## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 763

[OPPTS-62107A; FRL-4170-1]

RIn 2070-AC51

### Asbestos Model Accreditation Plan

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Interim final rule.

**SUMMARY:** EPA is issuing this interim final rule to revise its asbestos Model Accreditation Plan (MAP) to clarify the types of persons who must be accredited to work with asbestos in schools and public and commercial buildings; to increase the minimum number of hours of training, including additional hours of hands-on health and safety training, for asbestos abatement workers and contractor/supervisors; and to effect a variety of other necessary changes as mandated by section 15(a)(3) of the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). This revised rule replaces the original MAP found at 40 CFR part 763, Appendix C to Subpart E. The original MAP contained six components which, taken together, comprised a model asbestos accreditation plan for States and EPA-approved training providers. These components included: (1) Initial training, (2) examinations, (3) refresher training, (4) qualifications, (5) decertification requirements, and (6) reciprocity. This revision adds two new components to the original MAP; (1) definitions, which help to determine the scope and applicability of the rule, and (2) new recordkeeping requirements for the providers of accredited training courses. The changes also specify the deadline for States to modify their accreditation programs to be no less stringent than the revised MAP as required by the Toxic Substances Control Act (TSCA) section 206(b)(2). Further, the revised MAP prescribes deadlines for training course providers and persons who must obtain accreditation to comply with new requirements; distinguishes between the training requirements for each of the five accredited training disciplines; adds several new topics to the project designer training curriculum; establishes new enforcement criteria and Federal procedures for withdrawing approval from accredited persons and training programs; and stipulates new information requirements for training certificates. Because the revisions expand the minimum requirements for an accreditation plan, States may have to modify their programs to insure that each State has a contractor accreditation plan that is at least as stringent as the revised MAP as required by TSCA section 206(b). Similarly, training providers may need to adjust their training course administration or curricula to comply with the revised MAP. Finally, EPA has modified the organization, and some of the language of the original MAP. These modifications, however, are technical, and do not impose new substantive requirements.

**DATES:** This Rule is effective April 4, 1994. Because this is an interim final rule, EPA is accepting further comment on this action. All written comments must be received by EPA no later than March 4, 1994. EPA will consider the written comments received during the 30-day comment period in determining the need for any further rule amendments.

**ADDRESSES:** Written comments should be sent to: Field Programs Branch, Chemical Management Division (7404), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 401 M St., Washington, DC 20460. EPA does not anticipate receiving any comments that contain information claimed as confidential business information (CBI). If such comments are submitted, however, they must be clearly labeled as containing information claimed as CBI or they will be placed in the public record. CBI claims should be accompanied by statements substantiating the claim as described in 40 CFR 2.204(e)(4). If information is claimed as CBI, a nonconfidential version of the comments should also be submitted for the public docket.

**FOR FURTHER INFORMATION CONTACT:** Susan B. Hazen, Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, Rm E-543B, 401 M St., SW., Washington, DC 20460, (202) 554-1404, TDD: (202) 554-0551.

**SUPPLEMENTARY INFORMATION:**

The Agency is requesting comment on this revised MAP only to the extent that it has amended or changed the original MAP. The Agency is not soliciting comments on provisions of the original MAP that remain unaffected by this action. Specifically, and notwithstanding the inclusion of some of the existing language from the original MAP in this revised MAP, the Agency will only entertain comments to the extent that they address actual changes which have been incorporated. Appendix C to subpart E of 40 CFR 763 is reproduced in its entirety solely for clarity and to facilitate understanding of how the changes and amendments fit within the existing regulatory structure.

#### I. Background

In 1986, Congress enacted the Asbestos Hazard Emergency Response Act (AHERA, or TSCA Title II) which mandated a regulatory program to address asbestos hazards in schools. A part of AHERA (section 206; 15 U.S.C. 2646) dealt with the mandatory training and accreditation of persons who would perform certain types of asbestos-related work in schools. Subsequently, in 1990, Congress enacted ASHARA (Pub. L. 101-637), which amended AHERA to extend some of the training and accreditation requirements to persons performing such work in public and commercial buildings. Consequently, EPA is now effecting regulatory changes to reflect and implement these statutory amendments.

Originally, section 206 of AHERA required EPA to develop a MAP providing for the training of certain types of persons performing asbestos-related work in elementary and secondary schools (15 U.S.C. 2646). Persons covered by this original MAP included those who inspected school buildings for asbestos-containing materials (ACM); developed asbestos management plans for schools; and designed or conducted response actions with respect to friable ACM, other than small-scale, short-duration activities, in schools. Such persons were required to obtain accreditation as a prerequisite to performing this work.

AHERA also required States to adopt a State accreditation program that was no less stringent than that described in the MAP (15 U.S.C. 2646(b)(2)). Persons could then obtain accreditation by completing either an EPA-approved training course, or a training course approved by a State with a program that was at least as stringent as the MAP, and by passing an examination for that course. Individual States, however, could elect to impose more stringent requirements as a condition of accreditation.

The original MAP established five accredited "disciplines" for asbestos-related activities in schools, which included: worker, contractor/supervisor, inspector, management planner, and project designer. For each discipline, it outlined a functional role and set of job responsibilities, and stipulated minimum training, examination, and continuing education requirements. It established areas of knowledge of asbestos inspection, management plan development, and response action

technology that persons seeking accreditation must demonstrate and that States must include in their accreditation programs.

On November 28, 1990, Congress enacted ASHARA and expanded the accreditation requirements to apply to persons who work with asbestos in public and commercial buildings as well as schools. Specifically, ASHARA expanded TSCA section 206(a)(1) and (3) to require accreditation for any person who inspects for ACM in a public and commercial building, or who designs or conducts a response action with respect to friable ACM in such a building. As a result of this amendment, the MAP accreditation requirements for inspectors, project designers, workers, and contractor/supervisors now apply equally to persons in both schools and public and commercial buildings. Congress, however, did not extend the accreditation requirement for management planners. As a result, TSCA requires accreditation for persons who prepare management plans if they work in schools, but does not require such accreditation if they work in public and commercial buildings (15 U.S.C. 2646(a)(2)).

ASHARA also required EPA to revise the current MAP by increasing the minimum number of hours of training, including hands-on training, required for asbestos abatement workers in both schools and public and commercial buildings. ASHARA, however, did not specify the amount of additional training that would be required. In addition, ASHARA authorized EPA to modify the MAP as necessary to implement the extension of accreditation requirements to public and commercial buildings.

Finally, ASHARA amended the penalty provisions of TSCA section 207 (15 U.S.C. 2647). It provided for a civil penalty for contractors who fail to comply with TSCA accreditation requirements by inspecting, designing, or conducting a response action in a school or public or commercial building without TSCA accreditation, or by employing individuals to conduct response actions in such a building, and failing to require or provide TSCA accreditation for the employees. A contractor who commits a violation is liable for a civil penalty of $5,000 for each day of a violation, except for a contractor who is a direct employee of the Federal Government (15 U.S.C. 2646 (g)).

The ASHARA accreditation provisions originally were to take effect on November 28, 1991. ASHARA, however, authorized EPA's Administrator to extend that effective date for one year. On January 7, 1992, the Administrator took action to extend the effective date until November 28, 1992 (57 FR 1913, January 16, 1992). The Administrator determined that accredited asbestos contractors were needed to perform school site abatement required under AHERA, and that such an extension was necessary to ensure effective implementation of section 203 of TSCA (ASHARA section 15(c)). As a result of this extension, persons who perform inspections, or plan or conduct response actions in public and commercial buildings were required to obtain TSCA accreditation beginning on November 28, 1992.

EPA has decided to phase-in the other new requirements contained in the revised MAP when the revision takes effect. These requirements include an increase in the minimum number of hours of training, including hands-on training, for asbestos abatement workers in both schools and public and commercial buildings, and other necessary revisions.

EPA is promulgating the revised MAP as an interim final rule that will take effect 60 days after the rule is published. The streamlined procedures that EPA has utilized to revise the MAP are fully consistent with the Congressional directive to EPA for developing the original MAP. AHERA specifically authorized the Agency to issue the MAP "after consultation with affected parties" (15 U.S.C. 2646(b)(1)(A)). EPA issued it after a public request for information in the **Federal Register** (51 FR 28914, August 12, 1986) and consultations with affected parties, but without engaging in full-scale notice and comment rulemaking. EPA has used procedures to revise the MAP that are as extensive as those that were used to develop the original MAP. EPA believes it is reasonable to conclude that Congress did not intend EPA to engage in the redundancy of consultation with affected parties and formal notice and comment rulemaking in either issuing the MAP or in revising it, and therefore intended EPA to issue this revision to the MAP after undertaking similar consultations with affected parties.

EPA finds that there is good cause to issue an interim final rule, without utilizing all of the notice and public comment procedures in section 553(b) of the Administrative Procedures Act (APA), because those procedures are impracticable and unnecessary under the circumstances (5 U.S.C. 553(b)). It is impracticable to utilize the full-scale notice and comment proceedings in section 553(b) because such proceedings would unjustifiably extend the rulemaking process, and would further delay the implementation of the revised MAP. Congress clearly intended that EPA act expeditiously to revise the MAP, and even established a deadline for the EPA revisions. EPA did not meet the deadline because of the time-consuming process that was necessary to create an accreditation plan that would coordinate with existing, diverse State accreditation programs, minimize disruption of current training providers, and contain other provisions necessary to implement the revisions. If EPA were to develop and publish a notice of proposed rulemaking pursuant to section 553(b), the revisions would have been even further delayed. The impact of such a delay would be exacerbated by the additional time that is required for States to pass conforming legislation and implement the revised MAP after it is issued.

Finally, full-scale rulemaking is unnecessary because EPA has communicated informally with affected parties, given notice of the revisions to the public, and provided an opportunity to submit information and comments prior to promulgating this interim final rule. Initially, the Agency consulted with affected organizations to identify revisions that were necessitated by ASHARA. These organizations included schools, commercial building owners and operators, asbestos abatement consultants and contractors, labor organizations, training providers, and States. Subsequently, EPA published a notice in the **Federal Register** that described the revisions that were being considered, and announced a public meeting to discuss the changes (57 FR 20438, May 13, 1992).

EPA also established a docket containing information which supports EPA's revision of the MAP. To provide interested persons the opportunity for oral presentation of data, views, or arguments concerning the changes under consideration, EPA held a public meeting on June 8, 1992, in Washington, DC. Twenty-three persons presented oral comments for the record. A transcript of this proceeding is contained in the docket. EPA also received 80 written comments in response to the **Federal Register** announcement. These comments have also been filed in the docket, and were carefully considered by the Agency in revising the MAP.

## II. Summary of Changes

The various new requirements of the MAP are described here in greater detail. This summary is organized by subject area.

*A. Definitions*

The promulgated revisions establish a new definitions section for the MAP. Seven terms are included to help clarify and delineate the scope and applicability of the MAP to work performed in public and commercial buildings. The seven terms, and their meanings, are summarized below:

1. *Public and commercial building.* The term "public and commercial building" is defined in TSCA section 202(10) to mean "any building which is not a school building, except that the term does not include any residential apartment building of fewer than 10 units" (15 U.S.C. 2642(10)). This definition identifies those buildings where persons performing certain asbestos-related work are subject to the MAP training and accreditation requirements. Such buildings generally include apartment complexes, condominiums and cooperatives of more than 10 units, office buildings, government-owned buildings, colleges, museums, airports, hospitals, churches, preschools, stores, warehouses, and factories. It also includes all industrial buildings, because industrial buildings are included within the broad statutory definition of public and commercial buildings.

This particular term does not include elementary or secondary schools as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854; 15 U.S.C. 2642(9) and (12)). The definition in the revised MAP excludes all detached single family homes, because they are residential buildings of fewer than 10 dwelling units.

Furthermore, consistent with the statute and EPA's regulatory approach for schools, the term is interpreted to include only the interiors of buildings except for exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space. Consequently, accredited workers are generally not required for work on roofing or siding materials that are on the outside of either public and commercial buildings or schools.

2. *Friable asbestos-containing material (ACM).* In TSCA section 202, friable asbestos-containing material means any material containing more than one percent asbestos, which has been applied on ceilings, walls, structural members, piping, duct work, or any other part of a building, which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. The term includes non-friable ACM after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure" (15 U.S.C. 2642(6)). At no point does the statute regulate activities that involve nonbuilding materials, such as asbestos gloves or asbestos brake linings, that may be either stored or used inside of a building. Consequently, the use of the term "friable ACM" in the MAP refers only to "friable asbestos-containing building material (ACBM)," and, where the statute requires accreditation for activities associated with ACM, accreditation is only required if the asbestos is part of the building.

3. *Inspection.* Although AHERA required that schools conduct asbestos inspections, ASHARA did not extend this same requirement to public and commercial buildings. Furthermore, because the Asbestos-Containing Materials in Schools Rule ("Schools Rule") (40 CFR 763.80–763.119) simply listed the various activities required to be included as a part of these mandatory school inspections (40 CFR 763.85), without actually defining the term itself, a definition of "inspection" is necessary to delineate the scope of the MAP accreditation requirement as it applies to both schools and public and commercial buildings. Accordingly, the term "inspection" is defined to mean those activities undertaken to specifically determine the presence or location, or to assess the condition of, friable or non-friable ACBM or suspected ACBM, whether by visual or physical examination, or by collecting samples of such material. Similarly, the term includes all "reinspections" of friable and non-friable known or assumed ACBM which has been previously identified.

The inclusion of a definition for the term inspection is intended to clarify when a person must obtain TSCA accreditation before performing an inspection. TSCA Title II, as amended by ASHARA, did not define inspection. When Congress enacted ASHARA, however, the Schools Rule was in effect, and it identified the activities that constituted an inspection in school buildings (40 CFR 763.85 and 763.92). The definition of inspection adopted in the revised MAP is based upon the core inspection activities identified in the Schools Rule at § 763.85(a), including the visual or physical examination, and the sampling of ACBM or suspected ACBM to determine its location or presence or to assess its physical condition. Based upon the revised MAP, a person must be accredited to engage in any one of these core activities in a school or in a public and commercial building. In addition, the Schools Rule continues to require accreditation for any person who engages in any one of these core activities. Because the Schools Rule currently requires an accredited person to conduct the core inspection activities, and the revised MAP requires accreditation for those same activities, the revision will not expand the need for accredited inspectors in schools.

The definition, however, also allows for three specific exceptions, dealing with related activities which do not require accreditation. The three excepted activities include: periodic surveillance, compliance inspections, and visual inspections.

The first exception under this term addresses periodic surveillance of the type described in 40 CFR 763.92(b), which is commonly performed by custodial or maintenance workers. Periodic surveillance is distinct from reinspection and is limited only to visual observations. It refers to a visual examination of an area in a building that previously has been identified as containing ACBM, or that previously has been assumed to contain ACBM, and that is undertaken to identify changes in the physical condition of that ACBM. Thus, a person would not need accreditation to visually survey a ceiling that had already been identified in an earlier inspection or reinspection as suspected ACBM to determine whether the ceiling had been damaged by a water leak. If the person assessed the condition of the ceiling by collecting a sample, or touched it to determine whether it had become friable, however, then that person would have to be accredited as an inspector.

