

Management Planner Accreditation under AHERA

3-day EPA approved "Inspectors" training course and exam

2-day EPA approved Planner's training course

Passing score on exam

Continuing education- 1 day annually

Function of Management Planner

- 1. Review inspection survey data**
- 2. Determine hazard**
- 3. Selection of response action**
 - a. O&M**
 - b. Removal**
 - c. Repair**
 - d. Encapsulation**
 - e. Enclosure**
- 4. Evaluating Factors- prioritization**
- 5. Write O&M plan**
- 6. Write management plan**

Evaluation and Interpretation of Survey Results

Objectives:

- 1. To know the AHERA requirements for inspection reports and management plans.**
- 2. To understand the need for a systematic approach to review survey data and produce a summary.**
- 3. To be able to prepare and format survey data for use in hazard assessment.**
- 4. To know the necessary records from the inspection report to include in the management plan.**

Evaluation and Interpretation of Survey Results

A. Background

- 1. Relation of building inspection to the management plan**
- 2. Information required from inspection data**

B. Summary of the inspection report

- 1. List of homogeneous areas identified**
- 2. Location and size of homogeneous areas**

3. Analytical results
 4. Assessment results
 5. Signature of accredited inspector
- C. Review of survey data
1. Field data
 2. Laboratory analysis
 3. Physical assessment data
- D. Field data review
1. Suspect, assumed and confirmed ACBM
 2. Inspector's data sheets
 3. Verification of inspector's results
- E. Laboratory analysis review
1. Bulk sample analysis results
 2. Verification of accredited laboratory
- F. Physical assessment data review
1. Verification of inspector's assessment through building walk through
 2. Reassessment if necessary
- G. Summarizing the inspection data
- H. Summary of the management plan
1. Building description and inspection summary
 2. Hazard assessments for ACBM
 3. Response actions to be employed
 4. Rational and schedule for plan implementation
 5. Plan for any post-response action for ACBM
 6. Periodic reinspection plan
 7. Notification plan
 8. Evaluation of resources needed to implement plan

Hazard Assessment and Response Action Evaluation

Objectives:

1. To understand the term hazard assessment as defined by AHERA
2. To be able to distinguish between physical assessment and hazard assessment
3. To recognize various approaches to hazard assessment
4. To be able to employ the decision tree approach to hazard assessment
5. To be able to identify the seven hazard ranking classifications prescribed by AHERA and classify ACBM accordingly
6. To understand the correlation between hazard assessment ranking and response action

Hazard Assessment and Response Action Evaluation

A. Introduction - distinction between physical assessment and hazard assessment

B. Alternative approaches to assessment

1. Air monitoring
 - a. Application
 - b. Limitations
 - c. AHERA position
2. Physical assessment
 - a. Approaches
 - (1) Algorithms
 - (2) Categorical
 - (a) Tabular format
 - (b) Decision tree
 - (3) AHERA position

C. Decision tree approach to assessment

1. Principles of this approach
2. Factors
 - a. Condition of ACM
 - b. Potential for disturbance
 - c. Classification category of ACBM by the Building Inspector
3. Hazard assessment ranking by the Management Planner
 - a. Seven rankings under AHERA
 - b. AHERA definitions

D. Evaluation of response actions

1. Correlating hazard assessment ranking with response action

Classifications for Hazard Potential (Decision Tree Display)

ACBM Condition
Poor (Significant Damage)
Fair (Damage)
Good
Potential Disturbance *
Potential Disturbance *
High (Potential Significant Damage) Hazard Rank #6
Moderate (Potential Damage) Hazard Rank #5
Low Hazard Rank #4
High (Potential Significant Damage) Hazard Risk #3
Moderate (Potential Damage) Hazard Rank #2
Low Hazard Rank #1

* See overhead C4 for classification scheme.

Response Actions Based on Hazard Ranking

Hazard Rank Removal Priority AHERA Categories Response Actions Required by AHERA

- 7 1 Significantly Damaged Evacuate or isolate the area if needed. Remove the ACBM (or enclose or encapsulate it sufficient to contain fibers). Repair of thermal system insulation is allowed if feasible and safe. O&M required for all friable ACBM
- 6 2 Damaged + Potential for Significant Damage Evacuate or isolate the area if needed. Remove, enclose, encapsulate or repair to correct damage. Take steps to reduce potential for disturbance. O&M required for all friable ACBM.
- 5 3 Damaged + Potential for Damage Remove, enclose, encapsulate or repair to correct damage. O&M required for all friable ACBM.
- 4 4 Damaged Same as hazard rank 5
- 3 5 Potential for Significant Damage Evacuate or isolate the area if needed. Take steps to reduce potential for disturbance. O&M required for all friable ACBM.
- 2 6 Potential for Damage O&M required for all friable ACBM.
- 1 7 No Problem O&M required for all friable ACBM, but measures need not be as extensive as above.

Note: AHERA does not account for combination of current and potential damage (i.e., hazard ranks #5 and #6). The response actions shown are combinations of those required for each condition.

