ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

REGULATION 21

ARKANSAS ASBESTOS ABATEMENT REGULATION

MAY 30, 1997

TABLE OF CONTENTS

ARKANSAS ASBESTOS ABATEMENT REGULATION

SECTION 1 - TITLE

1.1 The following rules and regulations of the Arkansas Pollution Control and Ecology Commission adopted pursuant to the Removal of Asbestos Material Act, (Section 3, Act 308 of 1997 codified at A.C.A. § 20-27-1001 et seq.) hereinafter referred to as the Act and the Arkansas Water and Air Pollution Control Act, (Section 7, Act 163 of 1993 codified at A.C.A. § 8-4-101 et seq. shall be known as the Asbestos Abatement Regulation ["regulation"]).

SECTION 2 - PURPOSE

The purpose of this regulation is to provide for the following:

2.1 To protect public health and safety and the environment;

2.2 To administer and enforce a program for the licensing of **Asbestos Abatement Contractors, Asbestos Abatement Consultants** and **Training Providers** and for the certification of **Air Monitors, Contractor/supervisors, Inspectors, Management Planners, Project Designers,** and **Workers** in accordance with the Asbestos School Hazard Abatement Reauthorization Act (ASHARA [MAP])**,** 40 CFR Part 763.

2.3 To establish standards for demolitions, renovations, and disposal of friable asbestos-containing materials in order to reduce visible emission of asbestos-containing materials as provided by the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR, Part 61, and to establish standards for response actions as provided by the Asbestos Model Accreditation Plan, 40 CFR, Part 763, Subpart E, ASHARA.

SECTION 3 - APPLICABILITY

3.1 The provisions of this regulation are applicable to all owners and operators conducting a demolition or renovation activity; persons conducting inspections, air monitoring, developing management plans, and designing and/or conducting asbestos response actions; and training providers.

SECTION 4 - DEFINITIONS

ACBM	asbestos-containing building material - any friable and nonfriable asbestos-containing material that is in or on interior structural members or other parts of a facility.
ACM	any asbestos material which contains more than one percent of friable and/or nonfriable asbestos material.
Adequately wetted	means sufficiently mix or penetrate with liquid to prevent the release of particulate. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.
AHERA	Asbestos Hazard Emergency Response Act, Section 203 of Title II of TSCA, Section 15 U.S.C.
Air analysis	the microscopic examination of collected air samples to determine airborne fiber concentrations.
Air filtration system	a system designed to contain asbestos fibers in a specified area and prevent such fibers from getting into the outside air. Such systems shall utilize HEPA (High Efficiency Particulate Air) filters to capture such fibers.
Air monitoring	the process of measuring the airborne fiber concentration of a specific quantity of air over a given amount of time for purposes of clearance air monitoring as prescribed by this regulation.
Air sampling	the collection of units of air to determine airborne fiber concentration for purposes of clearance air monitoring as prescribed by this regulation.
Asbestos abatement consultant	any person or other legal entity, however organized, that acts as an agent for the owner or operator in performing demolitions, renovations, air monitoring, and/or response actions which will involve, or may involve, the removal or disturbance of RACM in any facility. This does not include in-house personnel performing work associated with the performance of that person's employment.
Asbestos abatement contractor	any person or other legal entity, however organized, that acts as an agent for the owner or operator in performing demolitions, renovations, air monitoring, and/or response actions which will

	involve, or may involve, the removal or disturbance of RACM in any facility. This does not include in-house personnel performing work associated with the performance of that person's employment.
Asbestos-containing waste materials	mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this regulation. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovations operations, this term also includes regulated asbestos-containing waste and materials contaminated with asbestos including disposable equipment and clothing.
ASHARA	Asbestos School Hazard Abatement Reauthorization Act.
Bridging encapsulant	the application of a sealant which provides a coating over the surface of RACM to prevent the release of asbestos fibers.
Category I nonfriable asbestos-containing material (ACM)	asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 % (one percent) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy.
Category II nonfriable asbestos-containing material (ACM)	any material, excluding category I nonfriable ACM, containing more than 1 % (one percent) asbestos as determined using the methods specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
Certificate	a document issued by the Department to any person certifying that person has satisfactorily completed such asbestos training, examination (as provided in Section 18 of this regulation), and other requirements of this regulation to perform the duties of the following: **Air Monitor, Contractor/supervisor, Inspector, Management Planner, Project Designer, and Worker.**
Certification	the status or classification of an individual who has been accredited in accordance with the EPA Model Accreditation Plan requirements and has satisfactorily met the additional State requirements described in this regulation.

Certified Industrial Hygienist (CIH)	a person certified in the comprehensive practice of Industrial Hygiene by the American Board of Industrial Hygiene.
Clearance air monitor	as required by this regulation, any person who measures the airborne fiber concentration of a specific quantity of air over a given amount of time at the conclusion of any demolition, renovation, or asbestos response action for which containment was utilized.
Consent Administrative Order (CAO)	an administrative order entered into by consent of the parties, including the Department.
Commission	the Arkansas Pollution Control and Ecology Commission.
Contractor/supervisor	any person who supervises the following activities with respect to friable ACM in a facility: a response action other than a SSSD activity, a maintenance activity that disturbs friable ACM, or a response action for a major fiber release episode and meets the certification requirements of this regulation.
Cutting	means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.
Demolition	the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or intentional burning of a facility.
Department	the Arkansas Department of Pollution Control and Ecology.
Director	the Director of the Arkansas Department of Pollution Control and Ecology.
Emergency renovation operations	a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.
Encapsulation	the coating of ACM with a bonding or sealing agent to prevent the release of airborne fibers.

Facility	any institutional, commercial, public, industrial, school, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this regulation is not excluded, regardless of its current use or function.
Facility component	any part of a facility, including equipment.
Friable asbestos-containing building material (ACBM)	any friable asbestos -containing material that is in or on interior structural members or other parts of a school or public and commercial building.
Friable asbestos material	any materials containing more than one percent (1%) asbestos as determined by using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by Polarized Light Microscopy (PLM), verify the asbestos content by point counting using PLM. The term includes nonfriable asbestos-containing material after such previously nonfriable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.
Glovebag procedure	a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glovebags provide a small work area enclosure typically used for small-scale short-duration asbestos stripping operations. Information on glovebag installation, equipment and supplies, and work practices is contained in the Occupation Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (Appendix G to 29 CFR 1910.1001).
Grinding	means to reduce to powder or small fragments and includes mechanical chipping or drilling.
HEPA	High Efficiency Particulate Air (filter).

HVAC System Heating, ventilation, and air conditioning system.

In poor condition the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

Inspection an activity undertaken in a facility to determine the presence or location, or to assess the condition, of friable or nonfriable ACM or suspect ACM, whether by visual or physical examination or by collecting samples of such material. This term includes reinspection of friable and nonfriable known or assumed ACM which has been previously identified. This definition does not apply to the following:

(A) Periodic visual surveillance solely for the purpose of recording or reporting a change in the condition of identified or assumed ACM;

(B) Regulatory compliance inspections conducted by Federal, State, or local government officials; and

(C) Visual inspections conducted solely for the purposes of determining completion of response actions.

Inspector any person who inspects for ACM in a facility and meets the certification requirements of this regulation.

Installation any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

Leak-tight solids or liquids cannot escape or spill out. It also means dust-tight.

License a document issued by the Department to an **Asbestos Abatement Contractor, Asbestos Abatement Consultant,** or **Training Provider** who meets the criteria for licensing described in this regulation.

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

Malfunction	any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failure of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.
Management planner	any person who prepares management plans for a school and and who meets the certification requirements of this regulation.
Management plan	a formal written procedure for appropriate actions for surveillance and management of ACM.
MAP	Model Accreditation Plan. Asbestos Model Accreditation, Plan; Interim Final Rule, published at 40 CFR, Part 763, Appendix C to Subpart E.
Minor fiber release episode	any uncontrolled or unintentional disturbance of ACM, resulting in a visible emission, which involves the falling or dislodging of 3 square or linear feet or less of friable ACM.
NESHAP	National Emission Standards for Hazardous Air Pollutants.
Nonfriable asbestos containing material	any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
Nonscheduled renovation operation	a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.
Notice of Deficiency (NOD)	a written enforcement document which identifies deficiencies in a Notice of Intent.
Notice of Intent (NOI)	a written notice to the Department which provides detailed information concerning renovations of RACM and all demolitions.
Notice of Violation (NOV)	a written notification to a person of alleged violations. The notice of violation **(NOV)** initiates an administrative enforcement action.

Outside air the air outside buildings and structures including, but not limited to, the air under a bridge or in an open air ferry dock.

Owner or operator of a demolition or renovation activity any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

Particulate asbestos material finely divided particles of asbestos or material containing asbestos.

Penetrating encapsulant a liquid material applied to RACM to control airborne fiber release by penetrating into the material and binding the fibers together.

Permitted landfill a waste disposal facility in Arkansas which has received a permit from the Department, authorizing the receipt and disposal of certain waste materials under the provisions of the Arkansas Solid Waste Management Code.

Phase contrast microscopy (PCM) a method of analyzing air samples utilizing the method published at the National Institute for Occupational Safety and Health (NIOSH), Method 7400, entitled "Fibers" published in the NIOSH Manual of Analytical Methods, Third Edition, Second Supplement, August 1987.

Planned renovations operations a renovation operation, or a number of such operations, in which some RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

Project designer any person who designs the following activities with respect to friable ACM in a facility: a response action other than a small-scale short-duration maintenance activity, a maintenance activity that disturbs friable ACM other than a small-scale short-duration maintenance activity, or a response action for a major fiber release episode and meets the certification requirements of this regulation.

