

DHHS POLICIES AND PROCEDURES

Section V:	Human Resources
Title:	Safety and Benefits
Chapter:	Asbestos Operations and Maintenance Activities
Current Effective Date:	5/1/09
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Purpose

To establish a policy for performing operations and maintenance work activities, to ensure no employee is exposed above the action level and to comply with relevant safety and health regulations.

Policy

Division/facility/school directors shall ensure all department employees receive asbestos hazard information and formal asbestos operations and maintenance training as required by the Environmental Protection Agencies (EPA) Asbestos Hazard Emergency Response Act (AHERA), OSHA 1910/1926 Industry and Construction Standards and State Employees Workplace Requirements Program for Safety and Health.

Roles and Responsibilities

1. DHHS Safety Manager:

The DHHS Safety Program Manager shall develop general operating procedures to implement this policy.

2. Division/Facility/School Director:

All DHHS Schools or division/facility with a school and/or employees who perform asbestos-disturbing tasks shall designate a competent person (s) and develop specific operating procedures to develop, implement and maintain the required plans.

3. Supervisors/Managers:

Each supervisor/manager shall comply with any asbestos plan and shall ensure the compliance of supervised employees.

4. Authorized Employee:

A. Each employee shall comply with this policy and pertinent associated procedures.

- B. Each authorized employee shall perform the duties and follow the procedures outlined in the operations and maintenance plan and where appropriate, the management plan.

Definitions (also see Safety and Benefits Policy, Establishment of the Safety and Health Program, Definitions Section)

1. **Abatement** - the act of removing/disturbing any intact/damaged ACM for any purpose other than a required repair covered under the definition of Operations and Maintenance.
2. **Action Level** - an average of 0.1 fibers per cubic centimeter of air within an 8-hour period and an average of 1 fiber per cubic centimeter of air over a thirty minute period
3. **Asbestos** - natural mineral fibers of chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, or any of these that have been chemically treated and/or altered.
4. **Asbestos-Containing Material, (ACM)** - any material containing or likely to contain asbestos fibers.
5. **Authorized Employees** – employees identified by the division/facility/school to perform asbestos related operations and maintenance work, or who for a combined total of thirty 30 days or more per year are engaged in Class III and IV work, or who are, or may reasonably be expected to be exposed to, airborne concentrations at or above the TWA or exposure limit as defined in OSHA Standard 1910.1001/1926.1101
6. **Competent Person** – a designated employee who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them.
7. **Damaged Asbestos Containing Material (ACM), Damaged Presumed Asbestos Containing Material (PACM)** - any ACM/PACM in a friable state which presents an asbestos exposure hazard, or:

Any ACM/PACM that due to its physical condition, presents an accident/injury hazard to employees.
8. **Disturb, Disturbance** - to disrupt the matrix of ACM, crumble or pulverize ACM, or generate visible debris.
9. **Exposure** - the presence of an employee in an environment with any concentration of airborne asbestos fibers, regardless of respiratory protection used.

10. **Fiber** - a particulate form of asbestos, 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.
11. **Operations and Maintenance (O & M)** - the act of repairing structural damage to any buildings owned, leased or controlled by DHHS and any building utilities system. (i.e. Plumbing, Electrical, Steam, Sanitation System, Water Supply etc.)

The act of removing and/or replacing damaged building materials in any building owned, leased or controlled by DHHS, damaged by a specific event and not caused by normal wear and tear.
12. **Presumed Asbestos Containing Material (PACM)** – any material that may contain asbestos, without definite knowledge of asbestos content.
13. **Regulated area** - an area established to demarcate areas where Operations and Maintenance projects are conducted and any adjoining area where debris and waste from such operations can accumulate and a work area where airborne concentrations of asbestos are likely to exist.
14. **Renovations** - the removal/replacement of any building materials solely for the purpose of maintaining or enhancing the appearance, or the continuity of a pattern or materials is considered a renovation project and therefore the replacement of ACM/PACM would be an abatement project and not an O&M project.
15. **Remove, Removal** - to take out or strip ACM/PACM from structures or substrates.
16. **School** - any building or portion of a building used for elementary or secondary (K-12) education classrooms or related activities, by any Client, Individual, Resident, Patient, Student or Consumer under the age of 21.
17. **Surfacing Material (SM)** - material that is sprayed, troweled-on, or otherwise applied to surfaces, other than drywall.
18. **Thermal Systems Insulation, (TSI)** - Insulation applied to boilers, pipes, tanks, ducts, or other equipment or structural components to prevent heat loss or gain.
19. **Undamaged ACM/PACM** - any ACM/PACM in a non friable state which does not present an asbestos exposure hazard.