Legal Responsibilities of Management Planners

- A. Introduction
- B. The Owner's Responsibilities
- C. Liability of the Management Planner
 - 1. Contractual Liability
 - a. Breach of contract
 - (1) Scope of work

- (2) Costs, manner and schedule of payment
- (3) Schedule of deliverables / completion
- b. Desirability of project-specific contract documents
- 2. Tort liability
 - a. Definition / explanation
 - b. Possible instances of negligence
 - (1) Building surveys
 - (2) Hazard assessment
 - (3) Development of response actions
 - (4) Development of O&M plans
- 3. Regulatory Liability
- 4. Indemnification and hold harmless clauses
 - a. Importance to the Management Planner
 - b. Negotiating clauses

D. Legal considerations of abatement measures

E. Legal considerations of O&M plans

- 1. Design and implementation
- 2. In-house staff versus contracted labor

F. Use of previous inspections.

G. Importance of record keeping

- 1. Documentation
- 2. Compliance

H. Insurance

- 1. The role of insurance
- 2. Insurance problems in the asbestos industry
- 3. Types of insurance
- 4. Evaluating an insurance company

Evaluation and selection of control options

Objectives:

- 1. To be able to distinguish between the five main AHERA response actions.
- 2. To be able to recognize the advantages / disadvantages of alternative response actions.
- 3. To be able to select appropriate response actions for specific applications.

Evaluation and Selection of Control Options

A. Overview of AHERA recognized response actions

B. Technical aspects of response actions

- 1. O&M programs
 - a. Purpose
 - b. Duration (Section G provides a complete discussion on O&M)
- 2. Encapsulation
 - a. Penetrating encapsulents
 - (1) Technical aspects
 - (2) Suitable / unsuitable applications
 - b. Bridging encapsulents

- (1) Technical aspects
- (2) Suitable / unsuitable applications
- 3. Enclosures
 - a. Mechanical systems
 - (1) Technical aspects
 - (2) Suitable / unsuitable applications
 - b. Spray - applied enclosures
 - (1) Technical aspects
 - (2) Suitable / unsuitable applications
- 4. Repair
 - a. As viewed under AHERA
 - b. Techniques
- 5. Removal
 - a. Technical aspects
 - b. Operational differences based on type of application
- C. Advantages / disadvantages / appropriate utilization of response actions
 - 1. Basis for making choice
 - a. AHERA requirements
 - b. Hazard ranking
 - c. Technical suitability
 - d. Costs
 - D. Factors considered in prioritizing response actions
 - 1. Occupant activity / utilization patterns
 - 2. Building maintenance and renovation plans
 - 3. Proximity of one area to another and their respective prioritization
 - 4. Occupancy patterns
 - 5. Life-span of building

The Role of Other Professionals in Developing the Management Plan

Objectives:

- 1. To understand the need to involve other professionals in the development of an asbestos management control program.
- 2. To recognize the specific contributions other professionals can make in developing a management plan.

The Role of Other Professionals in Developing the Management Plan

A. Introduction

- B. Professionals and their roles in the preparation of the management plan
 - 1. Industrial hygienist
 - a. Asbestos assessment
 - b. Control activities
 - c. Prioritization of response actions
 - d. Air monitoring
 - 2. Architect
 - a. Feasibility of response actions
 - b. Sequencing of response actions
 - c. Costs
 - d. Technical assistance
 - e. Sign-off on plans

3. Building Engineer
 - a. Building use (and abuse) patterns
 - b. History of damage and repair
 - c. Level of activity
 - d. Development and implementation of O&M program
4. School administration
 - a. Financial status
 - b. Use of in-house versus contracted staff

Role of Other Involved Professionals

Figure XI - Management Diagram

Building Owner

Attorney Asbestos Program Manager Technical Assistance RAC INFO CENTERS OTHER
 Building Custodial Building Maintenance Architectural/Engineering Firm or Department Industrial Hygiene/Safety Firm
 or Department Health Professionals or Department Contracting Firm SubContractors

Developing and Implementing an Operations and Maintenance Program

Objectives:

1. To understand the purpose of an operations and maintenance program.
2. To be aware of pertinent regulations which apply to operations and maintenance activities and incorporate these into the program.
3. To recognize the elements of an operations and management program.
4. To be able to develop an operations and maintenance plan.

Developing and Implementing an Operations and Maintenance (O&M) Program

- A. Introduction
- B. Objectives
 1. Clean existing contamination
 2. Minimize future fiber release
 3. Maintain ACBM until removal
- C. Elements of the O&M program
 1. Notification and labeling
 - a. Notification
 - (1) Methods
 - (2) Content
 - b. Labeling and signs
 - (1) Methods
 - (2) Content
 2. Training
 - a. General awareness
 - b. Cleaning and custodial work
 - c. Maintenance work
 3. Medical surveillance and employee protection programs
 4. Specialized cleaning procedures
 5. Maintenance / renovation permit system

