U.S General Service Administration (GSA)

GSA Order: Asbestos Management

PBS 1000.1B
PBS Office of Facilities Management

Purpose:

The purpose of this Order is to identify the Public Buildings Service (PBS) requirements for asbestos management necessary for compliance with the Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), and applicable State and local asbestos regulations.

Background:

Asbestos is a naturally occurring mineral used in a large assortment of commercial and industrial products due to its good insulating and tensile strength properties. Microscopic fibers from broken or deteriorated asbestos products can lead to disease or cancer when inhaled. Federal (referenced OSHA and EPA standards), state, and local regulations exist to limit human exposure and environmental contamination of asbestos-containing materials in Federal and commercial facilities through strict asbestos management, demolition, and disposal requirements.

Authority

a. 41 CFR § 102-80 establishes real property policy asbestos requirements for PBS and other Federal agencies.
b. 29 CFR § 1910.1001 establishes asbestos requirements for general industry.
c. 29 CFR § 1926.1101 establishes asbestos requirements for the construction industry.
d. 40 CFR Part 61 Subpart M, the National Emission Standards for Hazardous Air Pollutants, establishes requirements for asbestos demolition and disposal.
e. 40 CFR Part 763 Subpart E, Appendix C, Asbestos Hazard Emergency Response Abatement Reauthorization Act establishes asbestos training requirements (Model Accreditation Plan) for inspectors and management planners performing work in Federal facilities.
f. 40 CFR Part 302.4, Comprehensive Environmental Response, Compensation, and Liability Act establishes reporting requirements for asbestos released into the environment.

Applicability:

This Order applies to all Federally owned facilities under the jurisdiction, custody and control of the General Services Administration (GSA) including facilities operating under a delegation of authority (GSA-controlled federally owned). The Order also applies to GSA leased facilities as leases awarded by GSA must include contractual requirements for asbestos certification and related information.

Cancellation:

PBS 1000.1A, dated April 11, 2022, is hereby canceled by this Order.

Summary of Changes:

a. Reduces redundant language.
b. Reformats to enhance usability.
c. Moves away from five-year reinspections to mandatory, well-defined annual visual inspections as part of a more adaptive, risk-based approach, ensuring consistent documentation.
d. Eliminates mandatory annual air sampling in specific buildings.
e. Reduces management plan requirements.
f. Better defines roles and responsibilities.
g. Better defines recordkeeping requirements.
h. Updates several technical requirements regarding sampling methodology in the Asbestos Management Desk Guide.

Policy:

a. Regulated asbestos in all GSA-controlled federally owned facilities, shall be managed in place unless the age and condition of the asbestos constitutes a risk to occupants that cannot be mitigated through ongoing management of the asbestos. Asbestos that cannot be managed in place must be subject to a response action to mitigate the ongoing risk.

b. All occupied GSA-controlled federally owned facilities, constructed before 1998,must be inspected for ACM.

c. Periodic surveillance of ACM must be performed at least annually in all GSA-controlled federally owned facilities that contain ACM or PACM, except for materials that are permanently enclosed. The asbestos inspection inventory list used for periodic surveillance must be updated accordingly as ACM is discovered to have been removed or undiscovered ACM is found.

d. Annual notification to employers of employees of the presence, location, and quantity of ACM or PACM must occur as required by OSHA. Additionally, notification must also be provided to prospective bidders and each contractor working in the facility about the presence, location, and quantity of ACM or PACM at the beginning of their contract.

e. Appropriate ACM warning signs must be posted as required by OSHA in GSA-controlled federally owned facilities.

f. An asbestos pre-alteration assessment must be conducted prior to the commencement of any work that may disturb ACM. The assessment must occur in the part of the facility where the work is to take place and include an inspection and evaluation of the presence and condition of regulated asbestos to determine whether, and to what extent, asbestos may be disturbed. If the pre-alteration assessment finds undiscovered ACM, the asbestos inspection inventory list must be updated accordingly.

g. All asbestos inspections and construction project designs involving regulated asbestos in GSA-controlled federally owned facilities must be performed by an EPA-accredited asbestos inspector or an EPA-accredited project designer.