Regulated asbestos-containing material (RACM)

(A) friable asbestos material;

(B) category I nonfriable ACM that has become friable,

(C) category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or

(D) category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this regulation.

Remove to take out RACM or facility components that contain or are covered with RACM from any facility.

Renovation altering in any way a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Resilient floor covering asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than one percent (1%) asbestos as determined using polarized light microscopy according to the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy.

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

School means any elementary or secondary school as defined in Section 198 of the Elementary and Secondary Act of 1965 (20 U.S.C. 2854).

Small-scale short-duration activities (SSSD) 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 or 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 that those which can be contained in a single glovebag;

(H) minor repairs to damaged thermal system insulation which do not require removal;

(I) repairs to a piece of asbestos-containing wallboard; and

(J) repairs, involving encapsulation, enclosure, or removal, to small amounts of friable 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.

Strip to take off RACM from any part of a facility or facility component.

Training day a day consisting of 8 consecutive hours (including lunch and breaks) in which an approved training course is conducted.

Training provider any person or other legal entity, however organized, who conducts some or all of the training programs for asbestos professional disciplines which are regulated in this regulation and meets the licensing requirements of this regulation.

Transmission electron microscopy (TEM) a method of analyzing air samples and bulk samples through the use of a transmission electron microscope operated under procedures listed in 40 CFR, Part 763, Subpart E, Appendix A (AHERA). The transmission electron microscope utilizes an electron beam that is focused onto a thin sample.

Visible emissions any emissions which are visually detectable without the aid of instruments, coming from any RACM or asbestos waste material. This does not include uncondensed water vapor.

Waste generator any owner or operator of a source covered by this regulation whose action or process produces asbestos-containing waste materials.

Waste shipment record the shipping documents required to be originated and signed by the waste generator, and used to track and substantiate the disposition of asbestos-containing waste material.

Work days the days Monday through Friday, including any holidays which fall on any of the days Monday through Friday.

Worker any person who carries out any of the following activities with respect to friable ACM in a facility: a response action other than a SSSD activity**,** a maintenance activity that disturbs friable ACM other than a SSSD activity, or a response action for a major fiber release episode and meets the certification requirements of this regulation.

SECTION 5 - GENERAL PROVISIONS

5.1 The owner or operator of a demolition, renovation, or response action shall thoroughly inspect the affected facility or part of the facility for the presence of asbestos including category I and category II nonfriable asbestos prior to the commencement of the demolition, renovation, or response action.

5.2 A project design is required prior to renovation, demolition, or for any job greater than a SSSD or minor release episode that involves RACM. The person performing the project design must meet the certification provisions of this regulation.

5.3 A person must meet the licensing and/or certification provisions of this regulation prior to engaging in renovations, demolitions, or response activities involving RACM including the following:

(A) A person supervising any of the following activities with respect to RACM in a facility-- a response action other than a SSSD activity, a maintenance activity that disturbs RACM other than a SSSD maintenance activity, or a response action for a major fiber release episode-- must be trained, certified, and meet all other requirements of this regulation;

(B) A person conducting an inspection for ACM in a facility must be trained, certified, and meet all other requirements of this regulation;

(C) A person preparing management plans for schools must be trained, certified, and meet all other requirements of this regulation;

(D) A person designing the following activities with respect to RACM in a facility-- a response action other than a SSSD maintenance activity; a maintenance activity that disturbs RACM other than a SSSD maintenance activity, or a response action for a major fiber release episode--must be trained, certified, and meet all other requirements of this regulation;

(E) A person who carries out any of the following activities with respect to RACM in a facility--a response action other than a SSSD activity, a maintenance activity that disturbs RACM other than a SSSD activity, or a response action for a major fiber release episode--must be trained, certified, and meet all other requirements of this regulation; and

(F) A person conducting clearance air monitoring as prescribed in this regulation must be trained and certified and meet all other requirements of this regulation.

SECTION 6 - NOTIFICATIONS

6.1 For any demolition of a facility or facility component, the owner or operator shall submit a written NOI which must be either hand delivered, post-marked by U.S. Postal Service, or post-marked by a commercial delivery service to the Department at least 10 working days before any demolition activity begins (such as site preparation which would break up, dislodge, or similarly disturb asbestos material). Such notice must be accompanied by the required fee which is described in Section 22 of this regulation.

6.2 For any facility being demolished under order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, the owner or operator shall hand deliver, deliver by U.S. Postal Service, or commercial delivery service a NOI as early as possible before, but not later than the following working day to the Department. Such notice shall be accompanied by the required fee which is described in Section 22 of this regulation.

6.3 For any renovation project, including any nonscheduled renovation operation, involving the following amounts of RACM: at least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or at least 1 cubic meter (or 35 cubic feet) where the length could not be measured previously, the owner or operator shall submit a NOI to the Department by either hand-delivered, or post-marked

by U.S. Postal Service, or post-marked by commercial delivery service 10 working days before asbestos stripping, or removal work, or any other activity begins (such as site preparation that would break up or dislodge or similarly disturb asbestos material). Such notice must be accompanied by the required fee which is described in Section 22 of this regulation.

6.4 For planned renovation operations involving individual, nonscheduled operations of a combined additive amount of RACM to be removed or stripped during a calendar year in the amounts of at least 80 linear meters (260 linear feet) of pipe, at least 15 square meters (or 160 square feet) on other facility components, or at least 1 cubic meter (or 35 cubic feet) of facility components where the length or area could not be measured previously, the owner or operator shall hand deliver, post-marked U.S. Postal Service, or post-marked commercial delivery service a NOI to the Department by December 21 for the upcoming calendar period of January 1 through December 31. This notice must be accompanied by the required fee which is described in Section 22 of this regulation. To determine whether this paragraph applies to planned operations involving nonscheduled operations, the owner or operator shall predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.

6.5 For emergency renovation operations involving the sudden, unexpected event necessitating the renovation greater than a SSSD or minor episode of RACM, the owner or operator shall hand deliver, or post-marked U.S. Postal Service, or post-marked commercial delivery service a NOI to the Department as early as possible before, but not later than the following working day. Such notice must be accompanied by the required fee which is described in Section 22 of this regulation.

6.6 All written NOI shall be submitted on a form provided by the Department (see Attachment A) and shall include the following:

(A) An indication of whether the notice is the original or a revised notification;

(B) Name, address, and telephone number of both the facility owner and operator and the asbestos abatement contractor owner or operator;

(C) Type of operation: demolition or renovation;

(D) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility;

(E) Procedure, including analytical methods, employed to detect the presence of RACM and category I and category II nonfriable ACM;

(F) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface areas in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of category I and category II nonfriable ACM in the affected part of the facility that will not be removed before demolition;

(G) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished of renovated;

(H) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in 6.4 of this section;

(I) Scheduled starting and completion dates of demolition or renovation of RACM;

(J) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components;

(K) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handing emission control procedures;

(L) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited;

(M) A certification that at least one **Contractor/supervisor** trained as required by this regulation will supervise the stripping and removal described by this notification;

(N) For facilities described in 6.2 of this section, the name, title, and authority of the State of local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification;

(O) For emergency renovations described in 6.5 of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden;

(P) Description of procedures to be followed in the event that unexpected RACM is found or category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder;

(Q) Name, address, and telephone number of the waste transporter; and

(R) Name, address, Department certification number, and telephone number of the **Inspector**, **Project Designer**, and **Air Monitor**.

6.7 The Department shall review all notifications for accuracy and completeness. Notifications which are incomplete or do not otherwise meet the notification requirements of this section shall:

(A) Be returned to the owner or operator along with a NOD;

(B) Be corrected and resubmitted by the owner or operator; and

(C) Be subject to a new notification period.

6.8 An owner or operator who has already submitted an NOI shall notify the Department, as necessary, (1) when the beginning date for prepping and/or removal has changed and/or (2) when the amount of asbestos affected changes by at least 20 percent. The owner or operator shall also provide, in writing, the reason(s) for the change. Changes shall be submitted in letter form or on a revised notification form with the required fee which is described in Section 22 of this regulation. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(A) For any start date earlier than the date provided to the Department, the owner or operator shall notify the Department in writing at least 10 working days prior to the beginning of any stripping or removal work;

(B) For any start date after the date provided to the Department, the owner or operator shall notify the Department by telephone as soon as possible before the original start date and provide the Department with a written notice of the new start date as soon as possible before, and no later than, the original start date.

6.9 An owner or operator who has already submitted an NOI shall notify the Department of the following changes. These changes may be submitted by phone or fax. There will be no fee for these submittals.

(A) Ending date,

(B) Scheduled work hours,

(C) Engineering controls and work practices**,**

(D) Disposal site, or

(E) **Air Monitor, Inspector**, and/or **Project Designer**.

6.10 Changes in operator will result in the submittal of a new NOI with a new notification period and a new fee as described in Section 22 of this regulation.

SECTION 7 - RECORD KEEPING

7.1 The owner or operator shall keep at the site copies of all licenses and certifications issued by the Department pursuant to this regulation for each person participating in a demolition, renovation, or response action.

7.2 The owner or operator shall keep at the site copies of any written approval issued by the Department such as prior written approval from the Director to allow the owner or operator to not use wetting where it would cause unavoidable damage to equipment or present a safety hazard or to use an alternate collection device. The owner or operator shall also be required to keep copies of the recorded temperature for the area containing the facility components for the beginning, middle, and end of each workday for any period during which wetting operations were suspended due to freezing temperatures.

7.3 The owner or operator shall make available upon request by the Department during a site visit the following:

(A) A copy of the survey, including results of bulk sample analysis, air monitoring data, and

(B) A copy of the NOI or any revised NOI sent in compliance with this regulation and the attached order of any State or local government official ordering the demolition of a facility due to structural unsoundness and danger of imminent collapse if applicable.