6. Special work practices for maintenance activities
 - a. Surfacing materials
 - (1) Contact with ACM unlikely
 - (2) Accidental disturbance of ACM possible
 - (3) Disturbance of ACM intended or likely
 - (a) Small disturbances
 - (b) Large Disturbances
 - b. Thermal system insulation
 - (1) Contact with ACM unlikely
 - (2) Accidental disturbance of ACM possible
 - (3) Disturbance of ACM intended or likely
 - (a) Small disturbances
 - (b) Large disturbances
 - c. Other ACM
 - d. Other measures
7. Special work practices for renovation and remodeling
 - a. Renovation
 - b. Remodeling
8. Emergency response procedures
 - a. Minor episodes
 - b. Major episodes
9. Periodic ACM surveillance
10. Recordkeeping

O&M Program Definition

Set of Procedures applied to building cleaning, maintenance, renovation and general operations to maintain the building free of asbestos contamination.

Primary O&M Objectives

Remove Asbestos Fibers that are present
Minimize future release of fibers
Maintain ACM in Good Condition
An O&M program is needed as long as ACM is in the building

O&M Program Elements

Information, notification, labeling
Worker Training
Work Permit System
Special Work Practices
Fiber Release Episodes
Employee Protection / Medical Surveillance
Periodic Surveillance
Record Keeping

Regulatory Review

Objectives:

1. To become familiar with the general provisions of the major asbestos related regulations.
2. To learn details of the major regulations related to building inspectors and management planners.

Regulatory Overview

- A. Introduction
 1. Principal Agencies
 - a. EPA
 - b. OSHA
 2. Other Agencies
 - a. DOT
 - b. NBS
 - c. CPSC
- B. Occupational Safety and Health Administration (OSHA) Worker Exposure Rules
 1. Scope
 - a. General Industry (29 CFR Section 1910.1001) b. Construction Industry (29 CFR Section 1926.58)
 2. Exposure Level
 - a. PEL
 - b. Action Level
 3. Requirements for building owners / employers
 4. Implications for Building Inspectors
 5. Implications for Management Planners
- C. EPA Worker Protection Rule
- D. Asbestos-in-Schools Rule
- E. National Emission Standards for Hazardous Air Pollutants (NESHAPS) - Environmental Protection Agency (EPA) (40 CFR 61, Subpart M)
 1. Bans
 2. Areas Addressed
 - a. Visible emissions
 - b. Removal process regulations
 - c. Disposal requirements
 - d. Removal notification requirements
- F. Asbestos Hazard Emergency Response Act (AHERA) EPA (PL-99-519) 1986. Final Rule and Modeling Accreditation Plan (40 CFR Part 763)
 1. Applicability
 2. Objectives
 - a. Identifying
 - b. Evaluating
 - c. Controlling
 3. Requirements
 - a. Sampling
 - b. Analysis
 - c. Assessment
 - d. Response Actions
 - e. Operations and Maintenance
 - f. Training and Surveillance
 - g. Management Plans
 - h. Recordkeeping
 - i. Warning labels
 - j. Compliance and enforcement

- k. Waiver
- l. Exclusions
- 4. Deadlines
- 5. Implications for Building Inspectors
 - a. Accredited inspector
 - b. Reporting requirements
 - c. ACBM vs. ACM
 - d. Definitions of ACM condition and potential for damage
- 6. Implications for management planners
 - a. Accredited management planner
 - b. Reporting requirements
 - c. Abatement options
 - d. O&M programs

Recordkeeping for the management planner

Objectives:

1. To become familiar with requirements for record keeping in AHERA.
2. To recognize which documents and records need to be retained.
3. To understand the benefits of complete documentation.

Record Keeping for the Management Planner

- A. Responsibility for recordkeeping
- B. Benefits of recordkeeping
 1. Documentation of plan implementation
 2. Expedite response action
 3. Reduce legal liabilities
 4. Planning tool
- C. Elements of the record keeping system
 1. Required
 - a. Preventative and / or response actions
 - b. Air sampling
 - c. Training
 - d. Surveillance
 - e. Cleaning activities
 - f. Operations and maintenance activities
 - g. Maintenance actions
 - h. Fiber release episodes
 2. Suggested
 - a. Blueprints and other facility documents
 - b. Specifications for building materials
 - c. Photographs of warning signs and barriers
 - d. Asbestos related correspondence, notices and statements
 - e. Public awareness efforts

Assembling and Submitting a Management Plan

Objectives:

- 1. To be able to recognize the components of a complete management plan.**
- 2. To appreciate how the LEA will use a management plan.**

Assembling and Submitting a Management Plan

- A. Introduction**
 - 1. Dates of implementation**
 - 2. Management plan purpose**
- B. Components of a management plan**
 - 1. Inspection statement**
 - 2. Inspection Results**
 - 3. Response actions**
 - 4. Remaining asbestos**
 - 5. Reinspection and other activities**
 - 6. Financial resources**
 - 7. Operations and maintenance**
- C. Conclusion**
 - 1. Justification for the proposed plan**
 - 2. The management plan as a planning tool**

763.93 Management Plan

Inspection Statement
Inspection Report (copy)
Recommended Response Actions
Documentation of ACM
Reinspection
Financial Resources
O&M Program