Implementation

1. Employees of the DHHS shall not perform any asbestos activities outside the scope of a required O & M project.

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2. No employee shall willfully disturb asbestos-containing material or penetrate encapsulation of such material unless authorized by and in compliance with the maintenance and operations plan.
3. Each Institution which meets the definition of a school, or which contains within the facility, a section meeting the definition of a school as defined in the Asbestos Hazard Emergency response act (AHERA) 40 CFR 763, Subpart E, The facility/school director shall:
 - A. Appoint a Local Education Agency (LEA) Designee for their facility.
 - B. Ensure the inspection of the affected portion (s) of the facility is in compliance with 40 CFR 763.85(a) to identify asbestos-containing material.
 - C. In conjunction with DHHS Safety and Benefits office and DHHS Property and Construction Office prepare and implement a management plan in compliance with 40 CFR 763.93(e).
 - D. Ensure monitoring of the affected and connected areas every six (6) months to ensure that no employee is exposed above the Action Level (AL) in compliance with 40 CFR 763.92 (b).
 - E. In conjunction with DHHS Safety and Benefits office and DHHS Property and Construction Office ensure reinspections are conducted, in compliance with 40 CFR 763.85(b) every three years following the establishment of the management plan.
 - F. Ensure all employees who work in or adjacent to areas where asbestos-containing material has been identified are notified in writing annually, of the presence of the material, its location, the quantity and the encapsulation method and shall receive training on asbestos awareness. (40 CFR 763.84 (c))
 - G. Ensure all parents/guardians for anyone under the age of 21 who lives or attends school at a DHHS Division/Institution are notified in writing annually, of the presence of the ACM in the facility, the monitoring/inspection procedures in place and a point of contact for any questions. (40 CFR 763.84 (c))
 - H. Ensure all environmental services/housekeeping staff will receive training on asbestos awareness initially and annually thereafter. This course shall be a minimum of two (2) hours in length. (40 CFR 763.92 (a))

4. All DHHS Division/facility/school buildings and/or parts of buildings other than those addressed above, shall meet the OSHA requirements as directed in the 1910.1001 General Industry and 1926.1101 Construction Industry Standards.
 - A. All building material such as Thermal System Insulation (TSI), sprayed/troweled on Surfacing Material (SM), Blown-in Insulation, Asphalt and Vinyl Flooring and their adhesives used prior to 1980 will be considered Asbestos Containing Materials (ACM)/Presumed Asbestos Containing Material (PACM) until the division/facility/school proves no asbestos is present, via documentation or testing in accordance with 40 CFR 763 subpart E, 40 CFR 763.86, or analysis and certification by an Industrial Hygienist.
 - B. All asbestos-containing material (ACM)/presumed asbestos containing material (PACM) shall be addressed by one of the following means, unless it is addressed in the scope of an O&M project:
 1. Removal by an outside licensed contractor in compliance with relevant safety and health regulations.
 2. Permanent encapsulation.

5. Where a hazard assessment identifies a task where employees who for a combined total of 30 days or more per year are engaged in Class I, II and III work, or who are, or may reasonably be expected to be exposed to, airborne concentrations at or above the Time Weighted Average (TWA) or exposure limit as defined in OSHA Standard 1910.1001/1926.1101, the division/facility/school shall develop and implement an Asbestos Operations and Maintenance Plan that includes, at a minimum:
 - A. The identity by name or job classification of the competent person (s).
 - B. The identity by name or job classification of each employee authorized to perform the operations and maintenance tasks.
 - C. Specific operating procedures for:
 1. Operations and maintenance.
 - a. DHHS employees are authorized to perform an Operations and Maintenance procedure (as defined in definitions section) that is limited to the removal and replacement of the ACM/PACM damaged by the O & M requiring event.