7.4 Copies of all items listed in 7.1 and 7.2 shall be kept by the operator for a minimum of 2 years.

SECTION 8 - WORK PROCEDURES - APPLICABILITY

8.1 Asbestos demolition, renovation projects, or response actions which involve the removal of greater than a SSSD or a minor episode of RACM shall be conducted by persons

licensed or certified in accordance with this regulation, or may be conducted by permanent employees of the facility owner, provided such permanent employees have been trained and certified for asbestos abatement in accordance with these regulations.

SECTION 9 - GENERAL WORK PROCEDURES

Each owner or operator of (1) all demolitions and (2) all renovations involving projects of at least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or at least 1 cubic meter (or 35 cubic feet) where the length could not be measured previously shall comply with the following work procedures.

9.1 Generally, the owner or operator of a demolition, renovation, or response action to whom this regulation applies shall remove all RACM from a facility before being demolished or renovated or any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. If a facility is demolished by intentional burning, all RACM including category I and category II nonfriable ACM must be removed in accordance with this regulation before burning.

9.2 The owner or operator need not remove ACM before demolition if:

(A) It is category I nonfriable ACM that is not in poor condition and is not friable;

(B) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition;

(C) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed; or

(D) It is category II nonfriable asbestos-containing material and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.

9.3 The owner or operator shall ensure that no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless one **Contractor/supervisor** who is trained and meets all certification requirements of this regulation is present during all such activities.

9.4 When a facility component that contains, is covered with, or is coated with RACM is taken out from a facility as a unit or in sections, the owner or operator shall:

(A) Adequately wet RACM exposed during cutting and disjointing operations; and

(B) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.

9.5 When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.

9.6 In renovation operations, wetting is not required if:

(A) The owner or operator has obtained prior written approval from the Director based upon a written application that wetting to comply with this regulation would unavoidably damage equipment or present a safety hazard; and

(B) The owner or operator uses one of the following emission control methods:

(i) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air. The owner or operator may alternatively use air cleaning and shall for fabric collection devices installed after January 10, 1989, provide for easy inspection for faulty bags. After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Director determines a fabric filter is not feasible, the Director may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (or 40 inches water gage pressure), or use a HEPA filter that is certified to be at least 99.97 percent efficient for .3 micron particles. The Director may authorize the use of filtering equipment other than described in 9.6 if the owner or operator demonstrates to the Director's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material. A copy of any authorization from the Director must be retained at the site.

(ii) A glove-bag system designed and operated to contain particulate asbestos material produced by the stripping of the asbestos materials.

(iii) Leak-tight wrapping to contain all RACM prior to dismantlement.

9.7 The owner or operator shall ensure that clearance air monitoring shall be conducted inside containment after the completion of any renovation, demolition, or asbestos response action involving friable ACBM for which containment was utilized and which involved projects greater than 80 linear meters (260 linear feet) on pipes or at least 15 square

meters (160 square feet), or at least 1 cubic meter (35 cubic feet) where the length could not be measured previously.

(A) The owner or operator shall ensure that such sampling is conducted by a person who has met the certification requirements of this regulation for the **Contractor/supervisor** and **Air Monitoring** disciplines as provided in this regulation.

(B) The owner or operator shall ensure that sampling analysis is conducted by a laboratory which, for PCM analysis, uses NIOSH method 7400. For TEM analysis, the laboratory must be approved by the National Institute of Standards and Technology National Voluntary Laboratory Acccreditation Program (NVLAP).

(C) The owner or operator shall ensure that aggressive air sampling shall be conducted after removal and cleanup activities have been completed to determine the final clearance level.

(i) Aggressive sampling results indicate an air fiber count of .01 f/cc or less when using PCM; or

(ii) If TEM is used, an arithmetic mean of less than or equal to 70s/mm², or a Z-test result that is less than or equal to 1.65.

(D) If the aggressive air sampling analysis reveals an airborne fiber count greater than 0.01 f/cc (or 70 s/mm² or Z-test of 1.65) then the area shall be cleaned again, followed by additional aggressive air sampling. This process shall continue until the required air level has been achieved.

(E) Aggressive clearance sample collection shall be done in accordance with the requirements of 40 CFR Part 763, Subpart E, Appendix A(II)(B)(17) (AHERA).

The Department recommends clearance air monitoring be performed by a certified **Air Monitor** who is not an agent of the licensed asbestos firm conducting the demolition, renovation, or asbestos activities.

SECTION 10 - DISPOSAL PREPARATION

10.1 The owner or operator shall dispose of RACM from all demolitions and all renovations involving projects of at least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or at least 1 cubic meter (or

35 cubic feet) where the length could not be measured previously in a manner to comply with the following work procedures:

(A) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections as provided in this regulation, it shall be stripped or contained in leak-tight wrapping except for large facility components as provided in this section. If stripped either:

(i) Adequately wet the RACM during stripping; or

(ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated as provided in Section 9.6 of this regulation.

(B) For large facility components such as reactor vessels, large tanks, and steam generators, the RACM is not required to be stripped if:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing the RACM;

(ii) The component is encased in a leak-tight wrapping; and

(iii) During all loading and unloading operations and during storage, the leak-tight wrapping is labeled according to the following:

Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of the waste so that the signs are visible. The markings must be displayed in such a manner and location that a person can easily read the legend; conform to the requirements for 51 cm X 36 cm (20 in X 14 in) upright format signs specified in 29 CFR 1910.145 (d) (4) and this paragraph; and display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend:
DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
Authorized Personnel Only

Notation:
2.5 cm (1 inch) Sans Serif, Gothic or Block

2.5 cm (1 inch) Sans Serif, Gothic or Block
1.9 cm (3/4 inch) Sans Serif, Gothic or Block
14 Point Gothic

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(C) For all RACM, including material that has been removed or stripped:

(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with this regulation; and

(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material;

(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections;

(iv) RACM contained in leak-tight wrapping that has been removed in accordance with the following provisions of this regulation need not be wetted:

(a) The owner or operator is complying with the provisions of 10.1(A)(ii) as set out in this regulation;

(b) The owner or operator has received prior written approval from the Director to not wet because of resulting equipment damage or safety hazard and is using an alternate method approved in writing by the Director as set out in this regulation; or

(c) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible when the temperature at the point of wetting is below 0 degrees C (or 32 degrees F); and for periods during when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Director during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.

SECTION 11 - DISPOSAL

11.1 Each owner or operator of a facility shall dispose of RACM from all demolitions and all renovations involving projects of at least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or at least 1 cubic meter (or 35 cubic feet) where the length could not be measured previously in a manner to comply with the following work procedures. As applied to demolitions and renovations, the requirements of this section do not apply to category I nonfriable ACM waste and category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.

(A) Discharge no visible emissions to the outside air during the collection process (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the following emission control and waste treatment methods specified in this section:

(i) Adequately wet asbestos-containing waste material as follows:

(a) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material;

(b) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified in this regulation to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air;

(c) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping;

(d) Label the containers or wrapped materials specified in this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(2) or 1926.58(k)(2)(iii). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible; and

(e) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated and comply with all applicable DOT requirements.

(ii) Process asbestos-containing waste material into nonfriable forms as follows:

(a) Form all asbestos-containing waste material into nonfriable pellets or other shapes; and

(b) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method provided for in this regulation to clean emissions containing particulate asbestos material before they escape to or are vented to the outside air.

(iii) For facilities demolished where the RACM is not removed prior to demolition as provided in this regulation, adequately wet asbestos-containing material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.

(iv) Use an alternative emission control and waste treatment method that has received prior approval by the Director as provided in this regulation.

(B) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at a disposal site approved by a State and that meets the requirements of NESHAP or an EPA approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of 40 CFR Part 61.

(C) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that signs are visible. The markings must conform to the requirements specified in 10.1(B)(iii) of this regulation.

(D) For all asbestos-containing waste material transported off the facility site:

(i) Maintain waste shipment records, using a form including the following information:

(a) The name, address, and telephone number of the waste generator;
(b) The name and address of the ADPC&E Asbestos Section;
(c) The approximate quantity in cubic meters (or cubic yards);
(d) The name and telephone number of the disposal site operator;
(e) The name and physical site location of the disposal site;

(f) The date transported;
(g) The name, address, and telephone number of the transporter(s);
(h) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transportation by highway according to applicable international and government regulations.

(ii) Provide a copy of the waste shipment record, described in this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site. (See form in Appendix A.)

(iii) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or owner or operator of the designated disposal site to determine the status of the waste shipment.

(iv) Report in writing to the Department if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(a) A copy of the waste shipment record for which a confirmation of delivery was not received; and
(b) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts;

(v) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years;

(vi) Furnish upon request, and make available for inspection by the Director, all records required to be kept by this regulation.

11.2 Standards for waste disposal sites:

(A) Each owner or operator of an active waste disposal site that received asbestos-containing waste material from a source covered by this regulation shall meet the following requirements:

(i) Rather than meet the no-visible emission requirement of this regulation, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

(a) Be covered with at least 15 centimeters (or 6 inches) of compacted nonasbestos-containing material; or

(b) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturers to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Director. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent;

(ii) Rather than meet the no-visible emission requirement of this section, use an alternative emissions control method that has received prior written approval by the Director demonstrating the following criteria:

(a) The alternative method will control asbestos emissions equivalent to currently required methods;

(b) The suitability of the alternative method for the intended application;

(c) The alternative method will not violate other regulations; and

(d) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.

(B) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(i) Maintain waste shipment records using a form with the following information:

(a) The name, address, and telephone number of the waste generator;

(b) The name and address and telephone number of the transporter(s);

(c) The quantity of the asbestos-containing waste material in cubic meters (cubic yards);

(d) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the Department official responsible for administering the Asbestos program for the waste

generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report; and

(e) The date of the receipt.

