

PROCEDURE 31 - Asbestos Safety

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Synopsis

The purpose of this procedure is to establish requirements relative to the potential hazards that could result from exposure to asbestos or asbestos-containing materials. This procedure applies to all National Weather Service (NWS) facilities, work locations, and employees where asbestos or asbestos-containing materials are known or assumed to be present.

Initial Implementation Requirements:

- **Analyze Site Operations versus Requirements of the Procedure**
 - Perform Visual Inspection and Instrumental Testing of “suspect” ACMs. (31.3.2)
 - Identify all sites where asbestos hazard may be present. (31.3.3)
- **Develop/Obtain Documentation/Information required for Site**
 - Develop an Asbestos Control Program. (31.3.2), if applicable
- **Designate Person to Administer the Asbestos Safety Procedure Requirements** (if required)
- **Provide Local Training of Site Personnel** (if required)

Recurring and Annual Task Requirements:

- **Perform Inspection/Assessment/Testing**
 - Visual Inspections and Instrumental Testing of “suspect” ACM. (31.3.2), as necessary
- **Review/Update Documentation/Information required for Site**
 - Maintain Asbestos Control Program. (31.3.2), if applicable
- **Provide Refresher Training of Site Personnel** (if required)

Asbestos Safety Checklist

Requirements	Reference	YES	NO	N/A	Comments
Is initial and annual review of this procedure conducted and documented?	31.4.2				
Have all sites where asbestos hazard may be present been identified?	31.3.3				
Have all individuals affected by this procedure, read, understood and follow the procedure?	31.5.4b				
Are all “suspect” ACMs visually inspected and instrumentally tested?	31.3.2, Attachment A				
Has the Asbestos Control Program been developed at the facility where the potential for asbestos exposure is present?	31.3.2				

31 ASBESTOS SAFETY

31.1 Purpose and Scope

As part of its goal to provide a safe and healthful workplace, the National Weather Service (NWS) is promulgating this procedure related to the potential hazards that could result from exposure to asbestos or asbestos-containing materials. This procedure applies to all NWS facilities, work locations, and employees where asbestos or asbestos-containing materials are used.

31.2 Definitions

Asbestos. A generic term applied to a number of naturally occurring hydrated mineral silicate fibers, including chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite. These materials are heat and/or acid resistant in nature and until the early 1970's were widely used throughout the textile, automotive, and construction industries where fireproofing or thermal or acoustical insulation was required.

Asbestos-Containing Material (ACM). Any material containing more than one percent of asbestos.

Fiber. A particulate form of asbestos, five micrometers or longer, with a length-to-diameter ratio of at least three to one.

Field Office. A Field Office may include the following: Weather Forecast Office (WFO), River Forecast Center (RFC), Weather Service Office (WSO), and a Data Collection Office (DCO).

Operating Unit. For the purpose of this procedure, Operating Unit includes the National Centers for Environmental Prediction (NCEP), National Data Buoy Center (NDBC), NWS Training Center (NWSTC), National Reconditioning Center (NRC), Radar Operations Center (ROC), or the Sterling Field Support Center (SFSC).

Permissible Exposure Level (PEL): OSHA PEL for asbestos is an eight-hour Time-Weighted Average (TWA) limit of 0.1 fiber per cubic centimeter.

Presumed Asbestos Containing Material (PACM). "Presumed asbestos containing material" means thermal system insulation and surfacing material found in buildings constructed before 1981.

Station Manager. For the purpose of this procedure, the Station Manager shall be either the NWS Regional Director; Directors of Centers under NCEP (Aviation Weather Center, NP6; Storm Prediction Center, NP7; and Tropical Prediction Center, NP8; Space Weather Prediction Center, NP9); Directors of the NDBC, NWSTC, and Chiefs of NRC, ROC and SFSC facilities; or Meteorologist in Charge (MIC), Hydrologist in Charge (HIC), or Official in Charge (OIC).