h. All project monitoring must be performed on all asbestos abatement projects in GSA-controlled federally owned facilities.

i. After a project has been completed that impacts ACM, the asbestos inspection inventory list for the facility must be updated accordingly.

j. All PBS employees who have the potential to come in contact with asbestos during their routine job duties based on their job hazard assessment, must complete the assigned OLU asbestos training course.

k. All new leases awarded by GSA must include contractual requirements for asbestos certification and associated documentation.

l. Incidents involving a GSA employee and a fiber release episode resulting in airborne asbestos exposure must be documented and reported to the Employee Safety and Occupational Health Program within OAS.

m. Additional information on these topics is provided in the PBS Desk Guide For GSA Order PBS 1000.1B Asbestos Management. The Desk Guide provides additional technical information designed to supplement this Order.

Program Audit:

The Office of Chief Financial Officer (OCFO), PBS Financial Operations Division, with support from the PBS Office of Facilities Management, conducts annual reviews of asbestos inspections to obtain abatement cost estimates which are utilized to develop

an asbestos liability estimate as required by Federal Accounting Standards. Construction project information is examined for accurate asbestos cost accounting. The reviews support establishment of overall environmental liabilities, which make up a portion of the annual agency financial report.

Signature

/S/ 12/16/2024

Elliot Doomes
Commissioner
Public Buildings Service

Date

Public Buildings Service
Desk Guide
For
GSA Order PBS 1000.1B Asbestos Management

Office of Facilities Management
Facility Risk Management Division
December 16, 2024

Desk Guide for Asbestos Management

Contents

Introduction

This Desk Guide provides additional technical information designed to supplement GSA Order PBS 1000.1B Asbestos Management. The Public Buildings Service's (PBS) priority is to safely manage asbestos in place. However, once asbestos can no longer be safely managed in place, one or more response actions, recognized by the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA), must be performed to avoid immediate and long-term risk to occupants, contractors, visitors, employees, and the environment. What follows are detailed PBS requirements, templates, and best practices in support of asbestos management.

References and Authorities

41 C.F.R. § 102-80.15: Federal Management Regulations that require federal agencies to provide safe and healthy work environments and be responsible for the following assessment and management actions regarding asbestos:

- Inspect and assess buildings for the presence and condition of asbestos-containing materials. Space to be leased must be free of all asbestos containing materials, except undamaged asbestos flooring in the space or undamaged boiler or pipe insulation outside the space, in which case an asbestos management program conforming to U.S. Environmental Protection Agency (EPA) guidance must be implemented.
- Manage in-place asbestos that is in good condition and not likely to be disturbed.
- Abate damaged asbestos and asbestos likely to be disturbed. Federal agencies must perform a pre-alteration asbestos assessment for activities that may disturb asbestos.
- Not use asbestos in new construction, renovation/modernization or repair of their owned or leased space. Unless approved by GSA, Federal agencies must not obtain space with asbestos through purchase, exchange, transfer, or lease, except as identified in the first bullet of this section.
- Communicate all written and oral asbestos information about the leased space to tenants.

OSHA 29 C.F.R. § 1910.1001: OSHA asbestos regulations for general industry that require protective measures for people working with and around asbestos. Establishes requirements in the following:

- worker training,
- exposure assessment,
- medical monitoring,
- personal protective equipment,

- asbestos warning signs and labels,
- cleaning and housekeeping procedures,
- work practices during activities that will disturb asbestos, and
- disposal of asbestos waste.

OSHA 29 C.F.R. § 1926.1101: OSHA asbestos regulations for the construction industry that require protective measures for people working with and around asbestos in the construction trades. Establishes requirements in the following:

- worker training,
- exposure assessment,
- medical monitoring,
- personal protective equipment,
- asbestos warning signs and labels,
- cleaning and housekeeping procedures,
- work practices during activities that will disturb asbestos, and
- disposal of asbestos waste.