The second type of activity that is excluded from the definition of inspection is compliance inspections performed by Federal, State, or local regulatory agencies. These are excluded from accreditation because their primary purpose is to determine adherence to applicable statutes or regulations, and not to locate, assess, or remedy the condition of ACBM. TSCA Title II does not provide a clear definition of the types of inspection activities that require training. The legislative history of ASHARA, however, indicates that Congress intended to require training only for those persons who actually inspect for or abate asbestos in public and commercial buildings. *See* 136 Cong. Rec. S15304 (Oct. 15, 1990) (statement of Sen. Burdick). Based upon the purpose of ASHARA, EPA has concluded that government personnel who inspect to determine compliance with laws regulating asbestos are not required to obtain accreditation.

The third exception involves visual inspections of the type referenced in 40 CFR 763.90(i). These types of activities are excluded from the accreditation requirement because their purpose is to determine whether a response action is complete, not to actually inspect for asbestos. See 136 Cong. Rec. S15304 (Oct. 15,1990) (statement of Sen. Burdick). Moreover, when Congress enacted ASHARA, it was aware that AHERA required accreditation for persons who inspected for asbestos in schools. Persons who conducted visual inspections in schools to determine whether a response action was complete, however, did not have to be accredited as inspectors. The legislative history of ASHARA indicates that Congress did not intend to expand the categories of persons that had to be accredited when it modified the accreditation requirements to include public and commercial buildings as well as schools. As noted by Senator Chafee: "[ASHARA] does not require the accreditation of any category of individuals not now required to be accredited to perform asbestos abatement work [under AHERA]." 136 Cong. Rec. S15309 (Oct. 15, 1990) (statement of Sen. Chafee). Consequently, EPA has concluded that a person who conducts an inspection in a public and commercial building to determine whether a response action is complete does not have to be accredited as an inspector. Of course, many persons performing such activities will otherwise need accreditation as asbestos abatement workers or contractor/supervisors.

4. *Response action.* The term "response action" is defined in the MAP to mean a method, including removal, encapsulation, enclosure, repair, and operation and maintenance, that protects human health and the environment from friable ACBM. This definition is consistent with the definition of "response action" in TSCA section 202(11) (15 U.S.C. 2642(11)), and with the definition of "response action" in the Schools Rule found at 40 CFR 763.83. Its incorporation into the revised MAP will therefore ensure that it applies equally to regulated activities in both schools and public and commercial buildings. Consequently, those activities that are response actions in schools will also now be response actions when and where they are undertaken in public and commercial buildings.

Moreover, a person planning or conducting a response action is subject to the MAP accreditation requirements only if the ACBM is friable (15 U.S.C. 2646(a)(3)). As defined in both the MAP and in TSCA section 202(6), "friable ACM" refers only to ACM that "when dry, may be crumbled, pulverized, or reduced to powder by hand pressure" (15 U.S.C. 2642(6)). It also includes previously "nonfriable material after such previously non-friable material becomes damaged to the extent that when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure" (15 U.S.C. 2642(6)). This statutory definition of friability thereby limits the scope of the accreditation requirements for response actions in both schools and public and commercial buildings to ACBM that is friable or expected to become friable during the course of the response action.

5. *Small-scale, short-duration activities.* For purposes of the revised MAP, "small-scale, short duration activities (SSSD)" are tasks such as, but not limited to: (a) Removal of asbestos-containing insulation on pipes, (b) removal of small quantities of asbestos-containing insulation on beams or above ceilings, (c) replacement of an asbestos-containing gasket on a valve, (d) installation or removal of a small section of drywall, or (e) installation of electrical conduits through or proximate to asbestos-containing materials.

SSSD can be further defined by the following considerations: (a) Removal of small quantities of ACM only if required in the performance of another maintenance activity not intended as asbestos abatement, (b) removal of asbestos-containing thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag, (c) minor repairs to damaged thermal system insulation which do not require removal, (d) repairs to a piece of asbestos-containing wallboard, or (e) repairs, involving encapsulation, enclosure, or removal, to small amounts of friable ACM only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement (such work may not exceed amounts greater than those which can be contained in a single prefabricated mini-enclosure. Such an enclosure shall conform spatially and geometrically to the localized work area, in order to perform its intended containment function).

This definition is intended to establish a common exemption threshold for both schools and public and commercial buildings that limits the applicability of the MAP training and accreditation requirements. All persons in schools or public and commercial buildings who perform SSSD that do not otherwise meet the criteria for a major fiber release episode under 40 CFR 763.91(f)(2) are exempt from the MAP accreditation requirements. However, a SSSD removal of more than 3 square or linear feet of friable ACBM, where this amount of friable ACBM either falls or is dislodged, requires the use of an accredited worker.

6. *Major and minor fiber release episodes.* To help clarify the applicability and limits of the SSSD exemption under the MAP, EPA is incorporating two additional definitions for the terms "Minor Fiber Release Episode" and "Major Fiber Release Episode." Consistent with the Schools Rule (40 CFR 763.83 and 763.91(e), (f)), a minor fiber release episode is "any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission" that "involves the falling or dislodging of 3 square or linear feet or less of friable ACBM." A major fiber release episode is "any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission" that "involves the falling or dislodging of more than 3 square or linear feet of friable ACBM." The Schools Rule uses these terms, in addition to SSSD, as a means to distinguish between those maintenance activities that require the use of accredited workers, and those that do not. These terms help delineate when persons performing operation and maintenance activities are subject to MAP training and accreditation requirements. Like SSSD, they are basic to determining the scope of the regulation, and have been added for that reason.

### *B. Phased Implementation*

EPA has decided that it is necessary to phase-in the MAP revisions to achieve an orderly transition to the revised plan. Additional time will be needed after the revised MAP has taken effect for States to adopt accreditation plans no less stringent than the revised MAP, for training course providers to modify their training courses in keeping with upgraded MAP standards, and for individuals to obtain new or additional training where applicable. For these reasons, the revisions incorporate a timetable with two distinct deadlines; one that applies to States, and another for accredited persons and training course providers.

1. *States.* EPA believes that it is reasonable to allow States a comparable amount of time to come into compliance with the revised MAP as was allowed under the original MAP. Therefore, the requirement of the original MAP, that each State must adopt an accreditation plan at least as stringent as the EPA

model plan within 180 days after the commencement of the first regular session of the State's legislature following EPA's adoption of the model plan, is carried over to the revised MAP. When Congress originally enacted AHERA, it required States to adopt such a plan, and established a deadline that was tied to the timing of the first legislative session following completion of the MAP. When it promulgated ASHARA, Congress did not modify TSCA section 206(b)(2) that requires States to have a plan at least as stringent as the MAP (15 U.S.C. 2646(b)(2)). When Congress enacted ASHARA, it was aware that States would need time to enact conforming State legislation. It is reasonable to conclude that Congress intended to allow States the same amount of time to adopt implementing legislation to comply with the MAP revisions in ASHARA that it had originally allowed for compliance with AHERA. The deadline for State revisions of accreditation plans allows States the time that is needed to revise State laws. When this deadline is combined with the other provisions to phase-in the MAP revisions, EPA believes that there will be an orderly transition to the expanded system of accreditation for schools, and public and commercial buildings.

Some States already will have contractor accreditation programs that meet or exceed the upgraded MAP requirements when the revised MAP takes effect. These States are essentially unaffected by the revisions, and may continue to operate as before. A second group of States will not have accreditation programs in place that are as stringent as the revised MAP when it first takes effect, but will have preexisting accreditation programs that are in compliance with the original MAP. These State programs may or may not be approved by EPA under the revised MAP. Until such a State revises its program to comply with the upgraded MAP standards, it will not have the authority to approve any new training courses to provide training or accreditation that satisfies the requirements of TSCA section 206(a) (15 U.S.C. 2646(a)). In the interim, however, the State may continue to train persons and issue the accreditation required by TSCA section 206(a) if the State program otherwise complies with the minimum standards of the original MAP. The State also may continue its approval of training course providers, if the State issued the approval before the effective date of the revised MAP, and the training provider is in compliance with the self-certification requirements contained in Unit V.B. of the revised MAP. This allows qualified training course providers to continue to train and issue accreditation that satisfies TSCA section 206(a) requirements.

Some States in the second group will revise their accreditation program to be at least as stringent as the MAP within 180 days after the commencement of the legislature's first regular session that is convened after the effective date of the revised MAP. When such a State achieves this program upgrade, it will regain the authority to approve new training course providers.

Other States in the second group, however, may fail to meet the deadline for achieving the necessary program upgrade. Beginning on their respective deadline dates, these States will no longer have the authority to train persons or issue accreditation that satisfies the requirements of TSCA section 206(a), or to approve training course providers to conduct TSCA training or issue TSCA accreditation. A training provider that had been approved by such a State automatically loses its State approval. A training provider that loses State approval in this manner, however, will become EPA-approved if the provider has self-certified and is otherwise in compliance with the revised MAP. Finally, such a State automatically loses any EPA approval it may have had. Once lost, a State would need to reapply for such approval under the procedures outlined in Unit II of the revised MAP.

A third group of States will not have any accreditation program in place when the revised MAP takes effect, or will not have a program which is at least as stringent as the original or revised MAP. These States are not in compliance with TSCA Title II, are not authorized to train persons or issue accreditation that satisfy the requirements of TSCA section 206(a), and may not approve training course providers to conduct TSCA training or issue TSCA accreditation. EPA strongly recommends that States apply for and retain EPA approval of their accreditation programs for the purpose of substantiating their compliance status under TSCA Title II. Substantiation of compliance benefits all affected persons and organizations, including States that may be considering reciprocal arrangements with other States.

2. *Training course providers.* The revised MAP stipulates that all approved training course providers, whether approved by EPA or a State, must self-certify that they have upgraded their approved training programs to comply with the requirements of the revised MAP within 6 months of the revised MAP taking effect. The certification must be received by EPA on or before October 4, 1994. This requirement applies across-the-board to all initial and refresher training courses in all five accredited disciplines even though actual curriculum modifications are only required for the initial worker, contractor/supervisor, and project designer courses. Self-certification is required for all courses and all disciplines because all training providers must certify that they not only comply with the prescribed training course curricula, but with the new recordkeeping and certificate provisions of the revised MAP as well. The self-certification process is to be accomplished by submitting a written assurance to EPA that courses and programs have been appropriately modified. The self-certification must be signed by an authorized representative of the training provider, and must include the following statement: "Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the training described in this submission complies with all applicable requirements of Title II of TSCA, 40 CFR part 763, Appendix C to Subpart E, as revised, and any other applicable Federal, state, or local requirements." The self-certification submission must also include documentation adequately describing the course and program modifications effected to achieve compliance with the revised MAP. Training providers with multiple course approvals are encouraged to certify all such courses through a single consolidated submission. Complete duplicate copies of self-certifications must also be sent to and received by any State approving offices as of the same deadline date. Training courses that have not self-certified as of October 4, 1994, will no longer be approved, and must reapply through a State Program which is no less stringent than the revised MAP to have their approval status restored.

As was previously announced in the **Federal Register** (54 FR 38802, September 20, 1989), EPA stopped accepting new training course applications from providers for review and contingent approval as of October 15, 1989. Since that date, all training courses without approval have had to apply directly to State Programs with accreditation plans no less stringent than the original MAP in order to obtain the necessary approval. Once a training course has been self-certified, a training

provider may continue to offer that training course pursuant to the revised MAP. If the course had initially been approved by an EPA-approved State, and that State subsequently forfeits its EPA-approved status, EPA will continue to recognize the training course as being an approved course if it has been self-certified and otherwise remains in compliance with the revised MAP.

3. *Accredited persons.* The revisions grandfather all persons who possess valid accreditation as of the day before the date upon which the revised MAP goes into effect. A person is considered to have valid accreditation if they are in possession of an accreditation certificate that has not yet expired. If a State allows a person with an expired certificate to reinstate accreditation by completing refresher training within the 12-month grace period, then such a person will also be considered to have valid accreditation for purposes of grandfathering. The person must successfully complete the necessary refresher training course within 12 months of the date their certificate expires. Persons who do not meet either of the above conditions do not possess valid accreditation, and will not be grandfathered for purposes of accreditation under the revised MAP.

Grandfathered persons will not have to repeat initial training in order to perform work subject to accreditation, but will have to continue to fully comply with all annual refresher training requirements.

Persons who do not possess valid accreditation as of the day before the date upon which the revised MAP goes into effect have two alternative means of obtaining initial accreditation. A person may take an upgraded training course, and obtain accreditation that complies with the revised MAP. Alternatively, a person may take a course that was approved under the original MAP and obtain provisional accreditation. However, this person must then also complete the upgraded training course for the same discipline within 6-months of the revised MAP taking effect, on or before October 4, 1994, in order to obtain accreditation that complies with the revised MAP and to continue working beyond that date. This mechanism will ensure that all persons who become newly accredited after the revised MAP takes effect will meet the upgraded training standards within 6 months, while at the same time, making it possible for all persons to acquire a provisional accreditation and continue to work during the 6-month transition period when training providers are upgrading their courses and programs.

From earlier consultations with training providers, EPA anticipates that many, if not most, will have little or no difficulty transitioning to the upgraded training course standards (OPPTS Docket No. 62107, Log No. B2-002). For worker and contractor/supervisor courses, this involves extending hands-on training from 6 to 14 hours. For the project designer course, it involves revising instructional materials as necessary to accomodate curriculum changes. For the inspector and management planner courses, there are no required curriculum changes per se. Because many training providers already comply with the new recordkeeping and certificate requirements as a matter of standard business practice, these adjustments are not expected to be burdensome. Development and submittal of the self-certification letter, by design, should also be a relatively simple task. In addition, EPA expects that once the revised MAP has gone into effect, demand for the upgraded training courses in favor of the original courses will provide sufficient market incentive for a significant number of training providers to self-certify quickly, thereby expediting an infrastructure shift from the old courses to the new.

The examples below are intended to help illustrate how accreditation will operate during the transition period.

a. Person "A" obtains initial accreditation as a worker 1-month before the revised MAP takes effect. This person is then grandfathered in when the revised MAP goes into effect 1-month later. The person must then complete worker refresher training within 11 months after the revised MAP takes effect in order to continue accreditation status unbroken.

b. Person "B" is a non-accredited consultant who is awarded an asbestos abatement contract 4 months after the revised MAP takes effect. This person is able to find and quickly complete an upgraded contractor/supervisor course, thereby obtaining initial accreditation. This person has met the new training standards, and thus is unaffected by the 6-month compliance deadline. The consultant must then satisfy the refresher training requirement within 1-year of the initial accreditation date in order to continue uninterrupted contractor/supervisor work.

c. Person "C" is a non-accredited consultant who is awarded a contract for project design 1-month after the effective date of the revised MAP. This person is unable to find an upgraded training course, so opts to take the old initial project designer training course and begin contract work without undue delay. This person may begin work, but must complete an upgraded project designer course within the 6-month compliance deadline in order to continue working in an uninterrupted manner. A consultant who does not complete the upgraded training course by the compliance deadline must then stop work that requires TSCA accreditation until obtaining upgraded accreditation.

The same transitional provisions apply to any person who seeks initial accreditation after the revised MAP takes effect, including inspectors and management planners. The revised MAP imposes certain new requirements on all disciplines, specifically new recordkeeping and certificate requirements. EPA has concluded that everyone who is initially accredited after the revised MAP takes effect should be subject to the same transitional provisions to insure that their training and accreditation will be adequately documented as required by the new rule, and that they will have certificates that contain all the necessary information. Such uniformity will make the accreditation requirements easier to comply with and enforce.

*C. Distinct Training Disciplines*

These MAP revisions reaffirm the principle that each of the five accredited training disciplines in the MAP is distinct from the others. Because each discipline reflects a different functional job role, proficiency in any one of the five disciplines requires a different mix of knowledge, skill, and ability. Even where training programs cover common subjects, these same subjects need to be given a different priority and emphasis depending upon the particular discipline a person is being trained for. To ensure that each discipline receives adequate training, the revisions have incorporated the following changed requirements.