(ii) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(iii) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(iv) Furnish upon request and make available during normal business hours for inspection by the Department all records required under this section.

(v) Retain a copy of all records and reports required by this section for at least 2 years.

(vi) Maintain until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(vii) Upon closure of a facility, submit to the Department a copy of records of asbestos waste disposal locations and quantities.

(C) The Department shall be notified in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Department at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(i) Scheduled starting and completion dates;

(ii) Reason for disturbing the waste;

(iii) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material (if deemed necessary, the Department may require changes in the emission control procedures to be used); and

(iv) Location of any temporary storage site and the final disposal site.

(D) Within 60 days of a site becoming inactive and after the effective date of this regulation, a notation shall be recorded, in accordance with State law, on the deed to the facility property and on any other instrument that would normally be examined during a title search. This notation will in perpetuity notify any potential purchaser of the property that:

(i) The land has been used for the disposal of asbestos-containing waste material; and

(ii) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in Section 11.2(B)(vi) have been filed with the Department.

SECTION 12 - LICENSES (GENERAL)

12.1 Licenses shall be issued to **Asbestos Abatement Contractors, Asbestos Abatement Consultants** and **Training providers**. Such licenses shall be issued for a period not to exceed 12 months.

12.2 Any **Asbestos Abatement Contractor, Asbestos Abatement Consultant** or **Training provider** may apply for the renewal of a license issued by the Department. Such renewals are valid for a period not to exceed 12 months.

12.3 The Department shall assess an annual fee for all initial licenses and for all renewals of licenses. The amounts of such fees, listed in Section 22 of this regulation, shall be determined by the Department.

12.4 Persons or business entities who do not maintain offices in the state of Arkansas and who perform work in this state as an **Asbestos Abatement Contractor, Asbestos Abatement Consultant** or **Training provider**, as defined in this regulation, are subject to the licensing and certification requirements of the Act and this regulation.

12.5 State and federal governments (and subdivisions thereof) and permanent employees of a school district shall be exempt from the licensing requirements of Section 13 of this regulation.

12.6 The permanent employee described in 12.5 shall:

(A) Be trained in the proper disciplines in accordance with ASHARA and certified with the Department, and

(B) Conduct only asbestos-related activities which are associated with the performance of that person's permanent employment. If the employee conducts asbestos-related activities on any other buildings or structures not associated with that person's permanent employment, then the appropriate license fee must be paid.

SECTION 13 - ASBESTOS ABATEMENT CONSULTANTS AND CONTRACTORS LICENSES

13.1 Application for licenses or renewals shall be made to the Department and shall include the following:

(A) A completed application on a form provided by the Department;

(B) Annual **Asbestos Abatement Consultant** or **Asbestos Abatement Contractor** license fee as described in Section 22 of this regulation;

(C) Proof that the **Asbestos Abatement Contractor** has at least one supervisor who qualifies as a **Contractor/supervisor** as determined by this regulation and who has been certified by the Department in the appropriate disciplines;

(D) A completed Disclosure Statement on a form provided by the Department;

(E) Proof of liability insurance coverage which meets the following requirements:

(i) The certificate of insurance must demonstrate professional liability insurance coverage and shall contain a rider requiring that the insurer shall notify the Department in writing at least 30 days prior to any substantive changes made to the policy including, but not limited to, termination or failure to renew, or any reduction of the monetary limits of coverage;

(ii) The certificate of insurance must be produced by an Arkansas Resident Local Agent licensed by the Insurance Commissioner of the State of Arkansas.

SECTION 14 - TRAINING PROVIDER LICENSES

14.1 Application for licenses or renewals of approved **Training Providers** shall be made to the Department and shall include the following:

(A) A completed application on a form provided by the Department;

(B) Enclosure of the annual training provider fee described in Section 22 of this regulation;

(C) A statement certifying that each course complies with the requirements of the 40 CFR Part 763, Appendix C to Subpart E (MAP);

(D) Resumes of all instructors;

(E) Sample course agendas; and

(F) A completed training provider disclosure form provided by the Department. Governmental agencies and public institutions of higher learning are exempted from this requirement.

14.2 Training providers who have not received the approval described in Section 14.1(C) of this Section shall also submit the following:

(A) The course provider's name, address and telephone number;

(B) A list of any other states that currently approve the training course;

(C) The course curriculum;

(D) A letter from the provider of the training course that clearly indicates how the course meets the MAP and the requirements of this regulation, specifically addressing the following:

(i) Length of training days in 8-hour increments;

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

(iii) Examination (length, format, and minimum passing score); and

(iv) Topics covered in the course;

(E) A copy of all course materials (including student manuals, instructor notebooks, handbooks and any other printed materials);

(F) A description of the training methods to be used to present each topic (such as lecture, video, or hands-on);

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

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

(I) A description of, and an example of, the certificates issued to students who attend and successfully complete the course by passing the required written examination. Each certificate shall include the following information:

(i) A unique certificate number;

(ii) The name of the student;

(iii) The discipline of the training course completed;

(iv) The dates of the training course;

(v) An expiration date of one (1) year after the date upon which the person successfully completed the course and the examination;

(vi) The name, address, and telephone number of the training provider that issued the certificate; and

(vii) A statement that the person receiving the certificate has completed the required training for asbestos accreditation under the provisions of TSCA Title II.

14.3 The following minimum information is required for approval of refresher training courses by the State of Arkansas.

(A) The length of training in half-days or days;

(B) The topics covered in the course;

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

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

(E) A description of and an example of the numbered certificates issued to students who complete the refresher course. Certificates shall contain the same information as described in 14.2 of this regulation.

SECTION 15 - CERTIFICATION/ACCREDITATION

15.1 Any person seeking certification in the discipline of **Air Monitor, Contractor/supervisor, Inspector, Management Planner, Project Designer, and Worker** shall provide the Department with the following:

(A) The certificate issued by the training provider as proof of successful completion of the applicable training course which has been approved under the provisions of 40 CFR Part 763, Appendix C to Subpart E (MAP) and subsequent revisions (photocopies will not be accepted without prior approval from the Department);

(B) A completed application on a form provided by the Department;

(C) The applicable annual certification fee listed in Section 22 of this regulation.

15.2 Certified **Air Monitors, Contractor/supervisors, Inspectors, Management Planners, Project Designers, and Workers** shall work under the supervision of a facility or firm licensed pursuant to the provisions of this regulation.

15.3 Department certificates will be issued for one year from date of training.

SECTION 16 - RENEWAL OF LICENSES AND CERTIFICATIONS

16.1 **Asbestos Abatement Contractors** and **Asbestos Abatement Consultants** shall submit the following in order to renew their licenses:

(A) Renewal application on a form provided by the Department;

(B) Proof of insurance as described in Section 13.1 (E) of this regulation;

(C) Renewal fee as described in Section 22 of this regulation.

16.2 **Asbestos Training Providers** shall submit the following in order to renew their licenses:

(A) Renewal application on a form provided by the Department; and

(B) Renewal fee as described in Section 22 of this regulation.

16.3 **Air Monitors, Contractor/supervisors, Inspectors, Management Planners, Project Designers, and Workers** shall submit the following in order to renew their certification status:

(A) An official certificate from an approved asbestos refresher course conducted by an approved asbestos training provider for the applicable course;

(B) An official certificate of training for the 2-hour Arkansas Regulation Course if the refresher course was not provided by an Arkansas licensed asbestos training course;

(C) **Air Monitors** who have been certified under the provisions that they are a Certified Industrial Hygenist shall also submit proof of their current certification status.

(D) An application on a form provided by the Department; and

(E) Renewal fee as described in Section 22 of this regulation.

SECTION 17 - LAPSED LICENSES OR CERTIFICATES

17.1 Any license or certificate holder who allows a license or certificate to expire shall not be allowed to conduct asbestos-related work in Arkansas until all renewal requirements have been met.

17.2 Any license or certificate holder may complete the appropriate refresher course within 12 months of the expiration of the license or certificate without being required to comply with the initial training requirements.

SECTION 18 - TRAINING

18.1 Formal training for licensing and certification, which is intended to meet the training requirements of the Act and regulation, may be conducted by any educational institution, business entity, or individual that is approved by the Department.

18.2 Each training course for each discipline taught shall meet the requirements of the MAP and this regulation including the following minimum requirements:

(A) For **Workers**:

(i) Course length must be a minimum of 32 hours (four 8-hour days) including lectures, demonstrations, instruction on individual respirator fit-testing, and course review with a minimum of 14 hours devoted to hands-on instruction; and

(ii) A closed-book written exam of at least 50 multiple-choice questions and a minimum passing score of at least 70 percent.

(B) For **Inspectors**:

(i) Course length must be a minimum of 24 hours (three 8-hour days) including lectures, demonstrations, instruction on individual respirator fit-testing, course review and a minimum of 4 hours of hands-on instruction; and

(ii) A closed-book written exam of at least 50 multiple-choice questions and a minimum passing score of 70 percent.

(C) For **Management Planners:**

(i) All persons seeking accreditation as **Management Planners** shall complete a 24-hour (three 8-hour days) **Inspector** training course as outlined in this section and a 16-hour (two 8-hour days) **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; and

(ii) A closed-book written exam of at least 50 multiple choice questions with a minimum passing score of 70 percent.

(D) For **Project Designers**:

(i) Course length must be a minimum of 24 hours (three 8-hour days) including lectures, demonstrations, a field trip, course review and a written examination; and

(ii) A closed-book written exam of at least 100 multiple choice questions and a minimum passing score of at least 70 percent.