Thermal System Insulation (TSI). TSI means ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

31.3 Procedure

31.3.1 Asbestos Regulations and Controls. Occupational Safety and Health Administration (OSHA) General Industry standard 29 CFR 1910.1001 applies to occupational exposures to asbestos in all industries, with exception to construction and ship repairing and ship building industries. According to the standard, installed Thermal System Insulation (ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain) and sprayed on and troweled-on surfacing materials (e.g., acoustic plaster on ceilings and fireproofing materials on structural members), as well as asphalt and vinyl flooring shall be treated as asbestos-containing material in buildings constructed before 1981.

In 1991, EPA's mandates under the "Asbestos Ban and Phase Out Rule (ABPO)" were vacated and remanded pursuant to a decision of the Fifth Circuit Court of Appeals (*Corrosion Proof Fittings v. Environmental Protection Agency*, 947 F.2d 1201 (5th Cir. 1991)). The Court held that the EPA failed to meet its burden under the language of the Toxic Substances Control Act (TSCA) to promulgate a reasonable rule that would adequately reduce the risk. EPA has not been able to enact another asbestos rule addressing the manufacturing, processing, importation and distribution of asbestos containing product. Nevertheless, Thermal System Insulation, sprayed-on application of materials, wet-applied and pre-formed pipe insulation and specialty papers are still banned for use. Numerous materials are now being manufactured with asbestos materials again. Many other products containing asbestos such as roof felts and mastic, vinyl floor tiles, ceiling tiles and asbestos-cement flat sheets may be found at local building supply stores. Presence of asbestos in these materials should be verified by Material Safety Data Sheets or manufacturer documentation.

Any construction activity shall comply with the provisions of the OSHA standard set forth in 29 CFR 1926.1101. For the purpose of this procedure, construction activities include:

- a. Demolition or salvage of structures with asbestos present.
- b. Removal or encapsulation of ACMs.
- c. Construction, alteration, repair, maintenance, or renovation of structures containing asbestos.
- d. Installation of products containing asbestos.
- e. Emergency cleanup of spills of asbestos materials.
- f. Transportation, disposal, storage or containment of ACMs on or at a site where construction activities take place.

31.3.2 The Environmental Protection Agency (EPA) has summarized five basic facts concerning asbestos exposure:

- a. The health risk associated with asbestos-causing diseases depends on the human exposure to asbestos-containing materials.

- b. Prevailing asbestos levels in buildings and levels of employees' exposure as building occupants seem to be very low based upon available data.
- c. Removal of asbestos-containing materials is often not a building owner's best course of action to reduce asbestos exposure. In fact, an improper removal can create a dangerous situation where none previously existed.
- d. EPA only requires asbestos removal in order to prevent significant public exposure to asbestos, such as during building renovation or demolition.
- e. EPA recommends in-place management whenever asbestos is discovered. Instead of removal, a conscientious in-place management program will usually control fiber releases, particularly when the materials are not significantly damaged and are not likely to be disturbed.

While it is often possible to "suspect" that a material or product contains asbestos by visual determination, actual determinations can only be made by instrumental analysis. Until a material or product is tested, it is best to assume that it contains asbestos, unless the label or the manufacturer verifies that it does not. A listing of typical "suspect" ACMs can be found in Attachment A.

31.3.3 Asbestos Control Program. The NWS facilities where asbestos or ACMs are potentially present (e.g., buildings and structures built before 1981), shall arrange visual inspections and testing of "suspect" materials by an accredited inspector or Certified Industrial Hygienist (CIH) who has completed an EPA-approved asbestos training course. This effort should be coordinated with NOAA SECO personnel and NWS Regional Environmental/Safety Coordinators. When presence of asbestos or ACMs is confirmed, an Asbestos Control Program shall be established and maintained in coordination with NOAA SECO.