1. Each initial and refresher training course offered for accreditation must be specific to a single discipline, and not combined with training for any other discipline. The past practice of training providers offering combined worker and contractor/supervisor training is not allowed.

2. Workers are no longer permitted to "upgrade" their worker accreditation to that of contractor/supervisor by completing only one additional day of training. Separate initial training as a contractor/supervisor is now required. Accredited contractor/supervisors, however, may perform as workers without obtaining separate accreditation as such. This is because contractor/supervisors have received more training

in the aggregate than workers to ensure that they can perform their more complex job functions, and they must otherwise know how to perform all of the various tasks which workers are normally called upon to perform.

3. Persons completing initial training for accreditation as contractor/supervisors are no longer permitted to work as accredited project designers during their initial 1-year term of accreditation. This dual-accreditation provision, found in section I.1.C. of the original MAP, has been deleted from the revised MAP. Persons seeking accreditation as contractor/supervisors must now complete the new 5–day initial training for contractor/supervisors, and persons seeking accreditation as project designers must now complete the new 3–day initial training for project designers.

*D. Increased Training Requirements*

Section 15(a)(3) of ASHARA mandated that EPA, as a part of revising its MAP, increase the minimum number of training hours, including additional hours of hands-on health and safety training, required for the accreditation of asbestos abatement workers in schools and public and commercial buildings. EPA interprets the phrase "asbestos abatement workers" to include both workers and contractor/supervisors. These groups have the greatest need for additional hands-on training because they either actually perform asbestos abatement work, or directly oversee it at the job site. The revised MAP therefore incorporates 1 additional 8–hour day of hands-on training for both the worker and the contractor/supervisor disciplines. This has the effect of increasing the worker course from a total of 3 days to 4 days of training, with the hands-on training component increased from 6 hours to 14 hours. Similarly, the 4–day contractor/supervisor course has been upgraded to a 5–day course, with 14 hours of hands-on activity. These training hour requirements not only fulfill the statutory mandate for additional hands-on training for asbestos abatement workers, but also ensure that training can be obtained within the practical limits of a normal 40–hour, 5–day work-week.

The minimum training hour requirements for the other three accredited MAP disciplines, that of inspector, management planner, and project designer have not been altered. Congress only mandated increased training for asbestos abatement workers, and the only accredited disciplines directly engaged in hands-on abatement work are the worker and contractor/supervisor. The project designer and management planner courses do not include any hands-on health and safety training component. Because inspectors likewise do not participate in abatement, the existing 4-hour hands-on component for inspectors is unaffected by the ASHARA mandate.

*E. Expanded Project Designer Curriculum*

The MAP revisions incorporate several additions to the mandatory curriculum for accredited project designer training, but do not extend the required length of this initial training program. These changes relate only to the scope of training; they do not require an accredited project designer to perform any particular work practices. Because of concerns that project designs may sometimes be either inadequately prepared and/or executed, the curriculum additions are aimed at both clarifying and improving the effectiveness of the project designer's functional role (see OPPTS Docket No. 62107, Log No. C1–030). Where no written design plan exists, implementation can be prone to failure. This may also occur where a project design has not adequately considered all relevant facets of an abatement project. For these reasons, the six new topics which have been added include: (1) The need for and methods of preparing a written project design, (2) techniques for completing an initial cleaning of the work area, (3) increased emphasis on the rationale behind the establishment of functional spaces, (4) the need for written diagrams and methods of diagraming all containment barriers, (5) the need for a written sampling rationale for air clearance, and (6) clarification of what constitutes a complete visual inspection.

*F. Deaccreditation of Persons and Withdrawal of Course Approval*

The MAP revisions establish minimum national criteria for suspending or revoking the accreditation of individuals as well as for suspending or withdrawing the approval of training courses. Also included are additional criteria that EPA may use, and States are free to adopt, as well as the procedures that EPA will follow when suspending, revoking, or withdrawing accreditation or approval. The specified procedures are derived from those used for the suspension, modification, or revocation of pesticide applicator certificates found at 40 CFR 171.11(f). EPA believes that these procedures provide adequate notice and process to affected individuals and training course providers, while enabling the Agency to act more quickly than through those procedures specified at 40 CFR part 22, which had also been considered by the Agency. States, in initiating these kinds of actions, would be bound by the requirements of their own State administrative procedures.

The enumeration of criteria for suspension, revocation, or withdrawal is not meant to be a complete list of enforcement actions and choices available to EPA. Since the MAP is a regulation promulgated under Title II of TSCA, persons violating the MAP may also be subject to assessment of civil administrative penalties. The MAP revisions also clarify that EPA may take independent actions against either training entities or accredited persons, without reliance upon State enforcement authority or initiative.

1. *Deaccrediting persons.* Four minimum criteria are established for triggering deaccreditation actions by EPA or a State. They include: (1) Performing work requiring accreditation at a job site without being in physical possession of initial and current accreditation certificates; (2) permitting the duplication or use of one's own accreditation certificate by another; (3) performing work for which accreditation has not been received; or (4) obtaining accreditation from a training provider that does not have approval to offer training for the particular discipline from either EPA or from a State that has a contractor accreditation plan at least as stringent as the EPA MAP.

EPA may also suspend or revoke a person's accreditation if such person has been found in violation of other asbestos regulations administered by EPA. States may wish to adopt this criterion, or modify it to include their own asbestos statutes or regulations.

In addition, the revised MAP identifies some of the situations when a person who is performing an activity that requires accreditation will be subject to civil penalties under TSCA. Examples include, but are not limited to: (1) Obtaining accreditation through fraudulent representation of training or examination documents; (2) obtaining training documentation through fraudulent means; (3) gaining admission to and completing refresher training through fraudulent representation of initial or previous refresher training documentation; or (4) obtaining accreditation through fraudulent representation of accreditation requirements such as education, training, professional registration, or experience. This list is not exhaustive, and there may be other situations where persons may be subject to penalties

under TSCA by conducting work without the requisite accreditation.

2. *Withdrawal of course approval.* This new provision requires that States have minimum criteria and procedures for suspending or withdrawing approval from approved training courses. In pursuing actions for withdrawal of approval of accredited training programs, States should follow their own State administrative procedures. EPA may directly pursue actions for withdrawal of approval of accredited training programs without reliance on State withdrawal actions or enforcement authority or actions. In taking such actions, EPA will use the same procedures specified for the suspension or revocation of accreditation, those found at 40 CFR 171.11(f), to suspend or withdraw approval of a training course.

EPA continues to have the ability to withdraw approval of accredited training programs if field site inspections indicate that a training course is not conducting training that meets the requirements of the EPA MAP. Similarly, the requirement that training course providers permit EPA representatives to attend, evaluate, and monitor any training course without charge to EPA is preserved.

EPA believes that training providers should understand the criteria that the Agency will use to trigger a withdrawal action. Minimum criteria which trigger the commencement of a withdrawal action for withdrawal of approval of accredited training programs have been added to the MAP, including: (a) Misrepresentation of the extent of a training course's approval by a State or EPA; (b) failure to submit required information or notifications in a timely manner; (c) failure to maintain requisite records; (d) falsification of accreditation records, instructor qualifications, or other accreditation information; or (e) failure to adhere to the training standards and requirements of the EPA or State MAP as appropriate.

EPA may also suspend or withdraw a training course's approval if an approved training course instructor or other person with supervisory authority over the delivery of training has been found in violation of other asbestos regulations administered by EPA. An administrative or judicial finding of violation, or execution of a consent agreement and order under 40 CFR 22.18, constitutes evidence of a failure to comply with relevant statutes and regulations. States may wish to adopt this additional criterion, or modify it to include their own asbestos statutes or regulations.

The formal procedures for withdrawing course approval do not apply to training providers that fail to comply with the self-certification requirements of the revised MAP and that do not upgrade their courses within 6 months of the effective date of the revised MAP. EPA is provisionally allowing training providers to continue to operate during that 6-month period pursuant to approval granted under the original MAP. A training provider that fails to comply with the self-certification requirements within 6 months, however, automatically loses its provisional approval by operation of law. No individual notices or adjudicative process is required to effect the loss of such provisional approvals pursuant to this rule.

*G. Recordkeeping Requirements for Training Providers*

The revised MAP imposes a variety of new recordkeeping requirements on training providers that are necessary to strengthen compliance with MAP training standards and to enable more vigorous enforcement of those standards by both EPA and the States. Four different types of records must be maintained: (1) Records documenting approved training course materials (e.g., copies of student manuals, instructor notebooks, handouts), (2) records demonstrating instructor qualifications (e.g., copies of resumes, approval letters, dates and names of courses taught), (3) records documenting examinations (e.g., copies of tests used, individual student scores, dates and locations of exams given), and (4) records documenting accreditation certificates (e.g., to whom conferred, for which disciplines, dates of issuance and expiration). The revisions further stipulate that all such records must be retained for at least 3 years, and that reasonable access to all such records must be provided upon request to either or both EPA and the States.

*H. Accreditation Certificates*

The revised MAP stipulates that each accreditation certificate issued by an approved training provider must now contain certain additional items of information which had not been specified in the original MAP. The new minimum certificate standard is intended to enable quick identification of and contact with the training provider that issued the certificate. The revised MAP specifically requires the inclusion of the issuing provider's name, address, and telephone number. This mechanism makes it possible for training providers, regulatory agencies, and the general public to verify the accreditation status of persons performing work subject to the MAP.

## III. Responses to Comments

Comments on the various MAP changes being considered by EPA were received from many affected interest groups, including States, commercial buildings owners and managers, labor organizations, trade associations, asbestos contractors and consultants, training entities, power companies, universities, and federal agencies other than EPA. These written comments may be found in the docket supporting this action (OPPTS–62107). This Unit discusses EPA's responses to the significant issues raised in the comments received.

Comments and responses have been organized in this Unit according to the relevant sections of the May 13, 1992, **Federal Register** notice (57 FR 20438) under which they were solicited.

*A. Definitions*

1. *Public and commercial buildings.* Many commenters urged EPA to incorporate the NESHAP (40 CFR part 61 - National Emission Standards for Hazardous Air Pollutants) definition of "facility," so that greater consistency might be achieved between the various EPA asbestos rules. Although EPA is sympathetic to promoting regulatory integration whenever feasible, the statutory language of TSCA section 202(10) complicates this attempt. A regulated "facility" under the NESHAP includes residential buildings of more than four units, whereas the TSCA definition of "public and commercial building" includes residential apartment buildings of 10 or more units. Because EPA's mandate to issue and revise the MAP comes from TSCA, as amended by ASHARA, the TSCA definition is controlling. EPA must use the TSCA definition, even though it is less inclusive than NESHAP.

Other commenters suggested that the definition of the term "public and commercial building" should include ACM that is located both on the insides and the exteriors of buildings. EPA had earlier examined this same issue when it promulgated the Schools Rule and the original MAP pursuant to AHERA. At that time, EPA concluded that when AHERA used the phrase "in a school building," it meant the interior of the building, not the exterior (52 FR 41835, October 30, 1987). EPA adopted that interpretation in the Schools Rule which was in effect when Congress amended AHERA by enacting ASHARA. EPA believes that Congress intended the term "in" a public or commercial building to be given the same meaning as "in" a school building in the Schools Rule. Consistent with the approach

incorporated in the Schools Rule, training is required for work in interior areas only, except for exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

Several power companies and other industrial/manufacturing concerns objected to the Agency's proposal to include "industrial" buildings within the scope of the rule. They argued that the public generally does not have access to these buildings, is therefore not exposed, and that workers in these industrial buildings are already adequately protected by the OSHA asbestos standards or the EPA Worker Protection Rule. The accreditation requirements of the statute, however, clearly extend to activities in industrial buildings. TSCA section 202(10) defines "public and commercial buildings" expansively to mean "*any* building which is not a school building, except the term does not include any residential apartment building of fewer than 10 units" (15 U.S.C. 2642(10)) (emphasis added). The statutory definition includes all buildings with only two express exclusions for school buildings and residential buildings. Industrial buildings clearly do not qualify for either exemption. Thus, they fall within the category of any other type of building that is encompassed by the term "public and commercial building." Moreover, when Congress enacted ASHARA, it relied, in part, upon EPA's assessment of risk in public and commercial buildings, an assessment that included industrial buildings. EPA's 1988 Report to Congress on Asbestos in Buildings specifically identified industrial buildings as one of the types of structures included under the TSCA definition of "public and commercial buildings" (Report to Congress, page 2). Further, the inclusion of industrial buildings in the category of buildings where training is required is consistent with the purpose of ASHARA to protect workers as well as the public.

In extending the MAP training and accreditation requirements to public and commercial buildings under the ASHARA mandate, EPA recognizes that the revised MAP will now apply to activities in buildings that may be subject to the specific training requirements of other Federal asbestos regulations. This includes the competent person training requirements under the OSHA Asbestos Standard (29 CFR 1926.58) and the EPA Worker Protection Rule (40 CFR 763.121), the on-site representative training requirements under the asbestos NESHAP (40 CFR 61.145), and the training requirements for designated persons and operations and maintenance personnel found in the Schools Rule (40 CFR 763.84– 763.92). EPA wishes to clarify that a person subject to the accredited training requirements of the MAP will also remain subject to the applicable training requirements of these other asbestos rules. Compliance with the MAP does not automatically relieve a person of responsibilities under other asbestos rules.

2. *Friable ACM.* Several commenters, citing the need for regulatory consistency between schools and public and commercial buildings, urged the Agency to preserve the concept of friable ACM which had been applied in the Schools Rule. EPA agrees with this approach because it is consistent with the statutory mandate and because consistency between the Schools Rule and the MAP is desirable. Both rules must comply with the same TSCA section 202(6) definition of friable ACM. Thus, the Agency has incorporated that definition into the MAP. This ties the definition to ACBM that is or may become friable.

3. *Inspection.* Among those commenting on this issue, most expressed support for the broadest possible definition of "inspection," that would embrace all eight of the options outlined in the May 13, 1992 **Federal Register** notice (57 FR 20438). This expansive approach would not only extend accreditation requirements to include general environmental hazard assessments for insurance and real estate purposes, but also would specifically extend those requirements to all of the inspection-type activities required by other asbestos rules such as the Schools Rule, NESHAP, the EPA Worker Protection Rule and the OSHA Asbestos Standard. EPA believes that such an all encompassing definition is not warranted based upon risk, and would therefore result in unnecessary costs (see OPPTS Docket No. 62107, Log Nos. C1–025, C1–035, C1–038). EPA has elected a more targeted approach which focuses on both the object and the activity of inspecting for asbestos. The statute limits the accreditation requirement to those persons who "inspect for ACM in school buildings...or in a public or commercial building" (15 USC 2646 (a)(1)). EPA has adhered to this statutory language, and required accreditation only for those persons who inspect or reinspect specifically for ACBM. This would include, however, an inspection undertaken pursuant to NESHAP (40 CFR 61.145(a)) in a school, or public and commercial building, where the building owner or operator is required to thoroughly inspect the building for the presence of asbestos prior to commencing a demolition or renovation activity. Similarly, inspections required by other regulations would also be subject to accreditation, if the inspection, as defined in the revised MAP, included a component that was specific to ACBM, and was conducted within a school, or public and commercial building subject to the revised MAP. This includes more general inspection-type activities (e.g., environmental assessments) where asbestos is one of several potential hazards or materials that are being looked for or examined. Regardless of what other activities a person may be undertaking, if the person is inspecting for ACBM in a school, public, or commercial building, that person must be accredited to perform the asbestos inspection component of that activity. Conversely, if a person is performing an environmental assessment or building inspection that does not include an asbestos inspection component, that person does not require asbestos accreditation to perform that activity.