EPA 40 C.F.R. Part 61, Subpart M: Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations for asbestos. The Asbestos NESHAP establishes the following requirements for owners and operators of regulated asbestos-containing material (RACM) when conducting demolition and renovation activities :

- Thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable Asbestos Containing Material (ACM).
- Provide notification to EPA or the delegated State or local authority prior to demolition or renovation and disposal of RACM.
- Implement adequate controls in the demolition and renovation processes involving RACM to prevent any discharge of visible asbestos emissions to the air outside the work area(s) or building.
- Ensure all asbestos waste from demolition or renovation activities is properly packaged, labeled and sent to a licensed asbestos waste management site, accompanied by an asbestos waste shipment record.

EPA 40 CFR Part 763 Subpart E, Appendix C

The Asbestos School Hazard Reauthorization Act of 1990 (ASHARA) reauthorized the Asbestos Hazard Emergency Response Act and specifically extended asbestos training requirements for asbestos inspections and projects to commercial and public buildings. ASHARA requires all asbestos inspections to be performed or reviewed by an EPA accredited inspector. ASHARA

requires all asbestos projects to be designed or reviewed by an EPA accredited asbestos project designer.

EPA 40 C.F.R. Part 302.4: EPA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulations that establish reporting requirements for asbestos released into the environment. CERCLA requires immediate notification to the EPA National Response Center of any release of 1 pound or more asbestos within any 24 hour period, into the environment.

49 C.F.R. § 173: Department of Transportation (DOT) regulations for the packaging and transport of asbestos waste. DOT establishes the following requirements:

- Asbestos must be packaged in bags inside closed freight containers or rigid leak-tight containers.
- Vehicles transporting asbestos waste must have a DOT class 9 sign. The asbestos class 9 is a white diamond placard with seven black vertical stripes on the top half extending from the top of the placard to one inch above the horizontal centerline, labeled with the number 2212.

Definitions[1]

Asbestos. A group of naturally occurring, fibrous, silicate minerals used in a broad number of manufactured and applied commercial products. Chrysotile, amosite, and crocidolite are the most common asbestos types found in products.

Asbestos Awareness Training. A class of no more than 2 hours in length, designed to impart general health, safety, and environmental information about asbestos to individuals who may work on asbestos or may come in contact with asbestos during performance of their job duties. A GSA asbestos awareness training course is available to PBS employees through the On-line University

Asbestos Bulk Sample. A small, usually thumbnail-sized, portion of a suspect asbestos-containing building material that is collected for laboratory analysis to determine asbestos content.

Asbestos Containing Material (ACM). Also called asbestos-containing building material (ACBM), any material that contains more than 1% asbestos content as determined through laboratory bulk testing.

Asbestos Contractor/Supervisor and Worker Training. These are multi-day initial and annual refresher courses that follow the EPA asbestos model accreditation plan. These courses are designed for individuals who perform or supervise asbestos removal and other response actions.

Asbestos Inspection. The process of physically walking through a facility and gathering asbestos bulk samples for the purpose of preparing an asbestos inspection report and accompanying inventory. An inventory identifies the locations, quantities, and condition of all asbestos in the facility. Asbestos inspection and inventory information is used to assist in performing pre-alteration assessments for construction projects and maintenance activities.

Asbestos Inspector Training. A 3-day initial and 4-hour annual refresher course that follows the EPA asbestos model accreditation plan. The course is designed to train individuals who perform Asbestos Inspections. Trained individuals must maintain their state or local authority licensing or certification by completing annual refresher courses. This course is often offered with a 2-day Management Planner course to create an initial 5-day Inspector/Management Planner overall course. The management planner is designed for those who prepare asbestos facility

[1] These definitions are taken directly from EPA and OSHA regulations and guidance documents, or are common industry terms included as a resource for users.

management plans. Any asbestos inspection or pre-alteration assessment performed for GSA must be conducted by or reviewed by a licensed asbestos inspector, per EPA regulations.

Asbestos Notification. The process of informing prospective bidders, contractors, or occupants about asbestos-related information.