(E) For **Contractor/supervisors:**

(i) Course length must be a minimum of 40 hours (five 8-hour days) including lectures, demonstrations, and instruction on individual respirator fit-testing, course review, and a written examination with at least 14 hours of hands-on training; and

(ii) A closed-book written exam of 100 multiple choice questions with a minimum passing score of 70 percent.

(F) For **Air Monitors:**

(i) All persons seeking accreditation as an **Air Monitor** shall complete a 40-hour (five 8-hour days) **Contractor/supervisor** training course as outlined in this section and an **Air Monitoring** training course; unless, the applicant possesses certification as a Certified Industrial Hygienist, then current Certified Industrial Hygienist certification will replace the requirement of the **Air Monitoring** training course. **Air Monitors** are required to take the **Contractor/supervisor** course and the applicable refresher course. Possession of current and valid **Contractor/supervisor** accreditation shall be a prerequisite for admission to the **Air Monitoring** training course. Course length must be a minimum of 12 hours (one and one-half 8-hour days) including lectures, demonstrations, instruction, course review, and a written examination with at least 4 hours of hands-on training; and.

(ii) A closed-book written exam of 50 multiple choice questions with a minimum passing score of 70 percent.

18.3 Each discipline shall have its own separate and distinct training course and shall not be combined with any other training courses.

18.4 A member of the training provider staff must be present at all times during the written examination.

18.5 Provisions shall be made to allow a representative of the Department to attend one or more presentations of any course for which a training license has been issued, without payment of any associated fees. This attendance shall be for the purpose of determining compliance with this regulation and the correctness of the information being presented. The Director may revoke, suspend, or deny the application of any training license on the basis of findings resulting from this attendance.

18.6 Individuals who have successfully completed approved training courses outside the state of Arkansas shall attend a 2-hour awareness training course to learn about Arkansas asbestos regulatory requirements and policies. Such awareness training shall be conducted by a training provider which has been approved and licensed in accordance with this regulation.

18.7 All approved providers of accredited asbestos training courses must comply with the following minimum record keeping requirements:

(A) 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.

(B) Instructor qualifications. A training provider must retain copies of all instructors' resumes and the documents approving each instructor issued by either EPA or the Department. Instructors must be approved by either EPA or the Department before teaching courses for accreditation purposes. A training provider must notify EPA or the Department, 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.

(C) 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 supervised 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.

(D) Accreditation certificates. The training providers 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 shall maintain the records in a manner that allows verification by telephone of the required information.

(E) Verification of certificate information. Providers of refresher training courses shall confirm that their students possess valid accreditation before granting course admission. Training providers offering the initial **Management Planner** training course shall verify that students have met the prerequisite of possessing valid **Inspector** accreditation at the time of course admission.

(F) Records retention and access. The training provider shall maintain all required records for a minimum of 3 years.

(G) The training provider must allow reasonable access to all records required by this regulation and the MAP for the approval of asbestos training providers, to both the Department and the U.S. EPA, on request.

(H) If a licensed training provider ceases to conduct training, the training provider shall notify the Department and allow the opportunity for the Department to take possession of that provider's asbestos training records.

SECTION 19 - TRAINING COURSE CONTENT

19.1 The **Worker** training course shall adequately address the following topics:

(A) Physical characteristics of asbestos.

(i) Identification of asbestos,

(ii) Aerodynamic characteristics,

(iii) Typical uses,

(iv) Physical appearance, and

(v) Summary of abatement control options.

(B) Potential health effects related to asbestos exposure.

(i) Nature of asbestos-related disease;

(ii) Routes of exposure;

(iii) Dose-response relationships and the lack of a safe exposure level;

(iv) Synergistic effect between cigarette smoking and asbestos exposure;

(v) Latency periods for asbestos-related diseases; and

(vi) Discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.

(C) Employee personal protective equipment.

(i) Classes and characteristics of respirator types;

(ii) Limitations of respirators;

(iii) Proper selection and inspection;

(iv) Donning, use, maintenance and storage procedures for respirators;

(v) Methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks);

(vi) Qualitative and quantitative fit testing procedures;

(vii) Variability between field and laboratory protection;

(viii) Factors that alter respiratory fit (e.g., facial hair);

(ix) Components of a proper respiratory protection program;

(x) Selection and use of personal protective clothing;

(xi) Use, storage, and handling of nondisposable clothing; and

(xii) Regulations covering personal protective equipment.

(D) State-of-the-art work practices.

(i) Proper work practices for asbestos abatement activities, including descriptions of proper construction;

(ii) Maintenance of barriers and decontamination enclosure systems;

(iii) Positioning of warning signs;

(iv) Lock-out of electrical and ventilation systems;

(v) Proper working techniques for minimizing fiber release;

(vi) Use of wet methods;

(vii) Use of negative pressure exhaust ventilation equipment;

(viii) Use of HEPA vacuums;

(ix) Proper cleanup and disposal procedures;

(x) Work practices for removal, encapsulation, enclosure, and repair of ACM;

(xi) Emergency procedures for sudden releases;

(xii) Potential exposure situations;

(xiii) Transport and disposal procedures; and

(xiv) Recommended and prohibited work practices.

(E) Personal hygiene.

(i) Entry and exit procedures for the work area;

(ii) Use of showers;

(iii) Avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area; and

(iv) Potential exposures, such as family exposure.

(F) Additional safety hazards - Hazards encountered during abatement activities and how to deal with them, including:

(i) Electrical hazards;

(ii) Heat stress;

(iii) Air contaminants other than asbestos;

(iv) Fire and explosion hazards;

(v) Scaffold and ladder hazard;

(vi) Slips, trips, and falls; and

(vii) Confined spaces.

(G) Medical monitoring. OSHA and EPA Worker Protection Rule requirements for physical examinations, including:

(i) Pulmonary function test,

(ii) Chest x-rays, and

(iii) Medical history for each employee.

(H) Air monitoring. Procedures to determine airborne concentrations of asbestos fibers, including:

(i) Descriptions of aggressive air sampling, sampling equipment and methods;

(ii) Sampling equipment and methods;

(iii) Reasons for air monitoring;

(iv) Types of samples; and

(v) Interpretation of results.

(I) Relevant Federal, Arkansas, 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.

19.2 The **Contractor/supervisor** training course shall adequately address the following topics:

(A) The physical characteristics of asbestos and ACM.

(i) Identification of asbestos,

(ii) Aerodynamic characteristics,

(iii) Typical uses,

(iv) Physical appearance,

(v) Review of hazard assessment considerations, and

(vi) Summary of abatement control options.

(B) Potential health effects related to asbestos exposure.

(i) Nature of asbestos-related diseases,

(ii) Routes of exposure,

(iii) Dose-response relationships and the lack of a safe exposure level,

(iv) Synergism between cigarette smoking and asbestos exposure, and

(v) Latency period for diseases.

(C) Employee personal protective equipment.

(i) Classes and characteristics of respirator types;

(ii) Limitations of respirators;

(iii) Proper selection and inspection;

(iv) Donning, use, maintenance and storage procedures for respirators;

(v) Methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks);

(vi) Qualitative and quantitative fit testing procedures;

(vii) Variability between field and laboratory protection factors that alter respiratory fit (e. g., facial hair);

(viii) Components of a proper respiratory protection program;

(ix) Selection and use of personal protective clothing and use of personal protective clothing;

(x) Use, storage, and handling of nondisposable clothing; and

(xi) Regulations covering personal protective equipment.

(D) State-of-the-art work practices. Proper work practices for asbestos abatement activities including:

(i) Descriptions of proper construction and maintenance of barriers and decontamination enclosure systems;

(ii) Positioning of warning signs;

(iii) Lock-out of electrical and ventilation systems;

(iv) Proper working techniques for minimizing fiber release;

(v) Use of wet methods;

(vi) Use of negative pressure exhaust ventilation equipment;

(vii) Use of HEPA vacuums and proper cleanup and disposal procedure;

(viii) Work practices for removal, encapsulation, enclosure, and repair of ACM;

(ix) Emergency procedures for unplanned releases;

(x) Potential exposure situations;

(xi) Transport and disposal procedures and recommended and prohibited work practices; and

(xii) New abatement-related techniques and methodologies may be discussed.

(E) Personal hygiene.

(i) Entry and exit procedures for the work area;

(ii) Use of showers;

(iii) Avoidance of eating, drinking, smoking, and chewing (gum or tobacco) in the work area; and

(iv) 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;

(i) Electrical hazards;

(ii) Heat stress;

(iii) Air contaminants other than asbestos;

(iv) Fire and explosion hazards;

(v) Scaffold and ladder hazards;

(vi) Slips, trips, and falls; and

(vii) Confined spaces.

(G) Medical monitoring. OSHA and EPA Worker Protection Rule requirements for physical examinations including:

(i) Pulmonary function test,

(ii) Chest X-rays, and

(iii) Medical history for each employee.

(H) Air monitoring. Procedures to determine airborne concentrations of asbestos fibers including:

(i) Descriptions of aggressive air sampling,

(ii) Sampling equipment and methods,

(iii) Reasons for air monitoring,

(iv) Types of samples, and

(v) Interpretation of results.

(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 respiratory protection (29 CFR 1910.134) and subsequent changes;

(iv) OSHA Asbestos Construction Standard (29 CFR 1910.1101) or any subsequent revisions; and

(v) EPA Worker Protection Rule (40 CFR Part 763, Subpart G) or any subsequent revisions.

(J) Respiratory Protection Programs and Medical Monitoring Programs.

(K) Insurance and liability issues.

(i) Contractor issues,

(ii) Worker's compensation coverage and exclusions,

(iii) Third-party liabilities and defenses, and

(iv) Insurance coverage and exclusions.

(L) Record keeping for asbestos abatement projects.

(i) Records required by Federal, Arkansas, and local regulations; and

(ii) 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.

