

Chapter HFS 159

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 8 components:

- (1) Initial training;
- (2) Examinations;
- (3) Refresher training course;
- (4) Verification of qualifications;
- (5) Decertification requirements;
- (6) Reciprocity;
- (7) Instructor qualifications; and
- (8) Training provider recordkeeping requirements.

For purposes of certification requirements in ch. HFS 159, the duration is specified in number of days. A day of training shall have a minimum of 6 classroom contact hours, excluding lunch and breaks, and shall not exceed 8 hours in one calendar day.

In several instances, initial training courses for a specific job classification, such as workers or 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 initial training course requirements for persons required to have certification under s. 254.20, 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 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 discussions of the uses and locations of asbestos 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 relationship 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 between 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) *Relations with the public, employes and building occupants.* Notifying employe 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.

(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 and 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 such as 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 Asbestos Worker Protection Rule 40 CFR Part 763, Subpart G;

(2) Toxic Substances Control Act (TSCA) Title II;

(3) OSHA Asbestos Construction Standard, 29 CFR 1926.1101;

(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 between federal and state requirements where they apply and the effects, if any, on public and non-public school, other public buildings and commercial buildings; and

(7) National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR part 61 Subparts A and M.

(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 and responsibilities of the management planner; operations and maintenance programs; setting work priorities; protection of building occupants.

(b) *Evaluation and 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 of 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 air (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 and implementation process, and problems that have been experienced).

(h) *Regulatory review.*

(1) OSHA Asbestos Construction Standard, 29 CFR 1926.1101;

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

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

(4) Toxic Substances Control Act (TSCA) Title II; and

(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); management plan as a planning tool.

(k) *Financing abatement actions.* Economic analysis and cost estimates; development of cost estimates; present cost 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 course.

C. Asbestos Supervisors. All persons seeking certification as asbestos supervisors shall complete a 5-day training course as outlined below. The training course shall include lectures, demonstrations, at least 14 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. 254.20, 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 leadperson 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 supervisors training course shall adequately address the following topics:

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

(b) *Potential health effects of asbestos exposure.* The nature of asbestos related disease; routes of exposure; dose-response relationship 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 fit tests); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors; factors that alter respirator fit, such as 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 of maintenance of barriers and decontamination enclosure systems; positioning of warning signs, electrical and ventilation system lockout; proper working techniques for mini-

mizing fiber release; use of negative pressure ventilation equipment; use of high efficiency particulate air (HEPA) 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 and EPA Worker Protection Rule requirements for a pulmonary function test, chest x-rays and a medical history for each employe.

(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) Toxic substances Control Act (TSCA) Title II;

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

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

(4) OSHA Asbestos Construction Standard, 29 CFR 1926.1101; and

(5) EPA Asbestos 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 4-day training course as outlined below. 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. The Department recommends the use of audiovisual materials to compliment lectures where appropriate.

The worker 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 relationship 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, such as 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 description of proper construction of 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, encapsulation, enclosure and repair; emergency procedures for sudden release; potential exposure situations; transport and disposal procedures; 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 and EPA Worker Protection Rule requirements for a pulmonary function test, chest x-rays and a medical history for each employe.

(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 a respiratory protection program.*

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

E. Project Designers.

A person shall be certified as a project designer to design any of the following activities with respect to friable ACM in a school or in a public or commercial building:

(1) A response action other than SSSD maintenance activity;

(2) A maintenance activity that disturbs friable ACM other than a SSSD maintenance activity; or

(3) A response action for a major fiber release episode.

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 discussions 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 1926.1101).

(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; proper techniques for initial cleaning; use of negative pressure exhaust ventilation equipment; use of high efficiency particulate air (HEPA) 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 discussion 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, such as facial hair; components of a proper respiratory protection program; selection and use of personal protective clothing; use, storage, and handling of non-disposable clothing; 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.* Discussion of removal, enclosure, and encapsulation methods; asbestos waste disposal.

(j) *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; the use of transmission electron microscopy (TEM) in air clearance and lab accreditation under National Institute of Standards and Technology (NIST) or National Voluntary Laboratory Accreditation Program (NVLAP).

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

(L) *Writing abatement specifications.* Preparation of and the need for written project design; means and methods specifications versus performance specifications; design of abatement in occupied buildings; modification of guide specifications to a particular building; worker and building occupant health and medical considerations; replacement of ACM with non-asbestos substitutes; clearance of work area after abatement; air monitoring for clearance.

(m) *Preparing abatement drawings.* Significance and need for drawings; use of as-built drawings; use of inspection photographs and on-site reports; methods of preparing abatement drawings; diagramming containment barriers; relationship of drawings to design specifications; particular problems in abatement drawings.

(n) *Contract preparation and administration.*

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

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

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

(r) *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.