- b. If an Operations and Maintenance project requires the disturbance of undamaged ACM/PACM, DHHS employees are limited to the removal and the replacement of only the ACM/PACM contiguous to the repair site for the O & M causing event. Any ACM/PACM not disturbed/damaged/involved by the O & M causing event will not be disturbed or replaced as part of the O&M process. All ACM/PACM will be replaced with Non Asbestos Containing Materials. (NACM).
 - 2. Providing initial and annual training to competent persons and authorized employees.
 - 3. Providing initial and annual medical surveillance examinations to all authorized employees who meet the exposure guidelines as defined in OSHA standards 1910.1001/1926.1101.
 - 4. Providing equipment, supplies and personal protective equipment (PPE) necessary to perform O & M tasks.
- D. Specific operating procedures complying with this policy and relevant safety and health regulations for each identified task, which shall include at a minimum:
 - 1. The scope of the project.
 - 2. The engineering and equipment controls necessary to perform the task.
 - 3. The steps for notifying employees in and adjacent to the work area of the operation and the measures to be taken to maintain their exposure below the action level.
 - 4. The steps for establishing and marking the regulated area, isolating the work area from connected areas and establishment of the equipment area.
 - 5. The steps for performing the task, including the application of engineering controls and work practices.
 - 6. The steps for decontamination of equipment and work clothing.
 - 7. The steps for disposal of asbestos containing material.
 - 8. The steps for completing the task, decontamination, removal of isolation devices and regulated areas, and return of the area to normal use.

9. The steps for monitoring of employee breathing areas and connected areas where required.
6. Each person identified as a competent person for asbestos operations shall be granted full and exclusive authority to control the regulated area, including the direction of activities within that area.
7. Medical surveillance is required upon employment and annually thereafter for employees who for a combined total of 30 days or more per year are engaged in Class I, II and III work, or who are exposed to airborne concentrations at or above the permissible exposure limit as defined in OSHA Standard 1910.1001/1926.1101. The surveillance shall include, at a minimum:
 - A. A medical and work history questionnaire (see appendix D, OSHA 1910.1001/1926.1101); a complete physical examination with emphasis on the respiratory system, cardiovascular system and digestive tract.
 - B. A chest roentgenogram (x-ray).
 1. During initial examination.
 2. Every five (5) years for employees with ten or less years since first exposure.
 3. Every five (5) years for employees under the age of 35 with greater than 10 years since first exposure.
 4. Every two (2) years for employees 35 to 45 years of age with greater than 10 years since first exposure.
 5. Every year for employees over 45 years of age with more than 10 years since first exposure.
 - C. FVC and FEV (1.0) pulmonary function tests.
 - D. Any other medical test deemed necessary by the medical care provider.
8. Employees required to wear a respirator shall meet at the provisions set forth in the DHHS Respiratory Program Requirements Policy with regards to medical screening and clearance prior to the use of a respirator.

9. Employee training shall be provided initially upon employment to each authorized employee whose position requires the performance of any activity with risk of asbestos exposure and annually thereafter. Training shall include, at a minimum:
 - A. The health affects associated with asbestos.
 - B. The relationship between smoking and exposure to asbestos producing lung cancer.
 - C. The quantity, location, manner of use, release and storage of asbestos.
 - D. The specific tasks the employee will perform with risk of asbestos exposure and the procedures, protective equipment and other safety devices necessary to prevent exposure to the employee and fiber release to the atmosphere.
 - E. The training required under Safety and Benefits Policy, Respirator Program Requirements.
 - F. The description of and procedures for medical surveillance.
 - G. The contents of 29 CFR 1910.1001 and 29 CFR 1926.1101, including appendices.
 - H. The names, addresses and telephone numbers of public health organizations which provide information, materials, and/or conduct programs concerning smoking cessation.

References

Asbestos Hazard Emergency Response Act: 15 USC Chapter 53, Subchapter II.

North Carolina General Statutes:

Chapter 95, Occupational Safety and Health Act of North Carolina: 95-129(2) and 95-148(1).

Chapter 130A, Article 19: Asbestos Hazard Management.

Chapter 143, Article 63: State Employees Workplace Requirements Program for Safety and Health: 143-582(1), (3), (4), and (6).

North Carolina Administrative Code:

15A NCAC 19C.0600.

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25 NCAC 1N.0105 (a).

Asbestos Regulations: 40 CFR 763 Subpart E.

Occupational Safety and Health Standards for General Industry: 29 CFR 1910.1001.

Occupational Safety and Health Standards for the Construction Industry: 29 CFR 1926.1101.

Workplace Requirements Program Manual for Safety and Health:

For questions or clarification on any of the information contained in this policy, please contact [Human Resources](#). For general questions about department-wide policies and procedures, contact the [DHHS Policy Coordinator](#).