As described earlier in Unit II.A.3. of this preamble, other specific exceptions to the inspection accreditation requirement include; (1) persons performing periodic surveillance of the type described in 40 CFR 763.92(b), (2) compliance-related inspections performed by employees or agents of Federal, State or local government, and (3) visual inspections of the type described in 40 CFR 763.90(i) for purposes of determining the completion of a response action.

4. *Response action.* Commenters overwhelmingly supported a definition for response action that would treat this term the same way both for schools and for public and commercial buildings. EPA agrees with this approach because it provides regulatory consistency between the MAP and the Schools Rule. Because many of the same contractors will be performing abatement work in both schools and public and commercial buildings, the use of the same standard for both will further promote comprehension of and compliance with the new accreditation requirements. The definition in the revised MAP is therefore the same as that which appears in the Schools Rule. Consequently, if a response action were undertaken in a school, and the same activity was then undertaken in a public or commercial building, both activities would be considered response actions, and both activities would be required to engage the services of accredited workers unless specifically excluded

under the exemption for small-scale, short-duration activities. It should be noted, however, that there are other aspects relating to the conduct of response actions which may be different for schools than for public and commercial buildings. One example would be the requirements found at 40 CFR 763.90 for air clearance at the completion of a response action which are applicable to such activities in schools but not in public and commercial buildings.

5. *Small-scale, short-duration activities (SSSD).* A majority of commenters supported the extension of the existing Schools Rule training exemption for SSSD work in schools to public and commercial buildings (see 40 CFR 763, Appendix B to Subpart E). EPA agrees with the use of this exemption in the revised MAP, because it both preserves regulatory consistency and promotes compliance with the statute. Also, absent such a threshold exemption, a great many persons involved in operation and maintenance-type activities in buildings would have to be specially trained, regardless of risk.

6. *Major and minor fiber release episodes.* A common theme among those commenting on the prospective incorporation of an SSSD exemption into the MAP was that this concept lacked clarity, and was therefore difficult to interpret and apply. EPA is responding to this concern in two ways. First, by using the existing SSSD exemption from the Schools Rule, the MAP will apply the same accreditation exemption to all buildings (schools and public and commercial buildings) and thereby minimize any potential confusion among the regulated community. Secondly, by adding the definitions of major and minor fiber release episodes, the Agency is seeking to provide the clearest possible meaning to this exemption while keeping it entirely within the framework established by the Schools Rule.

*B. Phased Implementation*

1. *States.* Several State commenters expressed concern that an allowance of 180 days following their next legislative session would not provide them with sufficient time to upgrade their programs in keeping with the increased training requirements of ASHARA. Although EPA acknowledges the difficulties inherent with transitioning established State programs, the changes were mandated by Congress when it enacted ASHARA. Furthermore, the relatively short timeframes established in ASHARA for EPA to implement these training mandates clearly communicated a desire and intent for prompt action. For these reasons, EPA believes that it is reasonable to allow States a comparable amount of time to come into compliance with the revised MAP as had been allowed for under the original MAP. This provides each State with an allowance of 180 days following the convening of their next regular legislative session to adopt a State accreditation plan that is no less stringent than the revised MAP. For some States with legislatures that meet every year, this means they will have a period of time not less than 6 months in which to implement these changes. For other States whose legislatures meet every other year, it means these States might have as long as 30 months to effect the changes.

2. *Training course upgrades.* Most commenters supported the 6–month compliance deadline for training course upgrades which EPA had proposed. They also supported self-certification on the part of training entities as an efficient and practical way of quickly implementing the new standards. Other commenters, however, contended that the 6–month deadline was either too short or too long, and expressed concerns about the ability of EPA and/or the States to properly audit these upgraded training programs. EPA considers the course upgrades prescribed in the revised MAP to be fully achievable within a 6-month timeframe. The revisions directly affect only 3 of the 5 basic courses, and none of the refresher courses. The initial worker and contractor/supervisor training courses must each incorporate 1 additional day of hands-on training and the initial project designer courses must expand their curriculum to incorporate the 6 additional items specified in the revisions. The original training provider self-certifications under ASHARA will be submitted directly to EPA's Headquarter's Office in Washington, DC., so that this data can be quickly compiled at the national level and integrated with existing data bases. This simplified and centralized process expedites course upgrades to ensure that the new training courses will be widely available within a short period of time. EPA and/or the States may then follow-up with field audits of these training programs as resources permit.

3. *Accredited persons.* Most commenters expressed support for the Agency's proposal to grandfather in all those persons who are in possession of valid accreditation as of the day before the effective date of the revised MAP. Many also suggested that everyone else should be allowed more than 6 months to obtain valid accreditation based upon the increased ASHARA training requirements. In contrast, a few suggested that a transition period of less than 6 months would be sufficient. Because of the fairly simple adjustments needed to upgrade training courses, and because EPA is providing an expedited procedure (through self-certification) for purposes of obtaining course provider upgrade approval, the Agency considers the 6-month deadline for obtaining new accreditation to be adequate. Persons who are already accredited on the date the revised MAP takes effect are not directly impacted by it. Upon reaching their annual expiration date, they will take their annual refresher training course, as before, and their accreditation will be extended for an additional year. Persons seeking new accreditation on and after the effective date of the revised MAP, however, will need to complete either an existing course that complies with the original MAP and thereby obtain provisional accreditation, or an upgraded course that complies with the revised MAP to obtain regular accreditation. If a person takes an existing course, that person will have to complete the upgraded training course within 6 months after the revised MAP takes effect in order to sustain their accreditation and continue working. This provision helps ensure that anyone needing to obtain initial accreditation during the period of transition between the original MAP and the revised MAP will have the opportunity to do so.

Several commenters suggested that the MAP requirements for refresher training should also be increased along with the basic requirements. This might be accomplished by either extending the length of mandatory refresher training, or expanding its curriculum, or both. EPA does not agree with this position, however, and believes that actual work experience is at least equivalent to requiring additional hands-on training as a basis for reaccreditation. At the time of refresher training, most accredited persons should have already acquired on-the-job experience at least equivalent to what this refresher hands-on training might otherwise provide.

*C. Distinct Training Disciplines*

While a majority of commenters agreed with the general principle of separate training courses, many also believed that an exception should be made in the case of combined worker/supervisor training. These parties pointed to the common elements in the prescribed training curricula for these two disciplines as the primary reason for allowing joint training. In this view, workers and supervisors would attend

the same course, with the contractor/supervisors coming back for 1 additional day of training after the worker curriculum had been completed. Although EPA permitted this accomodation for a period of time under the original MAP, the Agency has now decided that, in light of the Congressional mandate to strengthen and improve asbestos-related training programs, contractor/supervisors may no longer obtain accreditation by attending the same training course as workers with a 1 day add-on. Contractor/supervisors have markedly different job functions and responsibilities than workers. While many training elements are common to these two disciplines, each discipline requires presentation at a different degree of complexity and level of detail, depending upon whether a person is in training to become a worker, or in training to become a supervisor. An on-site foreman, unlike a worker, must know how each of the workers should perform his/her individual assigned tasks, and must also comprehend the total job to be done. As a result, a contractor/supervisor requires more in-depth training on each of the training elements than does a worker. By way of illustration, "regulatory review" is one curriculum training element that is common to both the worker and the supervisor courses. Where a worker must have a general understanding of the bounds established by asbestos regulations, the supervisor, as the on-site person responsible for regulatory compliance, must have a much greater depth of knowledge regarding these rules and the methods of complying. If supervisors attend the same training course as workers, and are provided the same lecture on "regulatory review," not only is it likely that the workers in this class will get more regulatory training than they need (and possibly less of something else more relevant to their jobs), but more importantly, the supervisors will not get the right mix of subject matter depth and breadth. EPA believes, therefore, that the best way to ensure that contractor/supervisors receive the specialized training they need is to keep their training courses separate and distinct from those of workers.

EPA believes, however, that it is permissible to allow an accredited contractor/supervisor to perform in the role of an accredited worker without possessing separate worker accreditation. Separate worker accreditation is unnecessary because the contractor/supervisor must essentially know all that the worker knows and more, and the contractor/supervisor has also completed more training than the worker (5 days as opposed to 4 days).

The situation is different, however, with respect to dual accreditation for contractor/supervisors and project designers. Because these two training disciplines share little in common, EPA is now eliminating the original MAP provision whereby persons completing contractor/supervisor initial training could obtain dual accreditation to work as both contractor/supervisors and project designers. After the effective date of the revisions, all persons must take separate initial and refresher training that is specific to their discipline in order to obtain or retain valid accreditation.

*D. Increased Training Requirements*

EPA had solicited public comment on the number of additional hours of training that would be appropriate for the revised MAP because ASHARA had left this amount unspecified. Whereas commenters suggested a variety of ways in which this might be accomplished, many expressed support for EPA's proposal to require one additional 8-hour day of hands-on training for the worker and the contractor/supervisor initial training courses respectively. The length of all other training courses is not affected by the revisions. There are a number of distinct advantages to EPA's approach: (1) All MAP training courses would be limited in length to no more than one 5-day business week, a period of time adequate to accomplish the requisite training, (2) existing training course materials would remain relevant and not require extensive modifications, (3) additional hands-on training should appropriately be given to those persons who actually perform hands-on abatement work (i.e., workers and contractor/supervisors), and (4) the addition of 8 hours of hands-on training (on top of 6 hours that are already required) should be relatively simple for providers to achieve, yet affords them a degree of flexibility in deciding how to go about doing it (i.e., in selecting the particular hands-on activities to be practiced or exercised).

Several commenters with experience in training, representing, or employing asbestos workers agreed that 8 additional hours of hands-on training for workers and contractor/supervisors was advisable. They noted that the additional day of training was necessary to allow workers to practice their jobs under actual working conditions, to gain necessary experience in performing tasks such as erecting and dismantling containment barriers, glovebagging, and scaffolding, and in working inside containment areas, or while wearing personal protective equipment, or in other common workplace situations (see OPPTS Docket No. 62107, Log Nos. C1-016 and C1-020). Commenters also noted that the additional day of hands-on training would help acclimatize workers without risk of exposure, and also would eliminate complaints regarding the need for on-the-job training (OPPTS Docket 62107, Log Nos. C1-020 and C1-064).

*E. Expanded Project Designer Curriculum*

A majority of commenters agreed with EPA's proposal to broaden the prescribed project designer training curriculum to include six additional lecture elements without extending the minimum required length of the course. The six elements have therefore been added, and include: (1) The need for, and methods of preparing a written project design, (2) techniques for completing an initial cleaning of the work area, (3) increased emphasis on the rationale behind establishment of functional spaces, (4) the need for written diagrams and methods of diagraming all containment barriers, (5) the need for a written sampling rationale for air clearance, and (6) clarification of what constitutes a complete visual inspection. These revisions have each been incorporated as additions to the initial project designer training curriculum. They will improve the effectiveness of the accredited training programs, and thereby help to ensure that project designers will be fully prepared to perform work in both schools and public and commercial buildings.

*F. Withdrawal of Accreditation and Course Approval*

Broad support also was expressed for EPA's proposal to incorporate minimum Federal criteria for proceedings relating to the deaccreditation of persons and the withdrawal of approval from accredited training courses, and to adopt standardized procedures for such actions. These changes had been proposed to: (1) Promote greater consistency and predictability nationwide, and (2) clarify the manner by which EPA might directly deaccredit individuals or training courses without reliance upon State authority or activity The criteria have therefore been promulgated as minimum Federal criteria which the States must match or exceed in their own programs. The procedures govern EPA activities only; the States being left free to adhere to their own internal administrative procedures pursuant to State law.

*G. Recordkeeping Requirements for Training Providers*

Several commenters stated that a records retention period longer than 3 years would be preferable for compliance verification purposes. EPA, however, consistent with other TSCA recordkeeping requirements (i.e., 40 CFR 704.11 and 761.180), regards a minimum 3–year retention period as adequate for this purpose, and appropriate when consideration is given to the costs associated with records maintenance. These 3 years are adequate to ensure that records will be available for anyone who needs to verify either initial or refesher accreditation status. Even if a person obtained initial accreditation, and then took advantage of a full 12–month grace period before obtaining refresher training, the 3–year retention requirement would ensure that the training provider has the records to verify the initial accreditation.

A number of training providers also expressed concerns about access; surmising that if their records were opened in an unrestricted manner to the public, that such providers would become vulnerable to burdensome or harrassing requests. They did not object, however, to training provider records being open to EPA and the States (see OPPTS Docket No. 62107, Log No. D1-001). EPA accepts this position, and it has been incorporated into the revisions (see Unit I.F.6. of the revised MAP). This would not preclude the public from seeking information directly from the training provider through telephone inquiries or requests, but would permit training schools to maintain a measure of flexibility in responding to inquiries.

EPA also had asked for comments about whether training providers should be required to verify the accreditation status of students enrolling in their courses. In reply, several training entities commented that this could present a significant burden that should not be imposed (OPPTS Docket 62107, Log Nos. C1-019 and C1-041). After considering this information, EPA agrees, and the revised MAP includes a recommendation rather than a requirement that training entities verify the accreditation status of students enrolling in their courses.

Regarding the more general question of whether or not recordkeeping requirements should be imposed, many commenters acknowledged the need for this action and expressed support for EPA's position.

*H. Accreditation Certificates*

While most commenters expressed support for EPA's proposal to require additional training provider information on accreditation certificates (i.e., issuer's name, address, and telephone number), a few suggested that other items might be required as well, including the name of the course instructor and the photograph, social security number, and signature of the person to whom accreditation is being conferred. The Agency does not consider these other items to be necessary on certificates, because the same information is generally available through other sources. The names of course instructors are otherwise provided through the recordkeeping requirements contained in the revisions, and personal identification items such as photographs, social security numbers, and signatures are commonly available on the professional licenses issued by State programs.

*I. Miscellaneous*

1. *Project monitor training and accreditation.* Several parties indicated that EPA should expand the MAP to include mandatory accreditation for a sixth training discipline, that of "Project Monitor." The functional role of a project monitor is often specific to a particular response action; but generally might include: (1) Monitoring a response action for compliance with contract/job specifications and regulatory requirements, (2) performing visual audits of a job site before, during and after a response action is undertaken, and (3) performing air monitoring as a part of a response action or for purposes of clearing a response action. Depending upon the particular mix of activities undertaken by the project monitor, this person might otherwise require accreditation, particularly if they somehow become directly involved in conducting any part of the response action. Typically, however, the project monitor is an agent or employee representing a building owner or manager who is engaged to oversee a contractor's performance of a response action in a school or public or commercial building. These commenters argue that because such persons are already widely used, steps should be taken to ensure a minimum level of competency.