19.3 The **Inspector** training course shall adequately address the following topics:

(A) Background information on asbestos.

(i) Identification of asbestos and examples,

(ii) Discussion of the uses and locations of asbestos in buildings, and

(iii) Physical appearance of asbestos.

(B) Potential health effects related to asbestos exposure.

(i) Nature of asbestos-related diseases;

(ii) Routes of exposure;

(iii) Dose-response relationships and the lack of a safe exposure level;

(iv) Synergistic effect between cigarette smoking and asbestos exposure;

(v) Latency periods for asbestos-related diseases; and

(vi) Discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma and cancers of other organs.

(C) Functions/qualifications and role of **Inspectors.**

(i) Discussions of prior experience and qualifications for **Inspectors** and management planners,

(ii) Discussions of the functions of an accredited **Inspector** as compared to those of an accredited **Management Planner**, and

(iii) Discussion of inspection process including inventory of ACM and physical assessment.

(D) Legal liabilities and defenses.

(i) Responsibilities of the **Inspector** and **Management Planner**,

(ii) Discussion of comprehensive general liability policies,

(iii) Claims-made and occurrence-based policies,

(iv) Environmental and pollution liability policy clauses,

(v) State liability insurance requirements, and

(vi) Bonding and the relationship of insurance availability to bond availability.

(E) Understanding building systems. The interrelationship between building systems including:

(i) Overview of common building physical plan layout;

(ii) Heating, ventilation, and air conditioning (HVAC) system types;

(iii) Physical organization, and where asbestos is found on HVAC components;

(iv) Building mechanical systems, their types and organization, and where to look for asbestos on such systems;

(v) Inspecting electrical systems, including appropriate safety precautions; and

(vi) Reading blueprints and as-built drawings.

(F) Public/employee/building occupant relations.

(i) Notifying employee organizations about the inspection;

(ii) Signs to warn building occupants;

(iii) Tact in dealing with occupants and the press;

(iv) Scheduling of inspections to minimize disruptions; and

(v) Education of building occupants about actions being taken.

(G) Pre-inspection planning and review of previous inspection records.

(i) Scheduling the inspection and obtaining access;

(ii) Building record review;

(iii) Identification of probable homogeneous areas from blueprints or as-built drawings;

(iv) Consultation with maintenance or building personnel;

(v) Review of previous inspection, sampling, and abatement records of a building; and

(vi) Role of the **Inspector** in exclusions for previously performed inspections.

(H) Inspecting for friable and nonfriable ACM and assessing the condition of friable ACM.

(i) Procedures to follow in conducting visual inspections for friable and nonfriable ACM;

(ii) Types of building materials that may contain asbestos;

(iii) Touching materials to determine friability;

(iv) Open return air plenums and their importance in HVAC systems;

(v) Assessing damage, significant damage, potential damage, and potential significant damage;

(vi) Amount of suspected ACM, both in total quantity and as a percentage of the total area;

(vii) Type of damage;

(viii) Accessibility;

(ix) Material's potential for disturbance;

(x) Known or suspected causes of damage or significant damage; and

(xi) Deterioration as assessment factors.

(I) Bulk sampling/documentation of asbestos.

(i) Detailed discussion of the "Simplified Sampling Scheme for Friable Surfacing Materials (EPA 560/5-85-03 0ctober 1985)" and any subsequent revisions,

(ii) Techniques to ensure sampling in a randomly distributed manner for other than friable surfacing materials,

(iii) Sampling of nonfriable materials,

(iv) Techniques for bulk sampling,

(v) **Inspector** sampling and repair equipment,

(vi) Patching or repair of damage from sampling

(vii) Discussion of polarized light microscopy,

(viii) Choosing an accredited laboratory to analyze bulk samples, and

(ix) Quality control and quality assurance procedures.

The Department recommends 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.

(i) Classes and characteristics of respirator types;

(ii) Limitations of respirators;

(iii) Proper selection and inspection;

(iv) Donning, use, maintenance, and storage procedures for respirators;

(v) Methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks);

(vi) Qualitative and quantitative fit testing procedures;

(vii) Variability between field and laboratory protection factors that alter respiratory fit (e.g,. facial hair);

(viii) Components of a proper respiratory protection program;

(ix) Selection and use of personal protective clothing; and

(x) Use, storage, and handling of nondisposable clothing.

(K) Record keeping and writing the inspection report.

(i) Labeling of samples and keying sample identification to sampling location;

(ii) Recommendations on sample labeling;

(iii) Detailing of ACM inventory;

(iv) Photographs of selected sampling areas and examples of ACM condition; and

(v) Information required for school buildings under TSCA Title II, Section 203 (i)(1).

(L) Regulatory review. The following topics should be covered:

(i) NESHAP (40 CFR Part 61, Subparts A and M); EPA Worker Protection Rule (40 CFR Part 763, Subpart G);

(ii) OSHA Asbestos Construction Standard (29 CFR 1910.1101);

(iii) OSHA respirator requirements (29 CFR 1910.134); The Friable Asbestos in Schools Rule (40 CFR Part 763, Subpart F); and

(iv) 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:

(i) Walk-through inspection,

(ii) On-site discussion about information gathering and the determination of sampling locations,

(iii) On-site practice in physical assessment, and

(iv) Classroom discussion of field exercise.

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

19.4 The **Management Planner** training course shall adequately address the following topics:

(A) Course overview. The role and responsibilities of the **Management Planner:**

(i) Operations and maintenance programs,

(ii) Setting work priorities, and

(iii) Protection of building occupants.

(B) Evaluation/interpretation of survey results.

(i) 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,

(ii) Interpretation of field data and laboratory results, and

(iii) Comparison of field inspector's data sheet with laboratory results and site survey.

(C) Hazard assessment.

(i) Amplification of the difference between physical assessment and hazard assessment;

(ii) Role of the **Management Planner** in hazard assessment;

(iii) Explanation of significant damage, potential damage, and potential significant damage;

(iv) Use of a description (or decision tree) code for assessment of ACM;

(vii) Assessment of friable ACM; and

(viii) Relationship of accessibility, vibration sources, use of adjoining space and air plenums and other factors to hazard assessment.

(D) Legal implications.

(i) Liability;

(ii) Insurance issues specific to planners;

(iii) Liabilities associated with interim control measures, in-house maintenance, repair and removal; and

(iv) Use of results from previously performed inspections.

(E) Evaluation and selection of control options.

(i) Overview of encapsulation,

(ii) Enclosure,

(iii) Interim operations and maintenance and removal,

(iv) Advantages and disadvantages of each method,

(v) Response actions described via a decision tree or other appropriate method,

(vi) Work practices for each response action,

(vii) Staging and prioritizing of work in both vacant and occupied buildings, and

(viii) Need for containment barriers and decontamination in response actions.

(F) Role of other professionals.

(i) Use of industrial hygienists, engineers, and architects in developing technical specifications for response actions;

(ii) Any requirements that may exist for architect sign-off of plans; and

(iii) Team approach to design of high-quality job specifications.

(G) Developing an operations and maintenance (O & M) plan.

(i) Purpose of the plan;

(ii) Discussion of applicable EPA guidance documents;

(iii) What actions should be taken by custodial staff; proper cleaning procedures;

(iv) Steam cleaning and HEPA vacuuming;

(v) Reducing disturbance of ACM;

(vi) Scheduling O & M for off-hours;

(vii) Rescheduling or canceling renovation in areas with ACM;

(viii) Boiler room maintenance;

(ix) Disposal of ACM;

(x) In-house procedures for ACM-bridging and penetrating encapsulant;

(xi) Pipe fittings, metal sleeves;

(xii) Polyvinyl chloride (PVC), canvas, and wet wraps;

(xiii) Muslin with straps, fiber mesh cloth;

(xiv) Mineral wool and insulating cement;

(xv) Discussion of employee protection programs and staff training; and

(xvi) Case study in developing an O & M plan (development, implementation process, and problems that have been experienced).

(H) Regulatory review. Focusing on:

(i) The OSHA Asbestos Construction Standard found at 29 CFR 1910.1101 and subsequent revisions;

(ii) NESHAP found at 40 CFR Part 61, Subpart A (General Provisions) and M (National Emission Standard for Asbestos);

(iii) EPA Worker Protection Rule found at 40 CFR Part 763, Subpart G;

(iv) TSCA Title II; and

(v) Applicable Arkansas regulations.

(I) Record keeping of the **Management Planner**.

(i) Use of field inspector's data sheet along with laboratory results,

(ii) Ongoing record keeping as a means to track asbestos disturbance, and

(iii) Procedures for record keeping.

(J) Assembling and submitting the management plan.

(i) Plan requirements for schools in TSCA Title II Section 203(I)(1), and

(ii) The management plan as a planning tool.

(K) Financing abatement actions.

(i) Economic analysis and cost estimates,

(ii) Development of cost estimates,

(iii) Present costs of abatement versus future operation and maintenance cost, and

(iv) Asbestos School Hazard Abatement Act grants and loans.

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

19.5 The **Project Designer** training course shall adequately address the following topics:

(A) Background information on asbestos.

(i) Identification of asbestos,

(ii) Examples and discussion of the uses and locations of asbestos in buildings, and

(iii) Physical appearance of asbestos.

(B) Potential health effects related to asbestos exposure.

(i) Nature of asbestos-related disease and routes of exposure;

(ii) Dose-response relationships and the lack of a safe exposure level;

(iii) Synergistic effect between cigarette smoking and asbestos exposure;

(iv) Latency periods for asbestos-related diseases; and

(v) Discussion of the relationship of asbestos exposure to asbestosis, lung cancer, mesothelioma, and cancers of other organs.

(C) Overview of abatement construction projects.