Asbestos O&M Plan. A written document covering asbestos maintenance, repair and surveillance work procedures for a given facility. An O&M plan is typically a subset of the overall management plan. It must be specific to the facility and the asbestos materials and locations contained therein. An O&M plan should contain the specific procedures to be followed by facility service contract staff when performing work with or around asbestos and specific procedures for the contractor responsible for asbestos O&M activities in the facility. Appendix A contains an example outline of an O&M plan.

Asbestos O&M Training. A minimum 16-hour class following the EPA model accreditation plan requirements. The course is designed to train facility O&M staff in safely performing maintenance, cleanup and repair activities on equipment or surfaces containing asbestos.

Asbestos Project Designer Training. A 3-day initial and 8-hour annual refresher course that follows the EPA asbestos model accreditation plan. The course is designed to train individuals who perform asbestos project designs. Trained individuals must maintain their state or local authority licensing by completing annual refresher courses. All asbestos removal projects performed in Federally owned facilities under the jurisdiction, custody and control of GSA, including facilities operating under a GSA delegation of authority, must be designed by or reviewed by a licensed asbestos project designer, per EPA regulations.

Category I Nonfriable ACM. EPA classification of asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 C.F.R. Part 763, section 1, Polarized Light Microscopy.

Category II Nonfriable ACM. EPA classification of any material, excluding Category I nonfriable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 C.F.R. Part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Class I Asbestos Work. OSHA classification of asbestos removal involving thermal system or surfacing ACM.

Class II Asbestos Work. OSHA classification of asbestos removal of any ACM material other than thermal system or surfacing ACM.

Class III Asbestos Work. OSHA classification for repair or maintenance work on asbestos materials.

Class IV Asbestos Work. OSHA classification for the cleanup of asbestos materials and maintenance or custodial activities which may involve contact with, but no disturbance of asbestos.

Damaged ACM. Asbestos material that is in a damaged condition such that up to 25% localized or 10% distributed within a functional space or a facility.

Fiber Release Episode. Any uncontrolled or unintentional disturbance of ACBM resulting in visible emission.

Friable. Any asbestos-containing material that when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material that once damaged, can now be crumbled, pulverized, or reduced to powder by hand pressure.

Functional Space. A term commonly used to designate a room, group of rooms, or area(s) designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions in a facility.

Future Potential Damage. A term commonly used to estimate the probability (low, medium, high) and type of damage (air erosion, vibration, physical contact) that may occur to ACM materials in the future.

Homogeneous Area. A common method of assigning an identifier for all identical ACM materials within a facility, based upon factors such as color, texture and age of application.

Miscellaneous Material. Any other asbestos material in a facility that is not surfacing material or thermal system insulation.

Periodic Surveillance. The process of physically walking through a facility with either the most current asbestos inspection inventory list or the most recent periodic surveillance report and visibly noting any changes in asbestos condition or quantities. The periodic surveillance is performed annually, often by an asbestos-trained facility O&M employee or similarly trained consultant. Unlike an asbestos inspection, periodic surveillance typically does not include bulk asbestos sampling and analysis, nor is it intended to result in a comprehensive inventory of all regulated asbestos in the facility.

Pre-alteration Assessment. The process of determining whether planned renovation or construction projects may impact asbestos in building materials or equipment associated with the project. The purpose of a pre-alteration assessment is to identify asbestos that may be disturbed so that it can be accounted for in the project scope and thereby avoid an accidental release of asbestos that could put occupants at risk. Pre-alteration assessments must be performed by or reviewed by a licensed asbestos inspector or project designer. A pre-alteration assessment can range from simply matching asbestos inventory information to the project scope in terms of location and materials, to an independent contract for a limited inspection of the project area and materials. Pre-alteration assessments should be performed as early as possible in the project planning or scoping phases, in order to account for any necessary asbestos work scope and cost in the project.

Presumed Asbestos (PACM). All thermal system insulations and surfacing materials found in buildings constructed no later than 1980. PACM is considered to be ACM unless proven otherwise by appropriate bulk sampling and laboratory analyses.