ASHARA did not grant the Agency a clear mandate to enlarge the scope of federal accreditation to include additional training disciplines. Furthermore, implementing this course would necessitate more extensive changes to State programs and statutes, a consequence which would hinder State efforts to comply with ASHARA. For these reasons, EPA has incorporated a recommended training curriculum for such persons into the revised MAP and is urging States to consider adopting this curriculum for purposes of requiring project monitor accreditation under State law or regulation. Such State laws would not mandate that project monitors be used in every instance, but rather, would require their accreditation whenever a building owner or manager elected to employ the services of a project monitor. This curriculum was developed in 1992 through a roundtable discussion which involved numerous affected interests outside of EPA. The document which emerged from this process, entitled *Whitepaper on the Development and Implementation of Asbestos Abatement Project Monitor Training* (March 20, 1992), outlined a recommended 5–day training program. Even where States choose not to require accreditation under their State Plans for such persons, EPA recommends that training entities consider offering this course, and suggests that professionals working in this capacity seek out and obtain this or equivalent training.

2. *Operations and maintenance training and accreditation.* A few commenters suggested that persons responsible for SSSD operations and maintenance (O&M) activity involving ACBM should be subject to MAP training and accreditation requirements. They noted that while § 763.92(a) of the Schools Rule requires school maintenance personnel to take special "awareness" training, and, in some instances, additional O&M training, the MAP would not require training for all maintenance personnel in public and commercial buildings.

This difference in training requirements is based upon the statutory training scheme that Congress established in Title II of TSCA. Both the language of the statute, and the legislative history of AHERA and ASHARA support EPA's decision not to require MAP accreditation for all O&M personnel in public and commercial buildings.

When Congress enacted AHERA in 1986, it required MAP training and accreditation for persons who conducted response actions, but excluded certain types of O&M activities from the MAP training requirement (15 U.S.C. 2643(f), 2644(c), and 2646(a)(3)). It also required EPA to promulgate rules to regulate O&M programs in schools, and required local education agencies to develop and implement O&M plans, and to provide for the education of service and maintenance personnel with respect to asbestos-containing material.

EPA promulgated the Schools Rule pursuant to AHERA. The Schools Rule

does not require full MAP training and accreditation for all O&M workers, but does require it for any person in a school who: (a) Conducts a response action other than a SSSD activity (40 CFR 763.90(g)); (b) performs a maintenance activity that disturbs friable ACBM, other than a SSSD activity (40 CFR 763.91(e)); or (c) conducts a response action for a major fiber release episode (40 CFR 763.91(f)(2)(iii)).

In addition, the Schools Rule requires less extensive training for O&M school employees that are not performing an activity that falls within one of the three categories (40 CFR 763.92(a)). This last category of O&M employee does not have to be accredited.

Subsequently, in 1988, Congress amended AHERA, and created a new provision of TSCA, section 215, specifically to codify the O&M training requirements of the Schools Rule (15 U.S.C. 2655). Now, TSCA section 215 requires "proper training" for school employees who conduct O&M activities in a school (15 U.S.C. 2655(b)).

In 1990, Congress further modified TSCA asbestos training requirements when it enacted ASHARA. Congress expanded the MAP training requirements to cover persons working in public and commercial buildings, but it did not require MAP training and accreditation for all persons who perform O&M activities in such buildings. First, Congress left intact the original language in TSCA section 206(a) that exempts many persons who conduct O&M response actions from MAP training and accreditation requirements in both schools and public and commercial buildings (15 U.S.C. 2646(a)(3)). In the second place, Congress chose not to expand the coverage of TSCA section 215 and require limited training for O&M employees in public and commercial buildings. Finally, unlike the original AHERA that governs schools, Congress did not require EPA to promulgate rules regulating O&M programs in public and commercial buildings, nor did it require employers in such buildings to provide for the education of service and maintenance personnel with respect to asbestos-containing material.

In keeping with these Congressional actions, EPA has not required MAP training and accreditation for every O&M worker in public and commercial buildings. Rather, the revised MAP requires MAP accreditation where O&M workers are most at risk. O&M personnel must obtain MAP accreditation when conducting a response action, including a maintenance activity that disturbs friable ACBM, unless that activity is a SSSD activity, or when conducting a response action for a major fiber release.

3. *Management plans for public and commercial buildings.* A few commenters, noting that ASHARA section 15(a) specifically omitted management planners from the accredited disciplines being extended to public and commercial buildings, suggested that management plans should otherwise be required for such buildings. Although EPA, consistent with its manage-in-place policy articulated in the "Green Book" guidance (see *Managing Asbestos In Place: A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials*, EPA No. 20T–2003, July 1990), considers management plans to be helpful tools in preventing asbestos exposures, the Agency is not requiring management plans for regulated buildings in this revision. ASHARA did authorize EPA to establish training standards for asbestos workers, but it did not authorize the Agency to require public and commercial building owners to conduct asbestos-related work in a particular fashion. However, for those regulated public and commercial buildings where asbestos-related problems are identified through inspections, EPA strongly recommends that plans be prepared for how to address these issues. EPA's Green Book should prove to be a useful reference in this respect. The Agency would also suggest that accredited management planners be engaged for purposes of developing such plans to ensure their adequacy.

4. *Use of accredited laboratories.* Several commenters expressed concerns about the prospective quality of analytical work to be performed with respect to public and commercial buildings, noting that EPA's announcement of additions and changes under consideration had not mentioned the use of accredited laboratories for the analysis of bulk and/or air samples taken from such buildings. TSCA section 206(d) provides for the establishment of the National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program (NVLAP), and stipulates that only laboratories accredited under this program will be allowed to conduct analyses of asbestos bulk and air samples taken from school buildings under the authority of local education agencies (15 U.S.C. 2646(d)). But Congress did not extend this same requirement to the analysis of bulk or air samples taken from regulated public and commercial buildings.

EPA strongly recommends that these samples be analyzed by NVLAP-accredited laboratories because these laboratories have undergone Federal evaluation and testing and have met stringent performance standards. Further, EPA urges that asbestos abatement site air be analyzed by transmission electron microscopy (TEM) prior to building reoccupancy in a manner consistent with 40 CFR 763.90 (i)(3) and (4). This position is in keeping with EPA's on-going activity in schools where the allowance for the use of phase contrast microscopy (PCM) has been greatly diminished. EPA strongly recommends that abatement site air clearance samples collected from public and commercial buildings be analyzed by TEM at NVLAP-accredited laboratories. EPA now considers the technically superior TEM analysis to be both economical and widely available. TEM is technically superior to PCM because it is capable of measuring all asbestos fibers including those thin fibers not measured by PCM; therefore, TEM is the more stringent analytical tool to be used for analysis of airborne asbestos during abatement site air clearance.

5. *Instructor qualifications.* Some commenters were of the opinion that EPA had not gone far enough in establishing minimum qualifications for training course instructors. The original MAP stipulated that instructors needed to have academic training or field experience in asbestos abatement, yet allowed State programs to adopt their own more stringent qualification standards. Since promulgation of the original MAP, many States have elected to institute their own instructor qualification requirements, a fact which would now complicate any Federal effort to retroactively establish new minimum standards. EPA considers this to be an issue best left to the States to decide. So long as course instructors demonstrate relevant training and experience, and the knowledge and ability to provide effective instruction in the prescribed curriculum, EPA will continue to view such persons as meeting minimum standards. States are encouraged, however, to review this issue as they upgrade their programs in keeping with ASHARA.

A related issue had also been raised independently by the General Accounting Office (GAO) in a May 1991, Report to Congress entitled "EPA's Asbestos Accreditation Program Requirements Need Strengthening." In this report, GAO had recommended that EPA assess, in conjunction with its MAP revision, the need for requiring individuals working in the asbestos

professions to meet prequalification and experience standards. Although EPA responded to this comment by reevaluating this issue and discussing it with affected organizations, the fact that at least 17 States had already adopted widely varying prequalification standards posed a potentially significant obstacle (Source: State Asbestos Programs Related to AHERA; A Survey of State Laws and Regulations. National Conference of State Legislatures. September, 1992) (OPPTS Docket No. 62107, Log No. B1–024). These States had established their own prequalification standards for asbestos control professionals in response to EPA's earlier recommendation (contained in the original MAP) that they should consider doing so. Consequently, any action by EPA to retroactively impose new Federal minimum standards would add to the cost and difficulty of transitioning these State Programs into compliance with the revised MAP. Such an outcome would not be helpful in promoting ASHARA's objective to achieve a decentralized program administered by the 50 States. For this reason, EPA decided not to require new minimum prequalification standards in the revised MAP. Nonetheless, in support of this goal, EPA has increased its experience requirements through incorporation of an additional day of hands-on training in both the initial worker and contractor/supervisor training programs, and is renewing/continuing its recommendation that States adopt other appropriate prequalification standards of their own.

6. *Foreign language courses.* Several commenters suggested the need for specific requirements or accomodations for foreign language courses, citing the significant numbers of non-English speaking persons who are now seeking accredited training. EPA policy permits approved worker training courses in languages other than English so long as the course instruction, all of the course materials, and the course examination are each presented in the same foreign language. Given the lack of a uniform distribution of non-English speaking persons nationwide, with different languages prevailing in different regions of the country, the MAP will continue to allow States to adopt their own standards and procedures in this regard to address their individual and unique circumstances. EPA does, however, urge States to address these issues, and to accomodate the needs of their respective non-English speaking populations.

7. *Standard forms.* Some commenters remarked that the use of standardized forms for purposes of inspection reports and management plans would not only contribute to greater consistency and professionalism among accredited persons working with these tools, but might also facilitate the development of reciprocal arrangements between State programs. EPA agrees with these comments, and has incorporated specific recommendations into the training curricula for both inspectors and management planners which are aimed at promoting greater usage of standardized forms. EPA recommends that States consider the utility of adopting requirements for the use of standardized forms as an integral part of their asbestos regulatory programs.

8. *Federal recognition of State programs.* Several State commenters indicated that it is beneficial for a State to formally apply for and obtain Federal recognition of its accreditation plan. TSCA Title II specifically requires States to adopt accreditation plans that are no less stringent than the MAP, but does not require them to obtain formal EPA approval. Even though EPA approval is not statutorily required, it is beneficial. Where a State adopts and implements an accreditation program but does not obtain EPA approval, it is difficult for the industry and other States to determine whether such a State program complies with minimum Federal requirements and thus has the authority to issue TSCA accreditation. Where a person obtains a license from an unrecognized State, that person's credentials may not be readily accepted by an employer, a contractor, or another State in which the person might seek to find work, because absent EPA's approval, there is uncertainty about whether such a person is properly accredited. In contrast, EPA's approval of a State effectively resolves all of this uncertainty. EPA agrees with these comments, and strongly recommends that all States seek formal EPA approval of their accreditation programs.

9. *Grace period for accreditation reinstatement.* Other comments were received regarding whether there should be a "grace period" during which a person can complete refresher training within 12 months of their certificate expiration date and have their accreditation reinstated. Such a person would not be required to retake the full initial training program for that discipline. Some States expressed support for this approach, while one suggested there should be a penalty for persons who fail to obtain their refresher training on-time (i.e., before the certificate expiration date). EPA believes that the 12–month grace period is appropriate. If a person takes their refresher training too early in their accreditation year, they are penalized through a shortening of what would otherwise be a 12–month period. If they are unable to enroll in a refresher course precisely when they need it, at a location which is convenient, the grace period allows them the opportunity to take the course at a later, more convenient time. During the 12–month grace period, however, it should be emphasized that the person is not accredited, and may not otherwise perform the work that requires accreditation until they complete their refresher training. EPA views this as being a sufficient penalty for not obtaining the required refresher training in a timely manner. Because the 12–month grace period has proven helpful to the industry, and effective in preserving a sizeable, accredited workforce nationwide, the Agency plans to not only continue this procedure, but also to encourage States to adopt it for their programs as well. Consequently, the revised MAP now contains a formal recommendation that State programs take this approach.

10. *Accreditation program adoption by the U.S. Department of Defense.* In commenting on EPA's proposed changes to the MAP, the Department of the Navy noted that it operates its own in-house asbestos training program which it believes complies with the accreditation requirements of the MAP. For this reason, the Navy suggested that EPA might formally review and approve the Navy's training program so that Defense Department employees could become accredited through the Defense program, and therefore not need separate accreditation from a State.

ASHARA requires accreditation for all persons who perform certain types of asbestos-related work in public and commercial buildings, and defines that type of building very broadly. As a result, EPA has concluded that Federal employees who perform inspections or design or conduct response actions in government buildings must be accredited.

Under section 203(l) of TSCA, the Secretary of Defense is authorized to act in lieu of a State Governor with respect to any school operated under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921 et seq.). This authority allows the Secretary of Defense the opportunity to adopt its own accreditation program no less stringent than the EPA MAP for the purpose of accrediting Defense Department employees performing asbestos-related work in these schools. Although this might be accomplished in cooperation with EPA, the statute does not make the validity of the Defense

Department's plan for schools contingent upon EPA approval.

ASHARA, however, did not extend this accreditation authority given to the Secretary of Defense to cover Defense Department employees performing asbestos-related work in public and commercial buildings.

With respect to the Navy's in-house training courses, the Navy may apply for approval of its training courses in the same manner as any other training provider. This would permit the Navy to accredit any of its employees who might complete these approved training courses. However, because EPA is no longer accepting new courses for review and contingent approval (see 54 FR 38802), only those States with accreditation programs no less stringent than the MAP are in a position to grant approval for such courses.

## IV. Economic Impact

The regulatory impact analysis estimates the costs and benefits attributable to this regulation. Because this regulation is an amendment to a current regulation, the costs and benefits are incremental, estimating the additional effect of the regulation with respect to the current regulation.

The costs associated with this regulation are quantified; the benefits are discussed in qualitative terms and are expected to be of significant importance. EPA believes this rule achieves the benefits mandated by Congress at a modest cost. The rule affects training providers, asbestos workers, asbestos abatement and inspection companies, building owners, general building workers and occupants, State governments, and the Federal government.

The benefits associated with this rule involve reductions in exposure to asbestos fibers due to the use of knowledgeable individuals to work with asbestos and the use of safer work practices. The increased training requirements are expected to increase the knowledge of the trained individuals. The population most affected by this regulation is the asbestos professionals engaged in inspections and abatements, of which there are about 200,000 individuals who are required to be trained under this regulation for work in public and commercial buildings. These individuals are expected to benefit the most from this regulation due to the amount of time spent working with ACBM. EPA estimates that there are 0.4 to 1.2 million public and commercial buildings with ACBM, in which there are between 14 and 43 million employees and workers who will gain a greater degree of protection either through the use of trained contractors or their own education. Other employees and building occupants will gain a greater degree of protection through the use of appropriate and correctly applied work practices.

The costs associated with this rule are well documented. Upgrading courses, retaining records, and allowing access to records increase costs for training providers. Most of these costs are passed through in the form of higher charges for the courses that are offered. In the first year, EPA estimates that the overall increase in course costs would be between $2.3 million and $14.2 million. Training provider burden for recordkeeping and allowing access to their records would be $200,000 to $250,000 for the first year.

Training providers estimate that 70 percent of the asbestos-related abatement work done in public and commercial buildings already uses trained individuals. An analysis of the supply and demand of accredited asbestos professionals in each of the four disciplines extended to public and commercial buildings illustrates that the national supply is sufficient to accommodate the anticipated demand. Early estimates of supply and demand for project designers suggested a potential for shortfall, and this conclusion provided a basis for delaying implementation of this rule (57 FR 1913, January 16, 1992).

This rule requires the owners of public and commercial buildings to utilize accredited workers to inspect for ACBM, and to design and carry-out response actions with respect to friable ACBM, unless exempted under the SSSD threshold. EPA believes that most building owners will elect to hire outside contractors rather than train their own people to comply with this requirement, resulting in an annual cost of $2 million to $45 million for the estimated 374,000 to 1.23 million buildings which will be affected.