(i) Abatement as a portion of a renovation project, and

(ii) OSHA requirements for notification of other contractors on a multi-employer site (29 CFR 1910.1101).

(D) Safety system design specifications.

(i) Design, construction and maintenance of containment barriers and decontamination enclosure systems;

(ii) Positioning of warning signs;

(iii) Electrical and ventilation system lockout;

(iv) Proper working techniques for minimizing fiber release;

(v) Entry and exit procedures for the work area;

(vi) Use of wet methods;

(vii) Proper techniques for initial cleaning;

(viii) Use of negative-pressure exhaust ventilation equipment;

(ix) Use of HEPA vacuums;

(x) Proper cleanup and disposal of asbestos;

(xi) Work practices as they apply to encapsulation, enclosure, and repair; and

(xii) Use of glovebags and a demonstration of glovebag 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. Including a discussion of rationale for the concept of functional spaces during the walk-through.

(F) Employee personal protective equipment.

(i) Classes and characteristics of respirator types;

(ii) Limitations of respirators;

(iii) Proper selection and inspection;

(iv) Donning, use, maintenance and storage procedures for respirators;

(v) Methods for field testing of the face piece-to-face seal (positive and negative-pressure fit checks);

(vi) Qualitative and quantitative fit testing procedures;

(vii) Variability between field and laboratory protection factors that alter respiratory fit (e.g., facial hair);

(viii) Components of a proper respiratory protection program;

(ix) Selection and use of personal protective clothing;

(x) Use, storage, and handling of nondisposable clothing; and

(xi) Regulations covering personal protective equipment.

(G) Additional safety hazards. Hazards encountered during abatement activities and how to deal with them including:

(i) Electrical hazards,

(ii) Heat stress,

(iii) Contaminants other than asbestos, and

(iv) Fire and explosion hazards,

(H) Fiber aerodynamics and control.

(i) Aerodynamic characteristics of asbestos fibers,

(ii) Importance of proper containment barriers,

(iii) Settling time for asbestos fibers,

(iv) Wet methods in abatement,

(v) Aggressive air monitoring following abatement, and

(vi) Aggressive air movement and negative-pressure exhaust ventilation as a cleanup method.

(I) Designing abatement solutions.

(i) Discussions of removal, enclosure, and encapsulation methods; and

(ii) Asbestos waste disposal.

(J) Final clearance process.

(i) Discussion of the need for a written sampling rationale for aggressive final air clearance,

(ii) Requirements of a complete visual inspection, and

(iii) Relationship of the visual inspection to final air clearance.

(K) Budgeting/cost estimating.

(i) Development of cost estimates,

(ii) Present costs of abatement versus future operation and maintenance costs, and

(iii) Setting priorities of abatement jobs to reduce costs.

(L) Writing abatement specifications.

(i) Preparation of and need for a written project design,

(ii) Means and methods specifications versus performance specifications,

(iii) Design of abatement in occupied buildings,

(iv) Modification of guide specifications for a particular building,

(v) Worker and building occupant health/medical considerations, and

(vi) Replacement of ACM with nonasbestos substitutes.

(M) Preparing abatement drawings.

(i) Significance and need for drawings,

(ii) Use of as-built drawings as base drawings,

(iii) Use of inspection photographs and on-site reports,

(iv) Methods of preparing abatement drawings,

(v) Diagraming containment barriers,

(vi) Relationship of drawings to design specifications, and

(vii) Particular problems related to abatement drawings.

(N) Contract preparation and administration.

(O) Legal/liabilities/defenses.

(i) Insurance considerations;

(ii) Bonding, hold-harmless clauses;

(iii) Use of abatement contractor's liability insurance; and

(iv) Claims-made versus occurrence-based policies.

(P) Replacement of asbestos with asbestos-free substitutes.

(Q) Role of other consultants.

(i) Development of technical specification sections by industrial hygienists or engineers, and

(ii) Multi-disciplinary team approach to abatement design.

(R) Occupied buildings.

(i) Special design procedures required in occupied buildings,

(ii) Education of occupants,

(iii) Extra monitoring recommendations,

(iv) Staging of work to minimize occupancy exposure, and

(v) 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) NESHAP (40 CFR Part 61) Subparts A (General Provisions) and M (National Emission Standard for Asbestos);

(iii) OSHA Respirator Standard found in 29 CFR 1910.134;

(iv) EPA Worker Protection Rule found in 40 CFR Part 763, Subpart G;

(v) OSHA Asbestos Construction Standard found in 29 CFR 1910.1101; and

(vi) OSHA Hazard Communication Standard found in 29 CFR 1910.59.

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

19.6 The **Air Monitoring** training course shall adequately address the following topics:

(A) Generally, types of air monitoring:.

(i) Personal air monitoring,

(ii) Area air monitoring,

(iii) Preclearance air monitoring, and

(iv) Clearance air monitoring;

(B) Purpose and intent of clearance air monitoring;

(C) How to conduct clearance air monitoring;

(D) How to conduct aggressive sampling;

(E) Calibration of instruments;

(F) Selection of appropriate equipment and media;

(G) Sample placement;

(H) Calculations, chain of custody, preparation of reports, and sample labeling;

(I) General discussion of laboratories;

(J) Health considerations including decontaminating the equipment and the person performing the air monitoring;

(K) Hands-on demonstration of the following:

(i) Calculations,

(ii) Calibration of instruments,

(iii) Placement of air monitors,

(iv) Aggressive air monitoring,

(v) Decontamination procedures, and

(vi) Labeling; and

(L) Course overview.

19.7 Arkansas regulatory awareness training course. This 2-hour course is for persons who have successfully completed an ASHARA-approved training course outside the state of Arkansas. The course shall address, at a minimum, the following topics:

(A) The Department's relationship with the EPA, including the delegation of authority to operate Federal regulations;

(B) The Department's authority to enforce regulations on Federal facilities;

(C) The difference between NESHAP and this regulation;

(D) The relationship between the Department and OSHA; and

(E) The certification and licensing requirements in Arkansas.

SECTION 20 - REFRESHER TRAINING COURSE

20.1 Asbestos abatement **Contractor/supervisors, Inspectors, Management Planners, Project Designers,** and **Workers** shall annually attend a refresher training course for reaccreditation in their respective disciplines, with the exception that **Air Monitors** will receive the refresher training through the **Contractor/supervisor** training course.

After completing the annual refresher course, each person shall be eligible to apply to the Department to have his or her State of Arkansas certification renewed in accordance with Section 16 of this regulation.

20.2 The minimum length for each refresher course for each discipline shall be as follows:

(A) For **Workers**, one (1) full day (eight [8] hours);

(B) For **Contractor/supervisors**, one (1) full day (eight [8] hours);

(C) For **Inspectors**, one-half (½) day (four [4] hours);

(D) For **Management Planners**, one-half (½) day (four [4] hours) of inspector of inspector refresher training and one-half (½) day of management planning refresher course;

(E) For **Project Designers**, one (1) full day (eight [8] hours); and

20.3 Each refresher training course shall, at a minimum, address the following:

(A) Changes in Federal and State regulations,

(B) Developments in state-of-the-art procedures, and

(C) Review of key aspects of the initial training course.

20.4 Refresher courses shall be conducted as separate and distinct courses and shall not be combined with any other training during the period of the refresher course.

SECTION 21 - DENIAL AND REVOCATION

21.1 The Department may deny the application, suspend, or revoke the license or certification of **Asbestos Abatement Contractors, Asbestos Abatement Consultants, Air Monitoring, Contractor/supervisors, Inspectors, Management Planners, Project Designers,** or **Workers** for reasons including, but not limited to, the following:

(A) Performing work requiring accreditation at a job site without being in physical possession of initial and current accreditation certificates and/or licenses.

(B) Permitting the duplication and/or use of one's own accreditation certificate and/or license by another;

(C) Performing work for which certification and/or licensing has not been received;

(D) Obtaining certification from a training provider that does not have approval to offer training for the particular discipline from either EPA or from the Department;

(E) Failure to comply with the terms of a NOV or CAO issued by the Department;

(F) Being subject to a final order imposing a civil penalty or conviction under Section 16 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; or

(G) Any violation of the provisions of the Act or this regulation.

21.2 The following persons are not accredited for purposes of this regulation:

(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.

21.3 Training course approval or Training Provider licensing may be revoked for the following reasons:

(A) Misrepresentation of the extent of a training course's approval pursuant to this regulation;

(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;

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

(F) Failure to comply with the terms of a NOV or CAO issued by the Department;

(G) Being subject to a final order imposing a civil penalty or conviction under Section 16 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; or

(H) Any violation of the provisions of the Act or this regulation.

SECTION 22 - FEE ASSESSMENT

22.1 In order to support the costs of operating the asbestos program in the state of Arkansas the Department will assess the fees as described in this section.

22.2 Any **Asbestos Abatement Consultant** desiring a license to conduct asbestos abatement activities will be assessed an annual fee of **$500.00.** This fee will be prorated at $41.67 per month for the first fee, then will be $500 thereafter due December 31.

22.3 Any **Asbestos Abatement Contractor** desiring a license to conduct asbestos abatement activities will be assessed an annual fee of **$500.00.** This fee will be prorated at $41.67 per month for the first fee, then will be $500 thereafter due December 31.

22.4 Any **Training Provider** desiring a license to conduct asbestos training courses will be assessed an annual fee of **$500.00.**

22.5 Any person desiring certification as an **Air monitor** will be assessed an annual fee of **$150.00.**

22.6 Any person desiring certification as a **Contractor/ supervisor** will be assessed an annual fee of **$150.00.**

22.7 Any person desiring certification as an **Inspector** will be assessed an annual fee of **$150.00.**

22.8 Any person desiring certification as a **Management Planner** will be assessed an annual fee of **$150.00.**

22.9 Any person desiring certification as a **Project Designer** will be assessed an annual fee of **$150.00.**

22.10 Any person desiring certification as a **Worker** will be assessed an annual fee of **$35.00.**

22.11 Any person desiring certification as an **Air Monitor, Contractor/supervisor, Inspector, Management Planner**, or **Project Designer** who makes application at one time for more than one certificate will be assessed a **$150.00** fee for the first certificate and a **$75.00** fee for each additional request.

