesothelioma, and cancer of other organs.

(c) *Overview of abatement construction projects.* Abatement as a portion of a renovation project; OSHA requirements for notification of other contractors on a multi-employer site (29 CFR 1925.58).

(d) *Safety system design specifications.* 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; use of negative pressure exhaust ventilation equipment; use of high efficiency particulate aerosol (EPA) vacuums; proper clean-up and disposal of asbestos; work practices as they apply to encapsulation, enclosure, and repair; use of glove bags and a demonstration of glove bag use.

(e) *Field trip.* Visit an abatement site or other suitable building site, including on-site discussions of abatement design, building walk-through inspection, and discussion following the walk-through.

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

(g) *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.

(h) *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; aggressive air movement and negative pressure exhaust ventilation as a clean-up method.

(i) *Designing abatement solutions.* Discussions of removal, enclosure, and encapsulation methods; asbestos waste disposal.

(j) *Budgeting/cost estimation.* Development of cost estimates; present costs of abatement versus future operations and maintenance costs; setting priorities for abatement jobs to reduce cost.

(k) *Writing abatement specifications.* Means and methods specifications versus

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performance specifications; design of abatement in occupied buildings; modification of guide specifications to a particular building; worker and building occupant health/medical considerations; replacement of ACM with non-asbestos substitutes; clearance of work area after abatement; air monitoring for clearance.

(l) *Preparing abatement drawings.* Use of as-built drawings; use of inspection photographs and on-site reports; particular problems in abatement drawings.

(m) *Contract preparation and administration.*

(n) *Legal/liabilities/ defenses.* Insurance considerations; bonding; hold harmless clauses; use of abatement contractor's liability insurance; claims-made versus occurrence policies.

(o) *Replacement.* Replacement of asbestos with asbestos-free substitutes.

(p) *Role of other consultants.* Development of technical specification sections by industrial hygienists or engineers; the multidisciplinary team approach to abatement design.

(q) *Occupied buildings.* Special design procedures required in occupied buildings; education of occupants; extra monitoring recommendations; staging of work to minimize occupant exposure; scheduling of renovation to minimize exposure.

(r) *Relevant federal, state and local regulatory requirements.*

(1) TSCA Title II;

(2) National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subparts A (General Provisions) and M (National Emission Standard for Asbestos);

(3) OSHA standards for permissible exposure to airborne concentrations of asbestos fibers and respiratory protection, 29 CFR 1910.134;

(4) EPA Worker Protection Rule, 40 CFR Part 763, Subpart G;

(5) OSHA Asbestos Construction Standard, 29 CFR 1926.58.

(s) *Course review.* Review of key aspects of the training course.

2. EXAMINATIONS

The department shall administer a closed book examination or designate other entities such as department-approved training courses to administer the closed book examination to persons seeking certification who have completed an initial training course. Demonstration testing may also be included as part of the examination. A person seeking

certification in a specific job classification shall pass the examination for that classification to receive certification. For example, a person seeking certification as an inspector must pass the department-approved inspector certification examination.

Each examination shall adequately cover the topics included in the training course for that classification. Persons who pass the department-approved examination and fulfill whatever other requirements the department imposes shall receive an identification card indicating that they are certified in a specific classification.

The following are the requirements for examinations in each area:

1. Asbestos Inspectors- 50 multiple choice questions, 70% passing score.

2. Asbestos Management Planners- 50 multiple choice questions, 70% passing score.

3. Asbestos Supervisors- 100 multiple choice questions, 70% passing score.

4. Asbestos Worker- 50 multiple choice questions, 70% passing score.

5. Project Designer- 100 multiple choice questions, 70% passing score.

3. REFRESHER TRAINING COURSES

An annual refresher training course for recertification shall be one day in length except for the inspector classification. Refresher courses for inspectors shall be a half-day in length. Management planners shall attend the inspector refresher course, plus an additional half-day on management planning.

The refresher course shall be specific to each classification. For each classification, the refresher course shall review and discuss changes in federal and state regulations, developments in state-of-the-art procedures and a review of key aspects of the initial training course as determined by the department. After completing the annual refresher course, persons shall have their certification extended an additional year. The department may consider requiring persons to pass reaccreditation examinations at specific intervals.

4. QUALIFICATIONS

In addition to training and an examination, the department may require whatever qualifications and experience that the department considers appropriate for some or all classifications.

5. DECERTIFICATION REQUIREMENTS

Conditions for decertification are found in HSS 159.11(6)(a) for the five job classifications.

6. RECIPROCITY

Requirements for reciprocal acceptance of training certificates issued by states other than Wisconsin are found in HSS 159.13.

II. Text deleted, not applicable

III. Department Approval of Training Courses

Individuals or groups wishing to sponsor training courses in Wisconsin for job classifications required to be certified under Chapter HSS 159 shall apply for department approval. For a course to receive approval, it must meet the requirements for the course as outlined in the Wisconsin Model Accreditation Plan.

Applicants shall send the information requested below to the department's Asbestos Training and Certification Program. The information includes but is not limited to:

(1) A completed application form including the course sponsor's name, address and phone number;

(2) The accreditation fee.

(3) A letter from the training course sponsor that clearly indicates how the course meets the Wisconsin Model Accreditation Plan requirements for:

(a) Length of training in days;

(b) Amount and type of hands-on training;

(c) Topics covered in the course.

(4) A course curriculum;

(5) Course materials (student manuals, instructor notebooks, handouts, etc.);

(6) A copy of the keyed exam;

(7) A detailed statement about the development of the examination used in the course;

(8) Student notification of exam scores;

(9) Names and qualifications of course instructors. Instructors must have academic credentials and/or field experience in asbestos abatement;

(10) Course evaluation forms;

(11) Description and an example of numbered certificates issued to students who attend the course and pass the examination.

(12) Advertising materials;

(13) Training schedule;

(14) Copies of EPA and other state(s) approval letters.

Information and materials for refresher courses are similar to those above, except for exam development requirements.

As noted above, the training course administrator must issue numbered certificates to students who successfully pass the training course's examination. The numbered certificate is to indicate the name of the student and the course completed, the dates of the course and the examination, and a statement indicating that the student passed the examination. That certificate also would include an expiration date for certification that is 1 year after the date on which the student completed the course and examination. Training course administrators who offer refresher training courses must also provide certificates with all of the above information (except testing information unless testing is required).

The department may revoke or suspend approval if an on-site audit indicates that a training course is not conducting training that meets the requirements of the Wisconsin Model Accreditation Plan. Training course sponsors shall permit department representatives to attend, evaluate, and monitor any training course without charge to the department. Department representatives may not give advance notice of their audits.

The department will submit a list of those training courses that have been granted accreditation consistent with the Wisconsin Model Accreditation Plan to the U.S. EPA for publication in the Federal Register.