Response Actions. An EPA term for the options used to prevent the release of friable ACM, in order to protect human health and the environment:

- Removal. The process of removing asbestos from the substrate, commonly referred to as abatement
- Repair. The process of repairing asbestos to an undamaged condition.
- Encapsulation. The process of applying a coating to a surface or material, intended to cover and bind any underlying damaged asbestos.
- Enclosure. The process of constructing a physical barrier around the damaged asbestos.
- Dismantling. The process of physically removing the damaged building component or structure
- O&M. The process of maintaining asbestos during facility O&M activities through cleanup, repair or small-scale, short-duration removal.

Regulated Asbestos. Refers to any material containing more than 1% asbestos through bulk laboratory analysis, as defined by the EPA and OSHA. Also refers to materials containing any concentration of asbestos that has become airborne and poses an exposure risk, as defined by OSHA.

Significantly Damaged ACM. Asbestos material that has severe damage of more than 25% localized or 10% distributed surfaces throughout a functional space or a facility.

Small-Scale, Short Duration (SSSD) Activities. Removal of small quantities of asbestos when required in the performance of other maintenance activities. SSSD quantities are no more than

the amount of asbestos that can be contained in a single glove bag.

Surfacing Material. Any asbestos material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal System Insulation (TSI). Any asbestos material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Third-Party Monitoring. An industrial hygiene or environmental consultant company independently hired and separate from the company performing asbestos removal. The third-party consultant is commonly responsible for performing visual and air sampling quality assurance of the asbestos response action(s) to confirm compliance with regulations and the scope of work. Monitoring also commonly includes final visual inspection and clearance sampling to confirm the response action(s) have been successful and the space(s) are acceptable for re-occupancy.

Vermiculite. A natural platy material containing mica and other minerals. Often used for insulation, in potting soil and as a packing material. Until 1994, nearly 90% of vermiculite used in the United States was from an asbestos-contaminated source. Vermiculite found in Federal facilities, constructed before 1994, should be considered contaminated with asbestos until thoroughly tested. Testing commonly reveals trace (<1%) amounts of asbestos present.

Waste Shipment Record. The name of the manifest document defined by EPA, used to record the transport and disposal of asbestos waste.

Responsibilities

a. PBS Facilities Risk Management Division (FMRD). Central Office PBS FMRD is responsible for:

   (1) Issuance of this policy and all subsequent updates,

   (2) Providing national guidance and training in support of this policy,

   (3) Maintaining the IRIS FMA asbestos module IT recordkeeping system,

   (4) Supporting the PBS Office of Chief Financial Officer in the asbestos financial liability auditing process,

(5) Supporting regional Environmental, Health, Safety, Fire Protection (EHSF) offices in asbestos program management activities.

b. PBS Office of Architecture and Engineering. Central Office PBS Office of Architecture and Engineering is responsible for:

(1) Ensuring that P100 Facility Standards for the Public Buildings Service updates incorporate the most current, applicable asbestos requirements.

c. PBS Office of Leasing. Central Office PBS Office of Leasing is responsible for:

(1) Ensuring that updates to the standard, national lease contracting language incorporate the most current, applicable asbestos requirements for leases.

d. GSA OAS. Central Office OAS is responsible for:

(1) Retaining all records of GSA employees involved in a fiber release episode resulting in airborne asbestos exposure.

(2) Verifying that GSA employees have completed applicable training.

e. PBS Regional D&C. Regional Design and Construction Divisions are responsible for ensuring:

(1) Prior to the commencement of any work, a pre-alteration assessment is performed for every project managed by the Division in the part of the facility where the work is to take place and includes an inspection and evaluate the presence and condition of regulated asbestos to determine whether and to what extent asbestos may be disturbed,

(2) Provide pre-alteration assessment results to the Regional EHSF program office if the assessment determines the presence of ACM,

(3) Every project with asbestos impact, as determined by the pre-alteration assessment, includes a scope for asbestos response and third-party oversight, developed by an EPA-accredited project designer,

(4) Information for every asbestos project response action is properly recorded as outlined in the Recordkeeping section of the Desk Guide,