22.12 Any person requesting a replacement for any stolen, lost, or destroyed certification or license shall be assessed a fee of **$15.00.**

22.13 Any person desiring processing of certificates to be completed within thirty-six hours of submission to the agency will be assessed a processing fee of **$50.00.**

22.14 Any NOI involving demolition of a facility as described in Sections 6.1 and 6.2 which contains greater than 1 square/1 linear foot of ACM will be accompanied by a fee of **$100.00.**

22.15 Any NOI involving demolition of a facility as described in Sections 6.1 and 6.2 which contains 160 square/260 linear to 5000 square/5000 linear feet of RACM will be accompanied by a fee of **$300.00.**

22.16 Any NOI involving demolition of a facility as described in Sections 6.1 and 6.2 which contains between 5001 square/5001 linear and 10,000 square/10,000 linear feet of RACM will be accompanied by a fee of **$500.00.**

22.17 Any NOI involving demolition of a facility as described in Sections 6.1 and 6.2 which contains greater than 10,000 square/10,000 linear of RACM will be accompanied by a fee of **$1000.00.**

22.18 Any NOI involving renovation of a facility as described in Section 6.3 which contains 160 square/260 linear to 5000 square/ 5000 linear feet of RACM will be accompanied by a fee of **$300.00.**

22.19 Any NOI involving renovation of a facility as described in Section 6.3 which contains 5001 square/linear to 10,000 square/10,000 linear feet of RACM will be accompanied by a fee of **$500.00.**

22.20 Any NOI involving renovation of a facility as described in Section 6.3 which contains more than 10,000 square/10,000 linear feet of RACM will be accompanied by a fee of **$1000.00.**

22.21 Any NOI involving emergency renovation operations as described in Section 6.5 will be accompanied by a fee of **$300.00.**

22.22 Any NOI for a twelve-month notice as described in Section 6.4 will be accompanied by a fee of **$1500.00.**

22.23 Any revision of an original NOI as described in Section 6.8 shall be accompanied by a submittal fee of **$50.00.**

SECTION 23 - POWERS AND DUTIES OF THE DIRECTOR

23.1 The Director shall review applications for initial **Asbestos Abatement Contractor** and **Asbestos Abatement Consultant** licenses and renewals thereof based upon a satisfactory submittal of the following:

(A) A completed application with submission of the annual license fee described in Section 22 of this regulation,

(B) Proof that the **Asbestos Abatement Contractor** has one full-time employee in a supervisory capacity, who has been certified by the Department as a **Contractor/supervisor**.

23.2 The Director shall review applications for initial certificates and renewals thereof based upon Sections 15 and 16 of this regulation and any other information the Director deems relevant to determine whether such application shall be approved or denied.

23.3 The Director shall review applications for the initial training provider licenses and renewals based upon Sections 15 and 16 of this regulation and any other information the Director deems relevant to determine whether such application shall be approved or denied.

23.4 The Director shall set forth to the applicant in writing the basis for a decision to disapprove an application for a license, certificate, renewal, or revocation. Any denial,

disapproval, or revocation by the Director may be appealed as provided in Regulation Number 8, Administrative Procedures.

23.5 To establish minimum performance standards for the abatement of ACM under the Act, specific regulations promulgated by the EPA in 40 CFR Part 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants) and all subsequent revisions are hereby adopted as provisions of the regulation as though set forth herein line for line and word for word with the exception that all reference therein to the "Administrator" shall be considered as reference to the "Director of the Arkansas Department of Pollution Control and Ecology," and all reference to the "United States Environmental Protection Agency" shall be considered a reference to the "Arkansas Department of Pollution Control and Ecology"; further, the effective date of provisions adopted herein by reference as provisions of this regulation shall be the date such provisions are specified as being effective by the Commission in its rulemaking, and the effective date of the Federal regulations adopted herein shall have no bearing on the effective date of any provisions of this regulation. The following Federal regulations are hereby adopted from Title 40, Code of Federal Regulations, Part 61, Subpart M:

(A) Section 61.140;

(B) Section 61.141;

(C) Section 61.145;

(D) Section 61.147;

(E) Section 61.148;

(F) Section 61.150;

(G) Section 61.151;

(H) Section 61.152; and

(I) Section 61.154.

All are as adopted as final rules by the EPA on or before November 20, 1990 (and all subsequent revisions) and Appendix C of Title 40, Code of Federal Regulations, Part 763, Subpart E as adopted as interim final rule by the United States Environmental Protection Agency on or before February 3, 1994 (and all subsequent revisions). The Commission, within 180 days after the date of promulgation of any new or revised Federal regulations pertaining to National Emissions Standards for Hazardous Air Pollutants or the TSCA Asbestos Model

Accreditation Plan, shall conduct rulemaking with reference to this regulation to adopt such provisions. Such new or revised federal relations, upon the date of their publication as final rules of the EPA, shall constitute minimum guidelines to the Commission in formulating rulemaking proposals to this regulation but shall not be construed to limit or to interfere with the adoption of provisions more stringent than Federal regulations.

SECTION 24 - RECIPROCITY

24.1 Training and examination for initial certification may be waived if the applicant presents the certificate from a training course which has been accredited by EPA Asbestos Model Accreditation Plan (MAP) pursuant to 40 CFR 763 and submits proof of attendance to a 2-hour Arkansas Regulation Number 21 awareness course.

SECTION 25 - REVIEW OF ACTIONS

25.1 As provided in Section IV of the Act, an aggrieved party to any action taken under the authority of the Act of this regulation by the Director of the Department, with respect to licenses and certificates, shall have rights of redress as provided in Part I of the Arkansas Water and Air Pollution Control Act, as amended, including but not limited to, A.C.A. § 8-4-218 and the Arkansas Pollution Control and Ecology Commission Regulation No. 8.

SECTION 26 - ENFORCEMENT DATE

26.1 Unless otherwise provided, **Asbestos Abatement Consultants** shall have 90 days after the effective date of this regulation to come into compliance with these licensing requirements.

26.2 Unless otherwise provided, **Inspectors, Management Planners, Project Designers**, and **Air Monitors** shall have six months to come into compliance with these certification requirements.

SECTION 27 - EFFECTIVE DATE

27.1 This regulation and any amendment thereof shall be in full force and effect 20 days after filing with the Secretary of State.

PROMULGATED this _____ day of _____, 1997

By ORDER OF THE POLLUTION CONTROL AND ECOLOGY COMMISSION

BY _____
Chairman

ATTEST:

_____
Randall Mathis, Director

APPROVED:

_____
Mike Huckabee, Governor
State of Arkansas

APPENDIX A

(THE FOLLOWING FORMS ARE INCLUDED TO BE USED AS SAMPLES; HOWEVER, THE FORMS MAY BE REVISED AS NEEDED. PLEASE CALL THE ASBESTOS SECTION FOR VERIFICATION OF CURRENT FORMS.)

ARKANSAS REGISTER

Transmittal Sheet

Sharon Priest
Secretary of State
State Capitol Rm. 01
Little Rock, Arkansas 72201-1094

For Office Use Only: Effective Date July 15, 1997 Code Number 014.09.97--003

Name of Agency Arkansas Pollution Control & Ecology Commission

Department Arkansas Department of Pollution Control & Ecology

Contact Person Frieda Patton

Regulation No. 21. Asbestos Abatement
Docket No. 96-011-R
Minute Order No. 97-26

Phone 682-0690

Statutory Authority for Promulgating Rules Arkansas STATS, Title 8, 20-27-1001

		Date
Intended Effective Date	Legal Notice Published	03-01-97
☐ Emergency	Final Date for Public Comment	03-20-97
☒ 10 Days After Filing	Filed With Legislative Council	02-24-97
☒ Other	Reviewed by Legislative Council	05-13-97
	Adopted by State Agency	05-30-97

CERTIFICATION OF AUTHORIZED OFFICER

I Hereby Certify That The Attached Rules Were Adopted In Compliance with Act 434 of 1967 As Amended.

Laura Brown
Signature

582-7890 Laura Brown
Phone Number

Commission Secretary
Title

June 10, 1997
Date

FILED
AR. REGISTER DIV.
97 JUN 10 PM 2:36
SHARON PRIEST
SECRETARY OF STATE
STATE OF ARKANSAS

ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

LOCATION - SUBJECT
Regulation No. 21
Arkansas Asbestos Abatement
Docket No. 96-011-R

MINUTE ORDER NO. 97- 26 PAGE 1 OF 1

Pursuant to Public Notice and Hearing and after consideration of all comments received the Arkansas Pollution Control and Ecology Commission hereby adopts Regulation No. 21 (Arkansas Asbestos Abatement Regulation.)

PROMULGATED THIS 30th DAY OF MAY 1997 BY ORDER OF THE

ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION.

BY: Julia P. Mobley
Julia Mobley, Chair

ATTEST: Randall Mathis
Randall Mathis, Director

APPROVED: Mike Huckabee
Mike Huckabee, Governor

COMMISSIONERS

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	A. Carter NO AC		J. Shannon
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	J. Hill	HGW, E	R. Wilbourn
	J. Mobley	JEW	W. Wright
JP	J. Pascale		R. Young

Julia P. Mobley
Chair

SUBMITTED BY: Frieda Patton PASSED: 05/30/97