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## SAFETY POLICY & PROCEDURE

# Asbestos

# SPP#1910.1001

### Quick Reference

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## 1.0 Purpose

The purpose of this safety policy and procedure is to establish guidelines to ensure the prevention of North Carolina Department of Transportation (NCDOT) employee exposure to airborne asbestos fibers.

## 2.0 Scope and Applicability

Asbestos is the common name for a group of minerals that may appear as masses of compact or relatively long, silky fibers. Asbestos is resistant to heat and corrosive chemicals.

Asbestos fibers are carried into the body as airborne particles. These fibers can become embedded in the tissues of the lung and digestive system. Once the fibers become trapped in the lung's air sacs, they are removed very slowly. Years of exposure to asbestos can cause a number of disabling and fatal diseases.

This safety policy and procedure establishes prevention and assessment practices for asbestos related job activities. It does not address management practices associated with asbestos removal projects. See SPP #1910.1001A, Asbestos Management, for those details.

All NCDOT facilities have had Asbestos Inspections conducted with Asbestos Abatement completed to prevent any exposure to NCDOT personnel prior to renovations. Documentation of Inspection Reports and Asbestos Abatement projects is available through NCDOT Facilities Management Unit.

## 3.0 Reference

This safety policy and procedure is established in accordance with Occupational Safety and Health Standards for General Industry (1910.1001), Occupational Safety and Health for Construction Standard (29 CFR 1926.1101), and for Maritime Standard (29 CFR 1915.1001).

## 4.0 Policy

It is the policy of NCDOT to provide a place of employment that is free from recognized hazards that may cause serious harm to employees. Therefore, NCDOT employees should never be exposed to asbestos materials that may still be present at any facilities. Asbestos hazards have been eliminated through engineering and administrative controls using proper work practices to prevent any exposure to NCDOT personnel.

## 5.0 General Responsibilities

It is the responsibility of each manager/unit head, supervisor, and employee to ensure implementation of NCDOT's safety policy and procedure on Asbestos. It is also the responsibility of each NCDOT employee to report immediately any unsafe act or condition to his or her supervisor. Specific responsibilities are outlined in Section 6.3.

## 6.0 Procedure

This section provides applicable definitions, establishes general provisions, and identifies specific responsibilities required by NCDOT's safety policy and procedure on Asbestos.

## 6.1 Definitions

### **Asbestos**

Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.

### **Asbestos-Containing Material (ACM)**

Any material containing more than 1 percent asbestos.

### **Building/Facility Owner**

The legal entity, including a lessee, which exercises control over management and recordkeeping functions relating to a building and/or facility in which activities governed by this standard take place.

### **Presumed Asbestos-Containing Material (PACM)**

Thermal insulation, surfacing material, and flooring material found in buildings constructed no later than 1980. This may be rebutted with material sampling and laboratory analysis reporting negative results.

## 6.2 General Provisions

This section details the provisions of this safety policy and procedure with each provision discussed in a separate subsection. These provisions are:

- Employee Training
- Forms of Asbestos
- NCDOT Asbestos Related Work Activities
- Signs and Notification for Asbestos Abatement
- Permissible Exposure Limits

### 6.2.1 Employee Training

All new employees will be provided Asbestos Awareness and Notification during New Employee Safety Orientation documented in LMS.

All NCDOT employees should have received Asbestos Awareness and Notification training documented in LMS.

### 6.2.2 Forms of Asbestos

Asbestos-containing products come in 2 forms:

- Friable
- Nonfriable

**Friable asbestos** is a material that contains more than 1 percent asbestos by weight that can be crumbled, pulverized, or, when dry, reduced to powder by hand pressure. Examples of friable, asbestos materials include sprayed-on fireproofing, ceiling treatments, and pipe insulation.

**Nonfriable asbestos** is a material that contains more than 1 percent asbestos by weight that cannot be crumbled, pulverized or, when dry, reduced to powder by hand pressure. Examples of nonfriable asbestos materials include floor tile, mastics, and transite cement sheeting.

The form that asbestos products take in the workplace determines the potential airborne exposure risk. Friable asbestos materials can present a higher exposure risk than nonfriable materials.