Both State and Federal governments incur costs due to this rule. For the first year, State governments incur a cost of just under $4 million, while EPA incurs a cost of between $70,000 and $130,000. These costs are due to updating and reviewing State programs and reapproving training courses.

Overall costs for the first year for this rule are estimated to be between $8 million and $64 million. These costs are summarized below. Discounting over a 20–year period at 7 percent yields a present value cost estimate between $33 million and $458 million.

First Year Costs of the MAP Revision Interim Final Rule

(millions 1991 dollars)

| Cost Category | Low Estimate | High Estimate |
|---|---|---|
| Incremental Course Costs | 2.3 | 14.2 |
| Building Owner Costs over SSSD Threshold | 2.2 | 45 |
| Training Provider Burden | 0.2 | 0.3 |
| State Regulatory Burden | 3.6 | 3.9 |
| EPA Regulatory Burden | 0.1 | 0.1 |
| TOTAL | 8.4 | 63.5 |

The Agency's complete economic analysis is available in the public record for this rule (OPPTS Docket No. 62107, Log No. B1–001).

## V. Administrative Record

EPA has established an administrative record for this rule which has been designated OPPTS Docket No. 62107, and is located at the following address: Environmental Protection Agency, Rm E–G102, 401 M St., SW., Washington, DC 20460. This record is available for review and copying from 8 a.m. to noon and 1 to 4 p.m. Monday through Friday, excluding legal holidays.

The record includes public comments and other information considered by EPA in developing this rule. Any new comments received as a result of this notice will be added to the existing docket for this action.

## VI. References

The following references have been included in the record:

(1) USEPA. "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials," EPA/5-85-030a. October 1985.

(2) USEPA. Friable Asbestos-Containing Materials in Schools: Identification and Notification (40 CFR Part 763 Subpart F).

(3) USEPA. National Emission Standards for Hazardous Air Pollutants: Amendments to Asbestos Standard; Final Rule (40 CFR Part 61 Subpart M).

(4) USDOL. OSHA. Occupational Exposure to Asbestos, Final Rule (29 CFR 1926.58).

(5) USEPA. Toxic Substances; Asbestos Abatement Projects; Final Rule (40 CFR Part 763 Subpart G).

(6) USDOL. OSHA. Occupational Safety and Health Standards, Subpart I, Personal Protective Equipment (29 CFR 1910.134).

(7) USEPA. "Managing Asbestos in Place: A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials." EPA/20T-2003. July 1990.

(8) USEPA. "EPA Study of Asbestos-Containing Materials in Public Buildings: A Report to Congress." February 1988.

(9) USEPA. "Interim Rule to Revise the Asbestos Model Accreditation Plan: Draft Regulatory Impact Analysis." July, 1993.

## VII. Regulatory Assessment Requirements

### *A. Executive Order 12866*

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB)). Under section 3(f), the order defines a "significant regulatory action" as an action that is likely to result in a rule (1) Having an annual effect on the economy of $100 million or more, or adversely and materially affecting a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities (also referred to as "economically significant"); (2) creating serious inconsistency or otherwise interfering with an action taken or planned by another agency; (3) materially altering the budgetary impacts of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raising novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

Pursuant to the terms of this Executive Order, it has been determined that this rule is not "significant" and is therefore not subject to OMB review.

### *B. Regulatory Flexibility Act*

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Administrator certifies that this revised rule will not have a significant impact on a substantial number of small businesses. Virtually all of the States already have some type of asbestos certification program now in effect. Nationwide, many thousands of persons are presently completing accredited training programs each year. A discussion of EPA's analysis of the economic consequences of this interim final rule appears in Unit IV. of this notice.

### *C. Paperwork Reduction Act*

OMB has approved the information collection requirements contained in the existing rule under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), and assigned OMB control number 2070–0091. The information collection requirements included in this rule that differ from those previously approved, have been submitted to OMB as an amendment to OMB control number 2070–0091. Upon OMB's approval of this amendment to the existing approval, EPA will publish a notice in the **Federal Register** announcing such approval.

This collection of information requires training providers and States to respond. For training providers, public reporting for this collection of information is estimated to average 42 hours per response. This includes the time for reviewing the regulation, making required changes to training programs, preparing and submitting a self-certification package, maintaining records, and providing access to those records. There is no recordkeeping burden associated with maintaining the records as their maintenance is usual and customary business practice.

For States, public reporting for this collection of information is estimated to average 402 hours per response. This includes the time for reviewing the regulation, comparing the new requirements with the current State program, completing any necessary regulatory or legislative analysis, adopting new legislation or regulations, preparing and submitting an application for program approval, and implementing an updated State program. For States, there is no recordkeeping burden associated with this collection of information.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch (2136); U.S. Environmental Protection Agency; 401 M St., SW.; Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

### List of Subjects in 40 CFR Part 763

Environmental protection, Asbestos, Hazardous substances, Incorporation by reference, Occupational health and safety, Recordkeeping, Schools.

Dated: January 24, 1994.

**Carol M. Browner,**

*Administrator.*

Therefore, 40 CFR part 763 is amended as follows:

## PART 763—[AMENDED]

1. The authority citation for part 763 continues to read as follows:

**Authority**: 15 U.S.C. 2605 and 2607(c). Revised subpart E also issued under 15 U.S.C. 2641, 2643, 2646, and 2647.

2. Appendix C to subpart E, is revised to read as follows:

**Subpart E—Asbestos-Containing Materials in Schools**

* * * * *

### Appendix C to Subpart E - Asbestos Model Accreditation Plan

*I. Asbestos Model Accreditation Plan for States*

The Asbestos Model Accreditation Plan (MAP) for States has eight components:

(A) Definitions
(B) Initial Training
(C) Examinations
(D) Continuing Education
(E) Qualifications
(F) Recordkeeping Requirements for Training Providers
(G) Deaccreditation
(H) Reciprocity

A. Definitions

For purposes of Appendix C:

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

2. "Friable asbestos-containing building material (ACBM)" means any friable ACM that is in or on interior structural members or other parts of a school or public and commercial building.

3. "Inspection" means an activity undertaken in a school building, or a public and commercial building, to determine the presence or location, or to assess the condition of, friable or non-friable asbestos-containing building material (ACBM) or suspected ACBM, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and non-friable known or assumed ACBM which has been previously identified. The term does not include the following:

a. Periodic surveillance of the type described in 40 CFR 763.92(b) solely for the purpose of recording or reporting a change in the condition of known or assumed ACBM;

b. Inspections performed by employees or agents of Federal, State, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or

c. visual inspections of the type described in 40 CFR 763.90(i) solely for the purpose of determining completion of response actions.

4. "Major fiber release episode" means any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission, which involves the falling or dislodging of more than 3 square or linear feet of friable ACBM.

5. "Minor fiber release episode" means any uncontrolled or unintentional disturbance of ACBM, resulting in a visible emission, which involves the falling or dislodging of 3 square or linear feet or less of friable ACBM.

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

7. "Response action" means a method, including removal, encapsulation, enclosure, repair, and operation and maintenance, that protects human health and the environment from friable ACBM.

8. "Small-scale, short-duration activities (SSSD)" are tasks such as, but not limited to:

a. Removal of asbestos-containing insulation on pipes.

b. Removal of small quantities of asbestos-containing insulation on beams or above ceilings.

c. Replacement of an asbestos-containing gasket on a valve.

d. Installation or removal of a small section of drywall.

e. Installation of electrical conduits through or proximate to asbestos-containing materials.

SSSD can be further defined by the following considerations:

f. Removal of small quantities of ACM only if required in the performance of another maintenance activity not intended as asbestos abatement.

g. Removal of asbestos-containing thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag.

h. Minor repairs to damaged thermal system insulation which do not require removal.

i. Repairs to a piece of asbestos-containing wallboard.

j. Repairs, involving encapsulation, enclosure, or removal, to small amounts of friable ACM only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts greater than those which can be contained in a single prefabricated mini-enclosure. Such an enclosure shall conform spatially and geometrically to the localized work area, in order to perform its intended containment function.

B. Initial Training

Training requirements for purposes of accreditation are specified both in terms of required subjects of instruction and in terms of length of training. Each initial training course has a prescribed curriculum and number of days of training. One day of training equals 8 hours, including breaks and lunch. Course instruction must be provided by EPA or State-approved instructors. EPA or State instructor approval shall be based upon a review of the instructor's academic credentials and/or field experience in asbestos abatement.

Beyond the initial training requirements, individual States may wish to consider requiring additional days of training for purposes of supplementing hands-on activities or for reviewing relevant state regulations. States also may wish to consider the relative merits of a worker apprenticeship program. Further, they might consider more stringent minimum qualification standards for the approval of training instructors. EPA recommends that the enrollment in any given course be limited to 25 students so that adequate opportunities exist for individual hands-on experience.

States have the option to provide initial training directly or approve other entities to offer training. The following requirements are for the initial training of persons required to have accreditation under TSCA Title II.

Training requirements for each of the five accredited disciplines are outlined below. Persons in each discipline perform a different job function and distinct role. Inspectors identify and assess the condition of ACBM, or suspect ACBM. Management planners use data gathered by inspectors to assess the degree of hazard posed by ACBM in schools to determine the scope and timing of appropriate response actions needed for schools. Project designers determine how asbestos abatement work should be conducted. Lastly, workers and contractor/supervisors carry out and oversee abatement work. In addition, a recommended training curriculum is also presented for a sixth discipline, which is not federally-accredited, that of "Project Monitor." Each accredited discipline and training curriculum is separate and distinct from the others. A person seeking accreditation in any of the five accredited MAP disciplines cannot attend two or more courses concurrently, but may attend such courses sequentially.

In several instances, initial training courses for a specific discipline (e.g., workers, inspectors) require hands-on training. For asbestos abatement contractor/supervisors and workers, hands-on training should include working with asbestos-substitute materials, fitting and using respirators, use of glovebags, donning protective clothing, and constructing a decontamination unit as well as other abatement work activities.

1. Workers

A person must be accredited as a worker to carry out any of the following activities with respect to friable ACBM in a school or public and commercial building: (1) A response action other than a SSSD activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement workers shall complete at least a 4–day training course as outlined below. The 4–day worker training course shall include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review, and an examination. Hands-on training must permit workers to have actual experience performing tasks associated with asbestos abatement. A person who is otherwise accredited as a contractor/supervisor may perform in the role of a worker without possessing separate accreditation as a worker.

Because of cultural diversity associated with the asbestos workforce, EPA recommends that States adopt specific standards for the approval of foreign language courses for abatement workers. EPA further recommends the use of audio-visual 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, and 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; the synergistic effect between cigarette smoking and asbestos exposure; the latency periods for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.

(c) *Employee personal protective equipment.* Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory 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; maintenance of barriers and decontamination enclosure systems; positioning of warning signs; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of high-efficiency particulate air (HEPA) vacuums; proper clean-up and disposal procedures; work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for sudden releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices.

(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 physical examinations, including 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.* A review of key aspects of the training course.

**2. Contractor/Supervisors**

A person must be accredited as a contractor/supervisor to supervise any of the following activities with respect to friable ACBM in a school or public and commercial building: (1) A response action other than a SSSD activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as asbestos abatement contractor/supervisors shall complete at least a 5–day training course as outlined below. The training course must include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review, and a written examination. Hands-on training must permit supervisors to have actual experience performing tasks associated with asbestos abatement.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate.

Asbestos abatement supervisors include those persons who provide supervision and direction to workers performing response actions. Supervisors may include those individuals with the position title of foreman, working foreman, or leadman pursuant to collective bargaining agreements. At least one supervisor is required to be at the worksite at all times while response actions are being conducted. Asbestos workers must have access to accredited supervisors throughout the duration of the project.

The contractor/supervisor 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; and latency period for diseases.

(c) *Employee personal protective equipment.* Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection, donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; and use, storage, and handling of non-disposable clothing; 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; lock-out of electrical and ventilation systems; proper working techniques for minimizing fiber release; use of wet methods; use of negative pressure exhaust ventilation equipment; use of HEPA vacuums; and proper clean-up and disposal procedures. Work practices for removal, encapsulation, enclosure, and repair of ACM; emergency procedures for unplanned releases; potential exposure situations; transport and disposal procedures; and recommended and prohibited work practices. New abatement-related techniques and methodologies may be discussed.

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

(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 physical examinations, including 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, including descriptions of aggressive air sampling, sampling equipment and methods, reasons for air monitoring, types of samples and interpretation of results.

EPA recommends that transmission electron microscopy (TEM) be used for analysis of final air clearance samples, and that sample analyses be performed by laboratories accredited by the National Institute of Standards and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP).

(i) *Relevant Federal, State, and local regulatory requirements, procedures, and standards, including:*

(i) Requirements of TSCA Title II.

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

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

(iv) OSHA Asbestos Construction Standard (29 CFR 1926.58). (v)EPA Worker Protection Rule, (40 CFR part 763, Subpart G).

(j) *Respiratory Protection Programs and Medical Monitoring 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.* Discussions of key elements that are included in contract specifications.

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

**3. Inspector**

All persons who inspect for ACBM in schools or public and commercial buildings must be accredited. All persons seeking accreditation as an inspector shall complete at least a 3–day training course as outlined below. The course shall include lectures, demonstrations, 4 hours of hands-on training, individual respirator fit-testing, course review, and a written examination.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate. Hands-on training should include conducting a simulated building walk-through inspection and respirator fit testing. 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 asbestos in buildings; 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 periods for asbestos-related diseases; a discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers 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 an accredited inspector as compared to those of an accredited 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 disruptions; 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 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.* Detailed discussion of the "Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-030a October 1985)"; techniques to ensure sampling in a randomly distributed manner for other than friable surfacing materials; sampling of non-friable materials; techniques for bulk sampling; inspector's sampling and repair equipment; patching or repair of damage from sampling; discussion of polarized light microscopy; choosing an accredited laboratory to analyze bulk samples; quality control and quality assurance procedures. EPA's recommendation that all bulk samples collected from school or public and commercial buildings be analyzed by a laboratory accredited under the NVLAP administered by NIST.

(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-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair); the components of a proper respiratory protection program; selection and use of personal protective clothing; 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 inventory; photographs of selected sampling areas and examples of ACM condition; information required for inclusion in the management plan required for school buildings under TSCA Title II, section 203 (i)(1). EPA recommends that States develop and require the use of standardized forms for recording the results of inspections in schools or public or commercial buildings, and that the use of these forms be incorporated into the curriculum of training conducted for accreditation.

(l) *Regulatory review.* The following topics should be covered: National Emission Standards for Hazardous Air Pollutants (NESHAP; 40 CFR part 61, Subparts A and M); EPA Worker Protection Rule (40 CFR part 763, Subpart G); OSHA Asbestos Construction Standard (29 CFR 1926.58); OSHA respirator requirements (29 CFR 1910.134); the Friable Asbestos in Schools Rule (40 CFR Part 763, Subpart F); applicable State and local regulations, and differences between Federal and State requirements where they apply, and the effects, if any, on public and nonpublic schools or commercial or public buildings.

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

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

**4. Management Planner**

All persons who prepare management plans for schools must be accredited. All persons seeking accreditation as management planners shall complete a 3–day inspector training course as outlined above and a 2–day management planner training course. Possession of current and valid inspector accreditation shall be a prerequisite for admission to the management planner training course. The management planner course shall include lectures, demonstrations, course review, and a written examination.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate.

TSCA Title II does not require accreditation for persons performing the management planner role in public and commercial buildings. Nevertheless, such persons may find this training and accreditation helpful in preparing them to design or administer asbestos operations and maintenance programs for public and commercial buildings.