Cost Estimation and Financing Abatement Projects

Objectives:

- 1. To understand the factors involved in estimating the costs for implementing an asbestos control program.**
- 2. To become acquainted with sources of financing for asbestos control programs.**

Cost Estimation and Financing Abatement Projects

- A. Introduction**
 - 1. Least burdensome response action**
 - 2. Protection of human health**
 - 3. Environmental protection**
- B. Costs of alternative response actions**
 - 1. General factors affecting costs**
 - a. Size of project**
 - b. Complexity of the project**
 - c. Amount and applications of ACM**

- d. Quality of contract specification
- e. Bid solicitation process
- 2. Elements of cost estimation
 - a. ACM abatement
 - (1) Labor
 - (2) Equipment
 - (3) Material costs
 - (4) Potential liability costs
 - (5) Profit
 - (6) Other costs
 - b. Operations and maintenance program
 - (1) Equipment
 - (2) Labor
 - (3) Supplies
 - (4) Other
 - c. Other costs
 - (1) Direct and indirect costs
 - (2) "Hidden" costs
- C. Comparing costs and effectiveness of alternatives
 - 1. Response action alternatives
 - 2. Present value calculations
 - a. Estimate costs of abatement
 - b. Choose a real discount rate
 - c. May be useful to building owner
 - 3. Example
- D. Financing response actions
 - 1. Political considerations
 - 2. Financing options
 - a. Federal (ASHAA)
 - b. State

Cost Estimation and Financing

Protect Human Health & The Environment -Must be Technically Appropriate -Must be Effective
 Least Burdensome -Should be Least(Less) Costly -Should be Simple

General Factors Affecting Cost

Size of the project
 Complexity of the project
 Amount and Application of ACM
 Need for Replacement Materials
 Quality of Contract Specs

Estimating Costs

Abatement -Labor -Equipment -Materials -Insurance -Profit -Other
 O & M -Equipment -Labor -Supplies -Other
 Direct vs. Indirect Costs

Financing Options

Federal -Asbestos School Hazard Abatement

State

Local -Bonds -General Fund

AHERA MANAGEMENT PLAN REVIEW CHECKLIST

The following missing or deficient items have been noted in your management plan. Please revise the plan and resubmit it to the Department of the Environment within 30 days. All items are marked with either an "M" (missing) or a "D" (deficient).

I. General Inventory - 763.93 (e)(1)

_____ A list with the name and address of each school building and whether the building contains friable ACBM, nonfriable ACBM, or ACBM assumed to be ACM. Friable or Non-friable.

Comments:

II. Exclusions for inspections completed before December 14, 1987 - 763.93 (e)(2) - 763.99 (If NO EXCLUSIONS declared for inspections before December 14, 1987, check box and skip to III.)

(Mark N/A at B, D, E, or F, if that type of exclusion not declared.)

_____ A. Date(s) of inspection(s). (Required for all exclusions except (F), which is the exclusion for school buildings constructed after October 12, 1988.)

B. Statement(s) by accredited inspector(s) that, based on sampling records:

(Check the appropriate box for exclusions being declared.)

_____ Friable ACBM was identified in homogeneous or sampling area(s).

_____ Nonfriable ACBM was identified in homogeneous and sampling area(s).

_____ Material determined not to be ACBM in homogeneous and sampling area(s) was sampled in substantial compliance with Sec. 763.85(a).

Each statement by an accredited inspector must include:

_____ i. Signature of the accredited inspector.

_____ ii. Date of signature.

_____ iii. Accreditation Agency (state of EPA approved).

_____ iv. Accreditation Number (if applicable).

For each of the above exclusions (friable ACBM, nonfriable ACBM, and material not ACBM), the additional information specified in (C) is required.

- ___ C. A blueprint, diagram, or written description of each school building that identifies clearly:
 - ___ i. Each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM.
 - ___ ii. Exact locations, if possible, where bulk samples were collected and the dates of collection.

For each bulk sample analyzed, the following three categories of information are required:

- ___ iii. Copies of analysis.
 - ___ iv. Dates of analysis.
 - ___ v. Other laboratory reports (if any prepared).
- ___ D. Statement(s) by accredited inspector(s) that, based on records of the inspection(s), suspected ACBM in homogeneous or sampling area(s) is assumed to be ACM.
 - ___ E. Statement(s) by accredited inspector(s) that, based on inspection records and contractor and clearance records, no ACBM is present in homogeneous or sampling area(s) where asbestos removal operations were conducted before December 14, 1987.

Each statement by an accredited inspector must include:

- ___ i. Signature of the accredited inspector.
 - ___ ii. Date of signature.
 - ___ iii. Accreditation Agency (state or EPA approved).
 - ___ iv. Accreditation Number (if applicable).
- ___ F. A signed statement by an architect or project engineer responsible for the construction of a new school building built after October 12, 1988, or an accredited inspector, that no ACBM was specified as a building material in any construction document for the building, or, to the best of his or her knowledge, no ACBM was used as a building material in the building.
 - ___ G. A copy of written assessments required to be made under Sec. 763.88 of material that was identified before December 14, 1987, as (a) friable ACBM, (b) friable suspected ACBM assumed to be ACM, (c) nonfriable material that is newly friable, or (d) thermal system insulation.