Refer to Appendix A for a listing of asbestos-containing materials which may be present. Thermal system insulation and surfacing material installed prior to 1980 shall be considered to contain asbestos greater than 1 percent until a negative determination is made. It is noted that other types of construction material may contain asbestos-containing material if installed after 1980.

### **6.2.3 NCDOT Asbestos Related Activities**

NCDOT employees do not engage in any type of asbestos related activities. All Asbestos related abatement or other activities are contracted out to Licensed Asbestos contractors.

It shall be determined if materials contain asbestos before any building renovation and/or demolition activities begin by reviewing existing Asbestos Inspection reports or prior Asbestos Abatement records maintained by the NCDOT Facilities Management Unit. Any suspect TSI, surfacing material, flooring material, and other materials which may contain asbestos, installed prior to 1980, shall be presumed to contain asbestos if there is no record of previous Asbestos Inspection report. To determine if suspect materials do not contain asbestos, they must be sampled and analyzed for asbestos by a NVLAP laboratory.

Sampling of suspect material shall be performed only by North Carolina accredited asbestos inspectors.

NCDOT personnel will not be used for any asbestos removal work. This type of work shall be performed by a licensed and accredited asbestos abatement contractor.

### **6.2.4 Signs and Notification for Asbestos Abatement**

Warning signs will be provided and displayed by the Licensed Asbestos Abatement contractor prior to asbestos abatement.

**DANGER ASBESTOS MAY CAUSE  
CANCER CAUSES DAMAGE TO LUNGS  
AUTHORIZED PERSONNEL ONLY**

Notification by management or the facilities maintenance supervisor will be provided to all employee at a location (5) days prior to any Asbestos Abatement projects. All Asbestos Abatement shall be scheduled for weekends or at night when employees are not be scheduled to work in location being abated.

### **6.2.5 Permissible Exposure Limits (PEL)**

After any Asbestos Abatement, the Licensed Abatement Contractor will provide final clearance air sampling to ensure that no NCDOT employee is exposed to an airborne concentration of asbestos in excess of 0.01 fiber per cubic centimeter of air.

## **6.3 Specific Responsibilities**

### **6.3.1 Managers/Unit Heads**

Managers/Unit Heads will ensure that adequate funds are available and budgeted for any required Asbestos Inspection or Abatement required for their locations.

Managers/Unit Heads will ensure supervisors provide Asbestos notification to new employees if any asbestos may be present at the facility they will be working. Any asbestos present is in a state that presents no exposure to employees.

### **6.3.2 Supervisors**

Supervisors will provide Asbestos notification to new employees if there is any asbestos present at the location they will be working.

Supervisors let employees know that any asbestos present is in a state that presents no exposure to employees.

### **6.3.3 Employees**

New employees shall acknowledge receipt of Asbestos notification from their supervisor in LMS.

### **6.3.4 Building/Facility Owner for NCDOT Leased Properties**

It is the responsibility of the building/facility owner or landlord to notify NCDOT of the presence of any asbestos containing materials that are present for properties being considered for lease.

### **6.3.5 Safety & Risk Management**

Safety and Risk Management will provide prompt assistance to manager/unit heads, supervisors, or others as applicable on any matters concerning Asbestos. Safety and Risk Management will assist in developing or securing the required training.

The Industrial Hygienist will provide consultative and audit assistance to ensure effective implementation of this safety policy and procedure.

### **6.3.6 Facilities Management Unit**

The Facilities Management Unit has data base and records for all facility Asbestos Inspection reports and abatement. This information can be requested by any Unit or location.

Facilities Management is responsible for handling Asbestos Abatement prior to demolition of any facilities that may contain asbestos based on Asbestos Inspection records or positive sampling asbestos during demolition or renovation projects.

## **APPENDIX A: List of Possible Suspect Asbestos Containing Materials**

- Floor Tile (Specifically 9"x9" Floor Tile)
- Mastic (Glue) Under Floor Tile, Vinyl Flooring or Carpet
- Older (Paper Type) Steam Pipe Insulation
- Window Caulking
- Fire Proofing Materials
- High Temperature Gaskets
- Roof Shingles