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/interpretation of survey results.* Review of TSCA Title II requirements for inspection and management plans for school buildings as given in section 203(i)(1) of TSCA Title II; interpretation of field data and laboratory results; comparison of 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 planners; 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 of 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 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, and 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.* Focusing on the OSHA Asbestos Construction Standard found at 29 CFR 1926.58; the National Emission Standard for Hazardous Air Pollutants (NESHAP) found at 40 CFR part 61, Subparts

A (General Provisions) and M (National Emission Standard for Asbestos); EPA Worker Protection Rule found at 40 CFR part 763, Subpart G; TSCA Title II; 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. EPA recommends that States require the use of standardized forms for purposes of management plans and incorporate the use of such forms into the initial training course for management planners.

(j) *Assembling and submitting the management plan.* Plan requirements for schools 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 operation and maintenance costs; Asbestos School Hazard Abatement Act grants and loans.

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

**5. Project Designer**

A person must be accredited as a project designer to design any of the following activities with respect to friable ACBM in a school or public and commercial building: (1) A response action other than a SSSD maintenance activity, (2) a maintenance activity that disturbs friable ACBM other than a SSSD maintenance activity, or (3) a response action for a major fiber release episode. All persons seeking accreditation as a project designer shall complete at least a minimum 3–day training course as outlined below. The project designer course shall include lectures, demonstrations, a field trip, course review and a written examination.

EPA recommends the use of audiovisual materials to complement lectures, where appropriate.

The abatement 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 cancers 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 1926.58).

(d) *Safety system design specifications.* Design, construction, and maintenance of containment barriers and decontamination enclosure systems; positioning of warning signs; electrical and ventilation system lock-out; proper working techniques for minimizing fiber release; entry and exit procedures for the work area; use of wet methods; proper techniques for initial cleaning; use of negative-pressure exhaust ventilation equipment; use of HEPA vacuums; proper clean-up and disposal of asbestos; work practices as they apply to encapsulation, enclosure, and repair; use of glove bags and a demonstration of glove bag use.

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

(f) *Employee personal protective equipment.* Classes and characteristics of respirator types; limitations of respirators; proper selection, inspection; donning, use, maintenance, and storage procedures for respirators; methods for field testing of the facepiece-to-face seal (positive and negative-pressure fit checks); qualitative and quantitative fit testing procedures; variability between field and laboratory protection factors that alter respiratory 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.

(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) *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.

EPA recommends the use of TEM for analysis of final air clearance samples. These samples should be analyzed by laboratories accredited under the NIST NVLAP.

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

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

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

(n) *Contract preparation and administration.*

(o) *Legal/liabilities/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 specification sections by industrial hygienists or engineers; the multi-disciplinary 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, procedures and standards, including, but not limited to:*

(i) Requirements of TSCA Title II.

(ii) National Emission Standards for Hazardous Air Pollutants, (40 CFR part 61) subparts A (General Provisions) and M (National Emission Standard for Asbestos).

(iii) OSHA Respirator Standard found at 29 CFR 1910.134.

(iv) EPA Worker Protection Rule found at 40 CFR part 763, subpart G.

(v) OSHA Asbestos Construction Standard found at 29 CFR 1926.58.

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

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

**6. Project Monitor**

EPA recommends that States adopt training and accreditation requirements for persons seeking to perform work as project monitors. Project monitors observe abatement activities performed by contractors and generally serve as a building owner's representative to ensure that abatement work is completed according to specification and in compliance with all relevant statutes and regulations. They may also perform the vital role of air monitoring for purposes of determining final clearance. EPA recommends that a State seeking to accredit individuals as project monitors consider adopting a minimum 5–day training course covering the topics outlined below. The course outlined below consists of lectures and demonstrations, at least 6 hours of hands-on training, course review, and a written examination. The hands-on training component might be satisfied by having the student simulate participation in or performance of any of the relevant job functions or activities (or by incorporation of the workshop component described in item "n" below of this unit).

EPA recommends that the project monitor training course adequately address the following topics:

(a) *Roles and responsibilities of the project monitor.* Definition and responsibilities of

the project monitor, including regulatory/specification compliance monitoring, air monitoring, conducting visual inspections, and final clearance monitoring.

(b) *Characteristics of asbestos and asbestos-containing materials.* Typical uses of asbestos; physical appearance of asbestos; review of asbestos abatement and control techniques; presentation of the health effects of asbestos exposure, including routes of exposure, dose-response relationships, and latency periods for asbestos-related diseases.

(c) *Federal asbestos regulations.* Overview of pertinent EPA regulations. including: NESHAP, 40 CFR part 61, subparts A and M; AHERA, 40 CFR part 763, subpart E; and the EPA Worker Protection Rule, 40 CFR part 763, subpart G. Overview of pertinent OSHA regulations, including: Construction Industry Standard for Asbestos, 29 CFR 1926.58; Respirator Standard, 29 CFR 1910.134; and the Hazard Communication Standard, 29 CFR 1926.59. Applicable State and local asbestos regulations; regulatory interrelationships.

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

(e) *Asbestos abatement contracts, specifications, and drawings.* Basic provisions of the contract; relationships between principle parties, establishing chain of command; types of specifications, including means and methods, performance, and proprietary and nonproprietary; reading and interpreting records and abatement drawings; discussion of change orders; common enforcement responsibilities and authority of project monitor.

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

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

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

(i) *Air monitoring strategies.* Sampling equipment, sampling pumps (low v. high volume), flow regulating devices (critical and limiting orifices), use of fibrous aerosol monitors on abatement projects; sampling media, types of filters, types of cassettes, filter orientation, storage and shipment of filters; calibration techniques, primary calibration standards, secondary calibration standards, temperature/pressure effects, frequency of calibration, recordkeeping and field work documentation, calculations; air sample analysis, techniques available and limitations of AHERA on their use, transmission electron microscopy (background to sample preparation and analysis, air sample conditions which prohibit analysis, EPA's recommended technique for analysis of final air clearance samples), phase contrast microscopy (background to sample preparation, and AHERA's limits on the use of phase contrast microscopy), what each technique measures; analytical methodologies, AHERA TEM protocol, NIOSH 7400, OSHA reference method (non clearance), EPA recommendation for clearance (TEM); sampling strategies for clearance monitoring, types of air samples (personal breathing zone v. fixed-station area) sampling location and objectives (pre-abatement, during abatement, and clearance monitoring), number of samples to be collected, minimum and maximum air volumes, clearance monitoring (post-visual-inspection) (number of samples required, selection of sampling locations, period of sampling, aggressive sampling, interpretations of sampling results, calculations), quality assurance; special sampling problems, crawl spaces, acceptable samples for laboratory analysis, sampling in occupied buildings (barrier monitoring).

(j) *Safety and health issues other than asbestos.* Confined-space entry, electrical hazards, fire and explosion concerns, ladders and scaffolding, heat stress, air contaminants other than asbestos, fall hazards, hazardous materials on abatement projects.

(k) *Conducting visual inspections.* Inspections during abatement, visual inspections using the ASTM E1368 document; conducting inspections for completeness of removal; discussion of "how clean is clean?"

(l) *Legal responsibilities and liabilities of project monitors.* Specification enforcement capabilities; regulatory enforcement; licensing; powers delegated to project monitors through contract documents.

(m) *Recordkeeping and report writing.* Developing project logs/daily logs (what should be included, who sees them); final report preparation; recordkeeping under Federal regulations.

(n) *Workshops (6 hours spread over 3 days).* Contracts, specifications, and drawings: This workshop could consist of each participant being issued a set of contracts, specifications, and drawings and then being asked to answer questions and make recommendations to a project architect, engineer or to the building owner based on given conditions and these documents.

Air monitoring strategies/asbestos abatement equipment: This workshop could consist of simulated abatement sites for which sampling strategies would have to be developed (i.e., occupied buildings, industrial situations). Through demonstrations and exhibition, the project monitor may also be able to gain a better understanding of the function of various pieces of equipment used on abatement projects (air filtration units, water filtration units, negative pressure monitoring devices, sampling pump calibration devices, etc.).

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

C. Examinations

1. Each State shall administer a closed book examination or designate other entities such as State-approved providers of training courses to administer the closed-book examination to persons seeking accreditation who have completed an initial training course. Demonstration testing may also be included as part of the examination. A person seeking initial accreditation in a specific discipline must pass the examination for that discipline in order to receive accreditation. For example, a person seeking accreditation as an abatement project designer must pass the State's examination for abatement project designer.

States may develop their own examinations, have providers of training courses develop examinations, or use standardized examinations developed for purposes of accreditation under TSCA Title II. In addition, States may supplement standardized examinations with questions about State regulations. States may obtain commercially developed standardized examinations, develop standardized examinations independently, or do so in cooperation with other States, or with commercial or non-profit providers on a regional or national basis. EPA recommends the use of standardized, scientifically-validated testing instruments, which may be beneficial in terms of both promoting competency and in fostering accreditation reciprocity between States.

Each examination shall adequately cover the topics included in the training course for that discipline. Each person who completes a training course, passes the required examination, and fulfills whatever other requirements the State imposes must receive an accreditation certificate in a specific discipline. Whether a State directly issues accreditation certificates, or authorizes training providers to issue accreditation certificates, each certificate issued to an accredited person must contain the following minimum information:

a. A unique certificate number

b. Name of accredited person

c. Discipline of the training course completed.
d. Dates of the training course.
e. Date of the examination.
f. An expiration date of 1 year after the date upon which the person successfully completed the course end 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 accreditation under TSCA Title II.

States or training providers who reaccredit persons based upon completion of required refresher training must also provide accreditation certificates with all of the above information, except the examination date may be omitted if a State does not require a refresher examination for reaccreditation.

Where a State licenses accredited persons but has authorized training providers to issue accreditation certificates, the State may issue licenses in the form of photo-identification cards. Where this applies, EPA recommends that the State licenses should include all of the same information required for the accreditation certificates. A State may also choose to issue photo-identification cards in addition to the required accreditation certificates.

Accredited persons must have their initial and current accreditation certificates at the location where they are conducting work.

2. The following are the requirements for examination in each discipline:
a. Worker:
i. 50 multiple-choice questions
ii. Passing score: 70 percent correct
b. Contractor/Supervisor:
i. 100 multiple-choice questions
ii. Passing score: 70 percent correct
c. Inspector:
i. 50 Multiple-choice questions
ii. Passing score: 70 percent correct
d. Management Planner:
i. 50 Multiple-choice questions
ii. Passing score: 70 percent correct
e. Project Designer:
i. 100 multiple-choice questions
ii. Passing score: 70 percent correct

D. Continuing Education

For all disciplines, a State's accreditation program shall include annual refresher training as a requirement for reaccreditation as indicated below:

1. Workers: One full day of refresher training.
2. Contractor/Supervisors: One full day of refresher training.
3. Inspectors: One half-day of refresher training.
4. Management Planners: One half-day of inspector refresher training and one half-day of refresher training for management planners.
5. Project Designers: One full day of refresher training.

The refresher courses shall be specific to each discipline. Refresher courses shall be conducted as separate and distinct courses and not combined with any other training during the period of the refresher course. For each discipline, the refresher course shall review and discuss changes in Federal, State, and local regulations, developments in state-of-the-art procedures, and a review of key aspects of the initial training course as determined by the State. After completing the annual refresher course, persons shall have their accreditation extended for an additional year from the date of the refresher course. A State may consider requiring persons to pass reaccreditation examinations at specific intervals (for example, every 3 years).

EPA recommends that States formally establish a 12-month grace period to enable formerly accredited persons with expired certificates to complete refresher training and have their accreditation status reinstated without having to re-take the initial training course.

E. Qualifications

In addition to requiring training and an examination, a State may require candidates for accreditation to meet other qualification and/or experience standards that the State considers appropriate for some or all disciplines. States may choose to consider requiring qualifications similar to the examples outlined below for inspectors, management planners and project designers. States may modify these examples as appropriate. In addition, States may want to include some requirements based on experience in performing a task directly as a part of a job or in an apprenticeship role. They may also wish to consider additional criteria for the approval of training course instructors beyond those prescribed by EPA.

1. Inspectors: Qualifications - possess a high school diploma. States may want to require an Associate's Degree in specific fields (e.g., environmental or physical sciences).
2. Management Planners: Qualifications - Registered architect, engineer, or certified industrial hygienist or related scientific field.
3. Project Designers: Qualifications - registered architect, engineer, or certified industrial hygienist.
4. Asbestos Training Course Instructor: Qualifications - academic credentials and/or field experience in asbestos abatement.

EPA recommends that States prescribe minimum qualification standards for training instructors employed by training providers.

F. Recordkeeping Requirements for Training Providers

All approved providers of accredited asbestos training courses must comply with the following minimum recordkeeping requirements.

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 qualifications. A training provider must retain copies of all instructors' resumes, and the documents approving each instructor issued by either EPA or a State. Instructors must be approved by either EPA or a State before teaching courses for accreditation purposes. A training provider must notify EPA or the State, as appropriate, in advance whenever it changes course instructors. Records must accurately identify the instructors that taught each particular course for each date that a course is offered.
3. Examinations. A training provider must document that each person who receives an accreditation certificate for an initial training course has achieved a passing score on the examination. These records must clearly indicate the date upon which the exam was administered, the training course and discipline for which the 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 must correspond to those listed on that person's accreditation certificate. States may choose to apply these same requirements to examinations for refresher training courses.
4. Accreditation certificates. The training providers or States, whichever issues the accreditation certificate, shall maintain records that document the names of all persons who have been awarded certificates, their certificate numbers, the disciplines for which accreditation was conferred, training and expiration dates, and the training location. The training provider or State shall maintain the records in a manner that allows verification by telephone of the required information.
5. Verification of certificate information. EPA recommends that training providers of refresher training courses confirm that their students possess valid accreditation before granting course admission. EPA further recommends that training providers offering the initial management planner training course verify that students have met the prerequisite of possessing valid inspector accreditation at the time of course admission.
6. Records retention and access. (a) The training provider shall maintain all required records for a minimum of 3 years. The training provider, however, may find it advantageous to retain these records for a longer period of time.

(b) The training provider must allow reasonable access to all of the records required by the MAP, and to any other records which may be required by States for the approval of asbestos training providers or the accreditation of asbestos training courses, to both EPA and to State Agencies, on request. EPA encourages training providers to make this information equally accessible to the general public.

(c) If a training provider ceases to conduct training, the training provider shall notify the approving government body (EPA or the State) and give it the opportunity to take possession of that providers asbestos training records.

G. Deaccreditation

1. States must establish criteria and procedures for deaccrediting persons accredited as workers, contractor/supervisors, inspectors, management planners, and project designers. States must follow their own administrative procedures in pursuing deaccreditation actions. At a minimum, the criteria shall include:

(a) Performing work requiring accreditation at a job site without being in physical possession of initial and current accreditation certificates;

(b) Permitting the duplication or use of one's own accreditation certificate by another;

(c) Performing work for which accreditation has not been received; or

(d) Obtaining accreditation from a training provider that does not have approval to offer training for the particular discipline from either EPA or from a State that has a contractor accreditation plan at least as stringent as the EPA MAP.

EPA may directly pursue deaccreditation actions without reliance on State deaccreditation or enforcement authority or actions. In addition to the above-listed situations, the Administrator may suspend or revoke the accreditation of persons who have been subject to a final order imposing a civil penalty or convicted under section 16 of TSCA, 15 U.S.C. 2615 or 2647, for violations of 40 CFR part 763, or section 113 of the Clean Air Act, 42 U.S.C. 7413, for violations of 40 CFR part 61, subpart M.