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

(1) Toxic Substances Control Act (TSCA) Title II;

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

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

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

(5) OSHA Asbestos Construction Standard, 29 CFR 1926.1101; and

(6) OSHA Hazard Communication Standard found at 29 CFR 1926.59.

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

F. Roofing Workers. All persons seeking certification as roofing workers shall complete a one-day roofing worker training course as outlined below. The one day course shall include lectures, demonstrations and hands-on, a course review and a written examination.

The roofing workers training course shall adequately address the following topics within the minimum amount of class time specified:

(a) *Asbestos characteristics.* Identification of asbestos, aerodynamic characteristics, typical asbestos uses in roofing. Duration: 45 minutes.

(b) *Potential health effects of asbestos exposure.* The nature of asbestos-related diseases, lack of a safe exposure level, synergism between cigarette smoking and asbestos exposure, routes of exposure, dose-response relationship, latency period. Duration: 45 minutes.

(c) *Personal protective equipment.* Classes and characteristics of respirators, qualitative and quantitative fit testing, personal protective clothing, risk of family exposure, medical surveillance, limitations of respirators, field testing respirators, respirator protection factors, factors that alter respirator fit, use/storage/handling of non-disposable clothing, respiratory protection, proper selection/inspection/donning/use/storage procedures for respirators, components of a proper respiratory protection program. Duration: 2 hours.

(d) *Regulations for workers.* Wisconsin Department of Natural Resources rules, Wisconsin Department of Health and Family Services rules, U.S. Occupational Safety and Health Administration regulations, U.S. Environmental Protection Agency regulations, Wisconsin Department of Commerce rules, Wisconsin Department of Transportation rules. Duration: 45 minutes.

(e) *State of the art work practices.* General safety, engineering controls, wet methods associated with roofing work, NESHAP category I and II roofing material, operations and maintenance criteria, impact of roofing activities on interior asbestos-containing materials, air sampling for worker's interpretation of results, handling procedures for asbestos-containing roofing materials, proper use of power equipment, demonstration of decontamination procedure, decontamination units. Duration: 2 hours.

G. Roofing Supervisors. All persons seeking certification as roofing supervisors shall complete a one-day roofing worker course as outlined above and an additional one-day roofing super-

visor training course. The training program shall include lectures, demonstrations and hands-on, course review and a written examination.

The training course shall adequately address the following topics within a minimum amount of class time specified:

(a) *Bulk sampling for asbestos-containing roofing materials.* Techniques for bulk sampling and sampling equipment, quality control and assurance procedures, use of respiratory protection, repair of the sampling area, use of polarized light microscopy. Duration: 30 minutes.

(b) *Air sampling for airborne asbestos fibers.* Regulations and recordkeeping, calibration, interpreting results, asbestos analysis by PCM/TEM, equipment terminology, air sampling strategies and techniques for roofs. Duration: 1 hour.

(c) *Regulations for supervisors.* U.S. Occupational Health and Safety Administration regulations 29 CFR 1926.1101 (asbestos construction standards), 29 CFR 1926.59 (hazard communication standard) and 29 CFR 1910.134 (respiratory protection), Wisconsin Administrative Code Chapter Comm 32 (asbestos regulations for public sector employes), Wisconsin Department of Transportation regulations, Wisconsin Administrative code Chapter HFS 159 (asbestos certification), overview of U.S. Environmental Protection Agency regulations 40 CFR 763 Asbestos Hazard Emergency Response Act (AHERA), Wisconsin Administrative Code Chapter NR 447 (control of asbestos emissions) and Section NR 502.06 (3) (collection and transportation). Duration: 1 hour and 30 minutes.

(d) *Insurance and liability issues.* Tort law, occurrence insurance, regulatory law, claims made insurance, contractual law, worker's compensation. Duration: 30 minutes

(e) *Other supervisory issues.* Emergency planning, contract specifications, slower work productivity, fear associated with asbestos work, logistical problems related to asbestos-containing roofing materials, negative pressure and local exhaust ventilation. Duration: 1 hour.

(f) *On-site representative or competent person.* Glove bags and how they work, negative pressure enclosures, local exhaust ventilation systems, considerations when coordinating with asbestos abatement personnel. Duration: 45 minutes.

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 Workers – 50 multiple choice questions, 70% passing score.
5. Project Designers – 100 multiple choice questions, 70% passing score.
6. Roofing Workers – 35 multiple choice questions, 70% passing score.
7. Roofing Supervisors – 50 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, roofing supervisor and roofing worker classifications. Refresher courses for inspectors, roofing supervisors and roofing workers 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 successfully completing the annual refresher course and meeting application requirements, persons shall have their certification extended an additional year. The Department may consider requiring persons to pass recertification examinations at specific intervals.

Before allowing a student into a refresher training course, the training provider shall verify that the student has met any prerequisites for enrollment in the refresher course, including but not limited to having completed an initial training course in that discipline.