The written assessment must include the following information:

- _____ i. Name of assessor.
- _____ ii. Signature of assessor.
- _____ iii. Date.
- _____ iv. Accreditation Agency (State or EPA approved).
- _____ v. Accreditation Number (if applicable).
- _____ H. Descriptions of any response actions or preventive measures taken.

The following additional information regarding response actions and preventive measures is required "if possible"

- _____ i. Names and addresses of the contractors involved.
- _____ ii. Start and completion dates of the work.
- _____ iii. Results of any air samples analyzed during and upon completion of work.

Comments:

III. For inspections completed on or after December 14, 1987 - 763.85 (e) (3) - 763.85

- _____ A. A copy of the inspection report(s) completed under Sec. 763.85, which includes the following information:
 - _____ i. Date(s) of inspection.
 - _____ ii. Name of each accredited person performing the inspection.
 - _____ iii. Signature of each accredited person performing the inspection.
 - _____ iv. Accreditation Agency (State or EPA approved).
 - _____ v. Accreditation Number (if applicable).
- _____ B. A Blueprint, diagram, or written description that identifies clearly:
 - _____ i. Each location and approximate square or linear _____ where material was sampled for ACM.
 - _____ ii. The exact location where each bulk sample was collected.

- _____ iii. Date of collection.
- _____ iv. Homogeneous areas where suspected ACBM is assumed to be ACM.
- _____ C. List of homogeneous areas identified in (B) above that indicates whether those areas are surfacing material, thermal system insulation, or miscellaneous material (Sec. 763.85).

- D. Bulk sample procedure.
 - _____ i. Description of the manner used to determine sampling locations.

Information regarding the inspector(s) who collected the bulk samples.

- _____ ii. Name.
- _____ iii. Signature.
- _____ iv. Accreditation Agency (State or EPA approved).
- _____ v. Accreditation Number (if applicable).

- E. Analyses of bulk samples.
 - _____ i. Copies of analyses.
 - _____ ii. Dates of analyses.
 - _____ iii. Name and address of laboratories that analyzed bulk samples.
 - _____ iv. Statement(s) of laboratory accreditation.

Information regarding all person(s) who performed the analyses of bulk samples.

- _____ v. Name.
- _____ vi. Signature.

- _____ F. A copy of written assessments under Sec. 763.88 of all friable ACBM, friable suspected ACBM assumed to be ACM, and thermal system insulation, which includes the following information:

- _____ i. Name of assessor.
- _____ ii. Signature of assessor.
- _____ iii. Date.
- _____ iv. Accreditation Agency (State or EPA approved).

_____ v. Accreditation Number (if applicable).

Comments:

IV. Designated Person - 763.93 (e) (4)

_____ A. Name, address and phone number of LEA's designated person.

_____ B. Training received by designated person, including date training received, length of training (hours), and course name.

Comments:

V. Response Action Recommendations - 763.93 (e) (5) - 763.88 (d)

_____ A. Written recommendation made to the LEA regarding response actions, which includes the following information:

_____ i. Name of management planner making the recommendation.

_____ ii. Signature of the management planner.

_____ iii. Date.

_____ iv. Accreditation Agency (State or EPA approved).

_____ v. Accreditation Number (if applicable).

Comments:

VI. Response Actions - 763.93 (e) (6)

_____ A. Detailed descriptions of preventive measures and response actions to be taken.

_____ i. Methods to be used for preventive measures and response actions.

_____ ii. Locations where such actions and measures will be taken.

_____ iii. Reasons for selecting each response action or preventive measure.

_____ iv. Schedules for beginning and completing each preventive measure and response action.

Comments:

VII. Assurance of Accreditation - 763.93 (e) (7)

_____ Statement that person(s) who inspected for ACBM and who will design or carry out response action, except O&M, are or will be accredited by:

- i. The state's approved accreditation program.
- or
- ii. An EPA-approved course or another state's approved accreditation program.

Comments:

VIII. ACBM Remaining After Response Action - 763.93 (e) (8)

_____ A detailed description in the form of a blueprint, diagram, or written description of ACBM, or assumed ACM, that does or will remain after response action.

Comments:

IX. Activity Plans - 763.93 (e) (9)

- _____ A. Plan for reinspection.
- _____ B. Plan for periodic surveillance.
- _____ C. Operations and maintenance plan.
 - _____ i. Initial Cleaning
 - _____ ii. Management planner recommendation regarding additional cleaning.
 - _____ iii. The LEA response to that recommendation.

Comments:

X. Notification - 763.93 (e) (10) and g(4)

- A. Method to notify workers and building occupants, or legal guardians, about the following activities
 - _____ i. Inspections/reinspections.