2. Any person who performs asbestos work requiring accreditation under section 206(a) of TSCA, 15 U.S.C. 2646(a), without such accreditation is in violation of TSCA. The following persons are not accredited for purposes of section 206(a) of TSCA:

(a) Any person who obtains accreditation through fraudulent representation of training or examination documents;

(b) Any person who obtains training documentation through fraudulent means;

(c) Any person who gains admission to and completes refresher training through fraudulent representation of initial or previous refresher training documentation; or

(d) Any person who obtains accreditation through fraudulent representation of accreditation requirements such as education, training, professional registration, or experience.

H. Reciprocity

EPA recommends that each State establish reciprocal arrangements with other States that have established accreditation programs that meet or exceed the requirements of the MAP. Such arrangements might address cooperation in licensing determinations, the review and approval of training programs and/or instructors, candidate testing and exam administration, curriculum development, policy formulation, compliance monitoring, and the exchange of information and data. The benefits to be derived from these arrangements include a potential cost-savings from the reduction of duplicative activity and the attainment of a more professional accredited workforce as States are able to refine and improve the effectiveness of their programs based upon the experience and methods of other States.

*II. EPA Approval Process for State Accreditation Programs*

A. States may seek approval for a single discipline or all disciplines as specified in the MAP. For example, a State that currently only requires worker accreditation may receive EPA approval for that discipline alone. EPA encourages States that currently do not have accreditation requirements for all disciplines required under section 206(b)(2) of TSCA, 15 U.S.C. 2646(b)(2), to seek EPA approval for those disciplines the State does accredit. As States establish accreditation requirements for the remaining disciplines, the requested information outlined below should be submitted to EPA as soon as possible. Any State that had an accreditation program approved by EPA under an earlier version of the MAP may follow the same procedures to obtain EPA approval of their accreditation program under this MAP.

B. Partial approval of a State Program for the accreditation of one or more disciplines does not mean that the State is in full compliance with TSCA where the deadline for that State to have adopted a State Plan no less stringent than the MAP has already passed. State Programs which are at least as stringent as the MAP for one or more of the accredited disciplines may, however, accredit persons in those disciplines only.

C. States seeking EPA approval or reapproval of accreditation programs shall submit the following information to the Regional Asbestos Coordinator at their EPA Regional office:

1. A copy of the legislation establishing or upgrading the State's accreditation program (if applicable).

2. A copy of the State's accreditation regulations or revised regulations.

3. A letter to the Regional Asbestos Coordinator that clearly indicates how the State meets the program requirements of this MAP. Addresses for each of the Regional Asbestos Coordinators are shown below:

EPA, Region I, (ATC-111) Asbestos Coordinator, JFK Federal Bldg., Boston, MA 02203-2211, (617) 565-3836.

EPA, Region II, (MS-500), Asbestos Coordinator, 2890 Woodbridge Ave., Edison, NJ 08837-3679, (908) 321-6671.

EPA, Region III, (3AT-33), Asbestos Coordinator, 841 Chestnut Bldg., Philadelphia, PA 19107, (215) 597-3160.

EPA, Region IV, Asbestos Coordinator, 345 Courtland St., N.E., Atlanta, GA 30365, (404) 347-5014.

EPA, Region V, (SP-14J), Asbestos Coordinator, 77 W. Jackson Blvd., Chicago, IL 60604-3590, (312) 886-6003.

EPA, Region VI, (6T-PT), Asbestos Coordinator, 1445 Ross Ave. Dallas, TX 75202-2744, (214) 655-7244.

EPA, Region VII, (ARTX/ASBS), Asbestos Coordinator, 726 Minnesota Ave., Kansas City, KS 66101, (913) 551-7020.

EPA, Region VIII, (8AT-TS), Asbestos Coordinator, 1 Denver Place, Suite 500 999 - 18th St., Denver, CO 80202-2405, (303) 293-1442.

EPA, Region IX, (A-4-4), Asbestos Coordinator, 75 Hawthorne St., San Francisco, CA 94105, (415) 744-1128.

EPA, Region X, (AT-083), Asbestos Coordinator, 1200 Sixth Ave., Seattle, WA 98101, (206) 553-4762.

EPA maintains a listing of all those States that have applied for and received EPA approval for having accreditation requirements that are at least as stringent as the MAP for one or more disciplines. Any training courses approved by an EPA-approved State Program are considered to be EPA-approved for purposes of accreditation.

*III. Approval of Training Courses*

Individuals or groups wishing to sponsor training courses for disciplines required to be accredited under section 206(b)(1)(A) of TSCA, 15 U.S.C. 2646(b)(1)(A), may apply for approval from States that have accreditation program requirements that are at least as stringent as this MAP. For a course to receive approval, it must meet the requirements for the course as outlined in this MAP, and any other requirements imposed by the State from which approval is being sought. Courses that have been approved by a State with an accreditation program at least as stringent as this MAP are approved under section 206(a) of TSCA, 15 U.S.C. 2646(a), for that particular State, and also for any other State that does not have an accreditation program as stringent as this MAP.

A. Initial Training Course Approval

A training provider must submit the following minimum information to a State as part of its application for the approval of each training course:

1. The course provider's name, address, and telephone number.

2. A list of any other States that currently approve the training course.

3. The course curriculum.

4. A letter from the provider of the training course that clearly indicates how the course meets the MAP requirements for:

a. Length of training in days.

b. Amount and type of hands-on training.

c. Examination (length, format, and passing score).

d. Topics covered in the course.

5. A copy of all course materials (student manuals, instructor notebooks, handouts, etc.).

6. A detailed statement about the development of the examination used in the course.

7. Names and qualifications of all course instructors. Instructors must have academic and/or field experience in asbestos abatement.

8. A description of and an example of the numbered certificates issued to students who attend the course and pass the examination.

B. Refresher Training Course Approval

The following minimum information is required for approval of refresher training courses by States:

1. The length of training in half-days or days.

2. The topics covered in the course.

3. A copy of all course materials (student manuals, instructor notebooks, handouts, etc.).

4. The names and qualifications of all course instructors. Instructors must have academic and/or field experience in asbestos abatement.

5. A description of and an example of the numbered certificates issued to students who complete the refresher course and pass the examination, if required.

C. Withdrawal of Training Course Approval

States must establish criteria and procedures for suspending or withdrawing approval from accredited training programs. States should follow their own administrative procedures in pursuing actions for suspension or withdrawal of approval of training programs. At a minimum, the criteria shall include:

(1) Misrepresentation of the extent of a training course's approval by a State or EPA;

(2) Failure to submit required information or notifications in a timely manner;

(3) Failure to maintain requisite records;

(4) Falsification of accreditation records, instructor qualifications, or other accreditation information; or

(5) Failure to adhere to the training standards and requirements of the EPA MAP or State Accreditation Program, as appropriate.

In addition to the criteria listed above, EPA may also suspend or withdraw a training course's approval where an approved training course instructor, or other person with supervisory authority over the delivery of training has been found in violation of other asbestos regulations administered by EPA. An administrative or judicial finding of violation, or execution of a consent agreement and order under 40 CFR 22.18, constitutes evidence of a failure to comply with relevant statutes or regulations. States may wish to adopt this criterion modified to include their own asbestos statutes or regulations. EPA may also suspend or withdraw approval of training programs where a training provider has submitted false information as a part of the self-certification required under Unit V.B. of the revised MAP.

Training course providers shall permit representatives of EPA or the State which approved their training courses to attend, evaluate, and monitor any training course without charge. EPA or State compliance inspection staff are not required to give advance notice of their inspections. EPA may suspend or withdraw State or EPA approval of a training course based upon the criteria specified in this Unit III.C.

*IV. EPA Procedures for Suspension or Revocation of Accreditation or Training Course Approval.*

A. If the Administrator decides to suspend or revoke the accreditation of any person or suspend or withdraw the approval of a training course, the Administrator will notify the affected entity of the following:

1. The grounds upon which the suspension, revocation, or withdrawal is based.

2. The time period during which the suspension, revocation, or withdrawal is effective, whether permanent or otherwise.

3. The conditions, if any, under which the affected entity may receive accreditation or approval in the future.

4. Any additional conditions which the Administrator may impose.

5. The opportunity to request a hearing prior to final Agency action to suspend or revoke accreditation or suspend or withdraw approval.

B. If a hearing is requested by the accredited person or training course provider pursuant to the preceding paragraph, the Administrator will:

1. Notify the affected entity of those assertions of law and fact upon which the action to suspend, revoke, or withdraw is based.

2. Provide the affected entity an opportunity to offer written statements of facts, explanations, comments, and arguments relevant to the proposed action.

3. Provide the affected entity such other procedural opportunities as the Administrator may deem appropriate to ensure a fair and impartial hearing.

4. Appoint an EPA attorney as Presiding Officer to conduct the hearing. No person shall serve as Presiding Officer if he or she has had any prior connection with the specific case.

C. The Presiding Officer appointed pursuant to the preceding paragraph shall:

1. Conduct a fair, orderly, and impartial hearing, without unnecessary delay.

2. Consider all relevant evidence, explanation, comment, and argument submitted pursuant to the preceding paragraph.

3. Promptly notify the affected entity of his or her decision and order. Such an order is a final Agency action.

D. If the Administrator determines that the public health, interest, or welfare warrants immediate action to suspend the accreditation of any person or the approval of any training course provider, the Administrator will:

1. Notify the affected entity of the grounds upon which the emergency suspension is based;

2. Notify the affected entity of the time period during which the emergency suspension is effective.

3. Notify the affected entity of the Administrator's intent to suspend or revoke accreditation or suspend or withdraw training course approval, as appropriate, in accordance with Unit IV.A. above. If such suspension, revocation, or withdrawal notice has not previously been issued, it will be issued at the same time the emergency suspension notice is issued.

E. Any notice, decision, or order issued by the Administrator under this section, and any documents filed by an accredited person or approved training course provider in a hearing under this section, shall be available to the public except as otherwise provided by section 14 of TSCA or by 40 CFR part 2. Any such hearing at which oral testimony is presented shall be open to the public, except that the Presiding Officer may exclude the public to the extent necessary to allow presentation of information which may be entitled to confidential treatment under section 14 of TSCA or 40 CFR part 2.

*V. Implementation Schedule*

The various requirements of this MAP become effective in accordance with the following schedules:

A. Requirements applicable to State Programs

1. Each State shall adopt an accreditation plan that is at least as stringent as this MAP within 180 days after the commencement of the first regular session of the legislature of the State that is convened on or after April 4, 1994.

2. If a State has adopted an accreditation plan at least as stringent as this MAP as of April 4, 1994, the State may continue to:

a. Conduct TSCA training pursuant to this MAP.

b. Approve training course providers to conduct training and to issue accreditation that satisfies the requirements for TSCA accreditation under this MAP.

c. Issue accreditation that satisfies the requirements for TSCA accreditation under this MAP.

3. A State that had complied with an earlier version of the MAP, but has not adopted an accreditation plan at least as stringent as this MAP by April 4, 1994, may:

a. Conduct TSCA training which remains in compliance with the requirements of Unit V.B. of this MAP. After such training has been self-certified in accordance with Unit V.B. of this MAP, the State may issue accreditation that satisfies the requirement for TSCA accreditation under this MAP.

b. Sustain its approval for any training course providers to conduct training and issue TSCA accreditation that the State had approved before April 4, 1994, and that remain in compliance with Unit V.B. of this MAP.

c. Issue accreditation pursuant to an earlier version of the MAP that provisionally satisfies the requirement for TSCA accreditation until October 4, 1994.

Such a State may not approve new TSCA training course providers to conduct training or to issue TSCA accreditation that satisfies the requirements of this MAP until the State adopts an accreditation plan that is at least as stringent as this MAP.

4. A State that had complied with an earlier version of the MAP, but fails to adopt a plan as stringent as this MAP by the deadline established in Unit V.A.1., is subject to the following after that deadline date:

a. The State loses any status it may have held as an EPA-approved State for accreditation purposes under section 206 of TSCA, 15 U.S.C. 2646.

b. All training course providers approved by the State lose State approval to conduct training and issue accreditation that satisfies the requirements for TSCA accreditation under this MAP.

c. The State may not:

i. Conduct training for accreditation purposes under section 206 of TSCA, 15 U.S.C. 2646.

ii. Approve training course providers to conduct training or issue accreditation that satisfies the requirements for TSCA accreditation; or

iii. Issue accreditation that satisfies the requirement for TSCA accreditation.

EPA will extend EPA-approval to any training course provider that loses State approval because the State does not comply with the deadline, so long as the provider is in compliance with Unit V.B. of this MAP, and the provider is approved by a State that had complied with an earlier version of the MAP as of the day before the State loses its EPA approval.

5. A State that does not have an accreditation program that satisfies the requirements for TSCA accreditation under either an earlier version of the MAP or this MAP, may not:

a. Conduct training for accreditation purposes under section 206 of TSCA, 15 U.S.C. 2646;

b. Approve training course providers to conduct training or issue accreditation that satisfies the requirements for TSCA accreditation; or

c. Issue accreditation that satisfies the requirement for TSCA accreditation.

B. Requirements applicable to Training Courses and Providers

As of October 4, 1994, an approved training provider must certify to EPA and to any State that has approved the provider for TSCA accreditation, that each of the provider's training courses complies with the requirements of this MAP. The written submission must document in specific detail the changes made to each training course in order to comply with the requirements of this MAP and clearly state that the provider is also in compliance with all other requirements of this MAP, including the new recordkeeping and certificate provisions. Each submission must include the following statement signed by an authorized representative of the training provider: "Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the training described in this submission complies with all applicable requirements of Title II of TSCA, 40 CFR part 763, Appendix C to Subpart E, as revised, and any other applicable Federal, state, or local requirements." A consolidated self-certification submission from each training provider that addresses all of its approved training courses is permissible and encouraged.

The self-certification must be sent via registered mail, to EPA Headquarters at the following address: Attn. Self-Certification Program, Field Programs Branch, Chemical Management Division (7404), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. A duplicate copy of the complete submission must also be sent to any States from which approval had been obtained.

The timely receipt of a complete self-certification by EPA and all approving States shall have the effect of extending approval under this MAP to the training courses offered by the submitting provider. If a self-certification is not received by the approving government bodies on or before the due date, the affected training course is not approved under this MAP. Such training providers must then reapply for approval of these training courses pursuant to the procedures outlined in Unit III.

C. Requirements applicable to Accredited Persons.

Persons accredited by a State with an accreditation program no less stringent than an earlier version of the MAP or by an EPA-approved training provider as of April 3, 1994, are accredited in accordance with the requirements of this MAP, and are not required to retake initial training. They must continue to comply with the requirements for annual refresher training in Unit I.D. of the revised MAP.

D. Requirements applicable to Non-Accredited Persons.

In order to perform work requiring accreditation under TSCA Title II, persons who are not accredited by a State with an accreditation program no less stringent than an earlier version of the MAP or by an EPA-approved training provider as of April 3, 1994, must comply with the upgraded training requirements of this MAP by no later than October 4, 1994. Non-accredited persons may obtain initial accreditation on a provisional basis by successfully completing any of the training programs approved under an earlier version of the MAP, and thereby perform work during the first 6 months after this MAP takes effect. However, by October 4, 1994, these persons must have successfully completed an upgraded training program that fully complies with the requirements of this MAP in order to continue to perform work requiring accreditation under section 206 of TSCA, 15 U.S.C. 2646.

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