All NWS employees that work in facilities where presence of friable asbestos is confirmed must receive the asbestos awareness course, at least 2 hours long, per Asbestos Hazard Emergency Response Act (AHERA) requirements set forth in 40 CFR 763.92 . NWS employees who provide housekeeping or maintenance activities in a building that contains ACM must also complete awareness level training. If housekeeping and maintenance staff conduct any activities that will result in disturbance of ACM, awareness training and 14 hours of additional training shall be completed per 40 CFR 763.92. Additional information related can be found in the NWSM 50-5116, Environmental Management Manual, paragraph 17.6.5.

NOTE: Asbestos containing materials (ACM) may be present in some older facilities, including residences (e.g., siding, floors, etc.). Drilling through the structure/materials containing ACM is NOT permitted. Only an EPA certified and licensed contractor can do the work that involves disturbance of asbestos. Use an alternative location for drilling if ACM presence is suspected or confirmed.

31.4 Responsibilities

31.4.1 Regional and Operating Unit Environmental/Safety Coordinators

- a. Will monitor and promote compliance with the requirements of this procedure at field offices or Operating Unit facilities.
- b. Will ensure that applicable procedures are implemented at regional headquarters or Operating Unit facilities.

31.4.2 Station Manager

- a. Will ensure compliance with and promote all federal, state and local regulations and policies associated with asbestos located at NWS facilities.
- b. Will have oversight of the asbestos control program (if applicable) and ensure that the requirements of this procedure are followed.
- c. Will review this procedure on an annual basis to ensure that the facility is complying with its requirements. A written record of this review will be forwarded to the Regional or Operating Unit Environmental/Safety Coordinator.

31.4.3 NWS Headquarters (NWSH)

- a. The NWSH Safety Office will provide assistance to Regional Headquarters, Operating Units, and field personnel to ensure that NWS facilities comply with requirements of this procedure.
- b. NWSH will coordinate with NOAA SECO, as necessary, regarding compliance issues related to this procedure.

31.4.4 Safety or Environmental/Safety Focal Point

- a. Will ensure that any responsibilities delegated to them by the Station Manager are implemented in accordance with the requirements of this procedure.

31.4.5 Employees

- a. Will be responsible for their own safety and, to some degree, for that of their co-workers. All unsafe practices and conditions shall be brought to the attention of the worker(s) involved and their supervisor.
- b. Employees affected by this procedure are required to read, understand and comply with the requirements of this procedure.

<p>NOTE: Reference NWS PD 50-11 for complete list of responsibilities http://www.nws.noaa.gov/directives/050/pd05011a.pdf</p>
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31.5 References

Incorporated References. The following list of references is incorporated as a whole or in part into this procedure. These references can provide additional explanation or guidance for the implementation of this procedure.

31.5.1 U.S. Department of Labor, Occupational Safety and Health Administration, 29 CFR 1926.1101, Asbestos.

31.5.2 U.S. Environmental Protection Agency (EPA), Region 4 - Air, Pesticides and Toxics, The Asbestos Informer.

31.6 Attachments

Attachment A: Sample List of Suspect Asbestos-Containing Materials

ATTACHMENT A
Sample List of Suspect Asbestos-Containing Materials

Cement pipes	Elevator brake shoes
Cement wallboard	HVAC duct insulation
Cement siding	Boiler insulation
Asphalt floor tile	Breaching insulation
Vinyl floor tile	Ductwork flexible fabric connections
Vinyl sheet flooring	Cooling towers
Flooring backing	Pipe insulation
Construction mastics (floor tile, carpet, etc.)	Heating and electrical ducts
Acoustical plaster	Electrical panel partitions
Decorative plaster	Electrical cloth
Textured paints/coatings	Electrical wiring insulation
Ceiling tiles and lay-in panels	Chalkboards
Spray-applied insulation	Roofing shingles
Blown-in insulation	Roofing felt
Fireproofing materials	Base flashing
Taping compounds (thermal)	Thermal paper products
High temperature gaskets	Caulking/Putties
Laboratory hoods/table tops	Adhesives
Laboratory gloves	Wallboard
Fire blankets	Joint compounds
Fire curtains	Vinyl wall coverings
Elevator equipment panels	Spackling compounds