- _____ ii. Response actions.
- _____ iii. Post-response action activities, including:
 - _____ o Periodic surveillance.
 - _____ o Reinspection activities.
- B. Notification of parent, teacher, and employee organizations/groups of the availability of the management plan:
 - _____ i. Description of steps taken.
 - _____ ii. Dated copy of the notification.

Comments:

XI. Resource Evaluation - 763.93 (e) (11)

- _____ An evaluation of resources needed to complete response actions successfully and carry out reinspection, operations and maintenance activities, periodic surveillance, and training.

Comments:

XII. Names and Signatures of Responsible Parties

- A. Management Plan Consultants - 763.93 (e) (12) and (f)
 - _____ i. Name and statement of accreditation (state-approved program or EPA-approved course) for each consultant who contributed to the management plan.
 - _____ ii. Name and signed statement by management planner that management plan complies with AHERA requirements (Optional).
- B. Designated Person Sign-Off - 763.93 (i)
 - _____ Signed certification by designated person that general LEA responsibilities under 763.84 have been met or will be met.

Comments:

XIII. Recordkeeping - 763.93 (h) and 763.94 (b-h)

A. For each preventive measure and response action already taken since December 14, 1987, the following information is required.

- _____ i. A detailed written description of the action.
 - _____ 1) Methods used.
 - _____ 2) Location of measure or action.
 - _____ 3) Reasons for selection of each measure or action.
 - _____ 4) Start and completion dates.
 - _____ 5) Names and addresses of all contractors involved.
 - _____ 6) Accreditation agency (if applicable).
(State or EPA approved)
 - _____ 7) Accreditation number (if applicable).
 - _____ 8) Storage or disposal site if ACM was removed.
- _____ ii. Documentation of air sampling at completion of response actions.
 - _____ 1) The name and signature of any person collecting any air sample.
 - _____ 2) The locations where those samples were collected.
 - _____ 3) Date of collection.
 - _____ 4) Name and address of analyzing laboratory.
 - _____ 5) Date of analysis.
 - _____ 6) Results of analysis.
 - _____ 7) Method of analysis.
 - _____ 8) Name and signature of person performing analysis.
 - _____ 9) Laboratory accreditation statement.

B. Employee training already conducted since December 14, 1987 (16 hours of training required before employee disturbs ACBM) Sec. 763.92 (a) (1 and 2).

Information for each employee trained.

- _____ i. Name.

- ____ ii. Job title.
- ____ iii. Date training was completed.
- ____ iv. Location of training.
- ____ v. Number of hours completed.

C. If the initial cleaning required under Sec. 763.91 (c) already has been conducted, the following information is required.

- ____ i. Name of each person performing the cleaning.
- ____ ii. Date of cleaning.
- ____ iii. Locations cleaned.
- ____ iv. Methods used.

D. For operations and maintenance activities conducted under 763.91 (d) since December 14, 1987, the following information is required.

- ____ i. Name of person(s) performing the activity.
- ____ ii. Start and completion dates.
- ____ iii. Location.
- ____ iv. Description of activity.
- ____ v. If removal, the name and location of storage and disposal sites.

E. For each time that a major asbestos activity is performed under Sec. 763.91 (e) since December 14, 1987, the following information is required.

- ____ i. Name and signature of person(s) performing activities.
- ____ ii. State of accreditation (or EPA).
- ____ iii. Accreditation number (if applicable).
- ____ iv. Start and completion dates of activities.
- ____ v. Location of activities.
- ____ vi. Description of activities.
- ____ vii. If ACBM removed, name and location of storage or disposal sites.

F. For each fiber release episode. (763.91{f}) that has occurred since December 14, 1987, the following information is required.

- _____ i. Date and location of episode.
- _____ ii. Method of repair, preventive measures or response action.
- _____ iii. Name of person performing the work.
- _____ iv. If removal, the name and location of storage and disposal sites.

AHERA MANAGEMENT PLAN REVIEW CHECKLIST

The following missing or deficient items have been noted in your management plan. Please revise the plan and resubmit it to the Department of the Environment within 30 days. All items are marked with either an "M" (missing) or a "D" (deficient).

I. General Inventory - 763.93 (e)(1)

_____ A list with the name and address of each school building and whether the building contains friable ACBM, nonfriable ACBM, or ACBM assumed to be ACM. Friable or Non-friable.

Comments:

II. Exclusions for inspections completed before December 14, 1987 - 763.93 (e)(2) - 763.99 (If NO EXCLUSIONS declared for inspections before December 14, 1987, check box and skip to III.)

(Mark N/A at B, D, E, or F, if that type of exclusion not declared.)

_____ A. Date(s) of inspection(s). (Required for all exclusions except (F), which is the exclusion for school buildings constructed after October 12, 1988.)

B. Statement(s) by accredited inspector(s) that, based on sampling records:

(Check the appropriate box for exclusions being declared.)

_____ Friable ACBM was identified in homogeneous or sampling area(s).

_____ Nonfriable ACBM was identified in homogeneous and sampling area(s).

_____ Material determined not to be ACBM in homogeneous and sampling area(s) was sampled in substantial compliance with Sec. 763.85(a).