4. VERIFICATION OF QUALIFICATIONS

The Department may require whatever additional verifiable documentation may be necessary to substantiate that a person has met any or all applicable requirements in this chapter.

5. DECERTIFICATION REQUIREMENTS

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

6. RECIPROCITY

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

7. INSTRUCTOR QUALIFICATIONS

A. Training

A person seeking approval as an instructor of an accredited asbestos training course in any discipline shall have successfully completed:

- (a) A teaching methods course which covers at a minimum the following topics: principles of adult learning, training course design, non-lecture instructional methods, use of audio-visual

and other instructional resources, teaching methods such as, instructional objectives, guided discovery and learning styles, and maintaining classroom control for a learning environment.

The course shall consist of at least 16 hours of instruction and shall include a practice teaching component involving critique and evaluation of the applicant's teaching skills. Any degree that covers the topics required by this subdivision satisfies this requirement; and

(b) Certification in the disciplines that the instructor intends to instruct in.

B. Experience

A person seeking approval as an instructor of an asbestos course in any discipline shall be minimally qualified in the topics to be taught by having at least one year of experience in the 5 years preceding an application for approval in performing or being directly responsible for the tasks that are, or are closely related to the tasks performed in the asbestos discipline in which the applicant intends to teach.

C. Equivalent training and experience

The Department may approve training and experience qualifications other than those in parts A and B if the department, following consideration and evaluation of them on a case by case basis finds that they are substantially equivalent to the training and experience qualifications in parts A and B.

8. TRAINING PROVIDER RECORDKEEPING REQUIREMENTS

All accredited asbestos training providers shall comply with the following minimum recordkeeping requirements for all accredited training courses.

1. Training course materials. A training provider must retain copies of all instructional materials used in the delivery of the classroom training such as student manuals, instructor notebooks and handouts.

2. Instructor and guest lecturer qualifications. A training provider must retain copies of all instructor resumes, and the documents approving each instructor issued by the Wisconsin department of health and family services. Instructors must be approved by the Department of Health and Family Services before teaching courses for accreditation purposes. A training provider must notify the Department of Health and Family Services in advance whenever it changes course instructors. Records must accurately identify individual instructors who will teach each particular course topic for each date that a course is offered.

3. Examinations. A training provider shall document that each person who receives a certification certificate for an initial training course has achieved a passing score on the examination. These records shall clearly indicate the date upon which the exam was administered, the training course and the discipline for which exam was given, the name of the person who proctored the exam, a copy of the exam and the name and test score of each person taking the exam. The topic and dates of the training course shall correspond to those listed on that person's certification certificate. Copies of examinations administered and stored with the state or a state authorized testing organization shall meet these recordkeeping requirements.

4. Certificates. The training provider shall maintain records that document the names of all persons who have been awarded certificates, certificate number, the discipline for which the certificate was conferred, training and expiration dates, and the training location. The training provider shall maintain the records in a manner that allows verification by telephone of the required information.

5. Records retention period and access. All required records under this chapter shall be retained for a minimum of 3 years. The training provider shall allow reasonable access by the Department to all training records required by this chapter, including electronic records if they exist.

6. Cessation of training. If a training provider goes out of business or chooses to no longer conduct any or all department accredited asbestos courses, the training provider shall notify the Department and shall give the Department the opportunity to take possession of any or all relevant training records.

II. Department Approval of Training Courses

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

An applicant for training course approval shall send the accreditation fee and requested information to the Department's Asbestos Training and Certification Program. The information shall include:

- (1) A completed application form including the course sponsor's name, address and phone number;
- (2) 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; and
 - (c) Topics covered in the course.
- (3) A course curriculum;
- (4) Course materials (student manuals, instructor notebooks, handouts, etc.);
- (5) A copy of the keyed exam;
- (8) A detailed statement about the development of the examination used in the course;
- (7) Student notification of exam scores;
- (8) Names and qualifications of course instructors. Instructors shall have academic credentials and/or field experience in asbestos abatement;
- (9) Course evaluation forms;
- (10) Description and an example of numbered certificates issued to students who attend the course and pass the examination.
- (11) Advertising materials;
- (12) Training schedule; and
- (13) Copies of approval letters from EPA and other states.

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

Each certificate issued to a person seeking certification shall contain the following minimum information:

- a. A unique certificate number;
- b. Name of person who completed the training;
- c. Discipline of the training course completed;
- d. Dates of the training course;
- e. Date of the examination;
- f. An expiration date of one year after the date upon which the person successfully completed the course and examination;
- g. The name, address, and telephone number of the training provider that issued the certificate.

h. A statement that the person receiving the certificate has completed the requisite training for asbestos certification under TSCA Title II; and

- i. A statement that the student passed the examination.

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 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.