Each statement by an accredited inspector must include:

_____ i. Signature of the accredited inspector.

_____ ii. Date of signature.

_____ iii. Accreditation Agency (state of EPA approved).

_____ iv. Accreditation Number (if applicable).

For each of the above exclusions (friable ACBM, nonfriable ACBM, and material not ACBM), the additional information specified in (C) is required.

- _____ C. A blueprint, diagram, or written description of each school building that identifies clearly:
 - _____ i. Each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM.
 - _____ ii. Exact locations, if possible, where bulk samples were collected and the dates of collection.

For each bulk sample analyzed, the following three categories of information are required:

- _____ iii. Copies of analysis.
- _____ iv. Dates of analysis.
- _____ v. Other laboratory reports (if any prepared).
- _____ D. Statement(s) by accredited inspector(s) that, based on records of the inspection(s), suspected ACBM in homogeneous or sampling area(s) is assumed to be ACM.
- _____ E. Statement(s) by accredited inspector(s) that, based on inspection records and contractor and clearance records, no ACBM is present in homogeneous or sampling area(s) where asbestos removal operations were conducted before December 14, 1987.

Each statement by an accredited inspector must include:

- _____ i. Signature of the accredited inspector.
- _____ ii. Date of signature.
- _____ iii. Accreditation Agency (state or EPA approved).
- _____ iv. Accreditation Number (if applicable).
- _____ F. A signed statement by an architect or project engineer responsible for the construction of a new school building built after October 12, 1988, or an accredited inspector, that no ACBM was specified as a building material in any construction document for the building, or, to the best of his or her knowledge, no ACBM was used as a building material in the building.
- _____ G. A copy of written assessments required to be made under Sec. 763.88 of material that was identified before December 14, 1987, as (a) friable ACBM, (b) friable suspected ACBM assumed to be ACM, (c) nonfriable material that is newly friable, or (d) thermal system insulation.

The written assessment must include the following information:

- _____ i. Name of assessor.
- _____ ii. Signature of assessor.
- _____ iii. Date.
- _____ iv. Accreditation Agency (State or EPA approved).
- _____ v. Accreditation Number (if applicable).

_____ H. Descriptions of any response actions or preventive measures taken.

The following additional information regarding response actions and preventive measures is required "if possible".

- _____ i. Names and addresses of the contractors involved.
- _____ ii. Start and completion dates of the work.
- _____ iii. Results of any air samples analyzed during and upon completion of work.

Comments:

III. For inspections completed on or after December 14, 1987 - 763.93
(e) (3) - 763.85

_____ A. A copy of the inspection report(s) completed under Sec. 763.85, which includes the following information:

- _____ i. Date(s) of inspection.
- _____ ii. Name of each accredited person performing the inspection.
- _____ iii. Signature of each accredited person performing the inspection.
- _____ iv. Accreditation Agency (State or EPA approved).
- _____ v. Accreditation Number (if applicable).

_____ B. A Blueprint, diagram, or written description that identifies clearly:

- _____ i. Each location and approximate square or linear footage where material was sampled for ACM.
- _____ ii. The exact location where each bulk sample was collected.

- ___ iii. Date of collection.
- ___ iv. Homogeneous areas where suspected ACBM is assumed to be ACM.
- ___ C. List of homogeneous areas identified in (B) above that indicates whether those areas are surfacing material, thermal system insulation, or miscellaneous material (Sec. 763.85).
- ___ D. Bulk sample procedure.
- ___ i. Description of the manner used to determine sampling locations.

Information regarding the inspector(s) who collected the bulk samples.

- ___ ii. Name.
- ___ iii. Signature.
- ___ iv. Accreditation Agency (State or EPA approved).
- ___ v. Accreditation Number (if applicable).

- ___ E. Analyses of bulk samples.
- ___ i. Copies of analyses.
- ___ ii. Dates of analyses.
- ___ iii. Name and address of laboratories that analyzed bulk samples.
- ___ iv. Statement(s) of laboratory accreditation.

Information regarding all person(s) who performed the analyses of bulk samples.

- ___ v. Name.
- ___ vi. Signature.

- ___ F. A copy of written assessments under Sec. 763.88 of all friable ACBM, friable suspected ACBM assumed to be ACM, and thermal system insulation, which includes the following information:
 - ___ i. Name of assessor.
 - ___ ii. Signature of assessor.
 - ___ iii. Date.
 - ___ iv. Accreditation Agency (State or EPA approved).

_____ v. Accreditation Number (if applicable).

Comments:

IV. Designated Person - 763.93 (e) (4)

_____ A. Name, address and phone number of LEA's designated person.

_____ B. Training received by designated person, including date training received, length of training (hours), and course name.

Comments:

V. Response Action Recommendations - 763.93 (e) (5) - 763.88 (d)

_____ A. Written recommendation made to the LEA regarding response actions, which includes the following information:

_____ i. Name of management planner making the recommendation.

_____ ii. Signature of the management planner.

_____ iii. Date.

_____ iv. Accreditation Agency (State or EPA approved).

_____ v. Accreditation Number (if applicable).

Comments:

VI. Response Actions - 763.93 (e) (6)

_____ A. Detailed descriptions of preventive measures and response actions to be taken.

_____ i. Methods to be used for preventive measures and response actions.

_____ ii. Locations where such actions and measures will be taken.

_____ iii. Reasons for selecting each response action or preventive measure.

_____ iv. Schedules for beginning and completing each preventive measure and response action.

Comments:

VII. Assurance of Accreditation - 763.93 (e) (7)

_____ Statement that person(s) who inspected for ACBM and who will design or carry out response action, except O&M, are or will be accredited by:

- i. The state's approved accreditation program.
or
- ii. An EPA-approved course or another state's approved accreditation program.

Comments:

VIII. ACBM Remaining After Response Action - 763.93 (e) (8)

_____ A detailed description in the form of a blueprint, diagram, or written description of ACBM, or assumed ACM, that does or will remain after response action.

Comments:

IX. Activity Plans - 763.93 (e) (9)

- _____ A. Plan for reinspection.
- _____ B. Plan for periodic surveillance.
- _____ C. Operations and maintenance plan.
 - _____ i. Initial Cleaning
 - _____ ii. Management planner recommendation regarding additional cleaning.
 - _____ iii. The LEA response to that recommendation.

Comments:

X. Notification - 763.93 (e) (10) and g(4)

- A. Method to notify workers and building occupants, or legal guardians, about the following activities
 - _____ i. Inspections/reinspections.

- _____ ii. Response actions.
- _____ iii. Post-response action activities, including:
 - _____ o Periodic surveillance.
 - _____ o Reinspection activities.

B. Notification of parent, teacher, and employee organizations/groups of the availability of the management plan:

- _____ i. Description of steps taken.
- _____ ii. Dated copy of the notification.

Comments:

XI. Resource Evaluation - 763.93 (e) (11)

_____ An evaluation of resources needed to complete response actions successfully and carry out reinspection, operations and maintenance activities, periodic surveillance, and training.

Comments:

XII. Names and Signatures of Responsible Parties

A. Management Plan Consultants - 763.93 (e) (12) and (f)

- _____ i. Name and statement of accreditation (state-approved program or EPA-approved course) for each consultant who contributed to the management plan.
- _____ ii. Name and signed statement by management planner that management plan complies with AHERA requirements (Optional).

B. Designated Person Sign-Off - 763.93 (i)

_____ Signed certification by designated person that general LEA responsibilities under 763.84 have been met or will be met.

Comments:

XIII. Recordkeeping - 763.93 (h) and 763.94 (b-h)

A. For each preventive measure and response action already taken since December 14, 1987, the following information is required.

_____ i. A detailed written description of the action.

_____ 1) Methods used.

_____ 2) Location of measure or action.

_____ 3) Reasons for selection of each measure or action.

_____ 4) Start and completion dates.

_____ 5) Names and addresses of all contractors involved.

_____ 6) Accreditation agency (if applicable).
(State or EPA approved)

_____ 7) Accreditation number (if applicable).

_____ 8) Storage or disposal site if ACM was removed.

_____ ii. Documentation of air sampling at completion of response actions.

_____ 1) The name and signature of any person collecting any air sample.

_____ 2) The locations where those samples were collected.

_____ 3) Date of collection.

_____ 4) Name and address of analyzing laboratory.

_____ 5) Date of analysis.

_____ 6) Results of analysis.

_____ 7) Method of analysis.

_____ 8) Name and signature of person performing analysis.

_____ 9) Laboratory accreditation statement.

B. Employee training already conducted since December 14, 1987 (16 hours of training required before employee disturbs ACBM) Sec. 763.92 (a) (1 and 2).

Information for each employee trained.

_____ i. Name.

- ii. Job title.
- iii. Date training was completed.
- iv. Location of training.
- v. Number of hours completed.

C. If the initial cleaning required under Sec. 763.91 (c) already has been conducted, the following information is required.

- i. Name of each person performing the cleaning.
- ii. Date of cleaning.
- iii. Locations cleaned.
- iv. Methods used.

D. For operations and maintenance activities conducted under 763.91 (d) since December 14, 1987, the following information is required.

- i. Name of person(s) performing the activity.
- ii. Start and completion dates.
- iii. Location.
- iv. Description of activity.
- v. If removal, the name and location of storage and disposal sites.

E. For each time that a major asbestos activity is performed under Sec. 763.91 (e) since December 14, 1987, the following information is required.

- i. Name and signature of person(s) performing activities.
- ii. State of accreditation (or EPA).
- iii. Accreditation number (if applicable).
- iv. Start and completion dates of activities.
- v. Location of activities.
- vi. Description of activities.
- vii. If ACBM removed, name and location of storage or disposal sites.

F. For each fiber release episode. (763.91{f}) that has occurred since December 14, 1987, the following information is required.

- _____ i. Date and location of episode.
- _____ ii. Method of repair, preventive measures or response action.
- _____ iii. Name of person performing the work.
- _____ iv. If removal, the name and location of storage and disposal sites.