(5) Final close-out documents from the third party monitoring company are sent to the Regional EHSF program office.

f. PBS Regional LS/LCO. Regional LS/LCOs are responsible for ensuring:

(1) For new, replacing, succeeding and superseding leases, the Offeror has completed the asbestos representation on GSA Form 1364,

(2) Request the Offeror's existing records to support the claim that no asbestos is present in facilities as needed,

(3) If an Offeror indicates the presence of asbestos, the Offeror also provides a current asbestos-related management plan or O&M plan, along with a current asbestos re-inspection report, in accordance with the Request for Lease Proposal requirements,

(4) Any re-inspection report and management or O&M plan received from the Offeror is forwarded to the regional EHSF for review,

(5) Any asbestos documentation received from an Offeror is maintained in the Kahua.

g. PBS Regional EHSF Program Office. The PBS Regional EHSF program office is responsible for:

(1) Overseeing compliance with the asbestos management program and this policy throughout the region,

(2) Ensuring asbestos inspections and periodic surveillance are conducted for all applicable regional Federal facilities,

(3) Providing technical asbestos program support to regional facility managers, project managers and lease administration managers, as needed,

(4) Ensuring regional asbestos program information is recorded and maintained within the IRIS FMA asbestos module IT system,

(5) Reviewing asbestos reports and documentation including but not limited to pre-alteration assessments and final close-out documents from third party monitoring companies in order to update and ensure the accuracy of the the asbestos inspection inventory list,

(6) Providing recommendations to responsible offices as needed,

h. PBS Regional FM/SC Divisions. For each GSA-controlled federally owned facility, the PBS Regional FM/SC Divisions are responsible for ensuring:

(1) Prior to the commencement of any work, a pre-alteration assessment is performed for every project managed by the Division in the part of the facility where the work is to take place and include an inspection and

evaluate the presence and condition of regulated asbestos to determine whether and to what extent asbestos may be disturbed,

(2) Provide pre-alteration assessment results to the Regional EHSF program office if the assessment determines the presence of ACM,

(3) Every project with asbestos impact, as determined by the pre-alteration assessment, includes a scope for asbestos response and third-party oversight, developed by an EPA-accredited project designer,

(4) Final close-out documents from the third party monitoring company are sent to the Regional EHSF program office,

(5) Annual asbestos periodic surveillance is completed for each facility that contains ACM or PACM, except for materials that are permanently enclosed,

(6) Asbestos notifications are completed for each facility that contains ACM or PACM,

(7) Asbestos warning signs are posted in appropriate locations,

(8) Only trained individuals perform asbestos O&M work,

(9) Periodic surveillance results, asbestos notifications, or other related asbestos records are recorded in the IRIS FMA asbestos module IT system with support, as needed, from the regional EHSF Office,

(10) Any asbestos accident or release in a facility is promptly reported to the regional EHSF Office.

Recordkeeping

All ACM recordkeeping will be performed as listed below:

a. For all GSA-controlled federally owned facilities that contain asbestos, the asbestos module of the PBS IRIS IT application or subsequent application is the official repository for:

- Asbestos inspection and inventory list,
- asbestos periodic surveillance results,
- and annual asbestos notifications.

b. The PBS Kahua IT application or subsequent application is the official asbestos repository of record for detailed asbestos abatement project deliverables, including but not limited to design and construction submittals and drawings, for all GSA-controlled federally owned.

c. The PBS G-REX IT application or subsequent application is the official asbestos repository of record for asbestos information furnished by the lessor or Offeror for all GSA leased facilities.

d. Additional asbestos documents not required to be maintained in the above applications may be documented in a Google Drive, COR files, or PBS National Computerized Maintenance Management System (NCMMS).

e. For Federal facilities operating under a GSA delegation of authority, all asbestos records produced by the delegated agency must be maintained by the agency and made available to GSA upon request.

f. GSA employee exposure reports that have been submitted must be maintained by OAS.

Building Inspections

Asbestos Inspections involve a process of physically walking through a facility and gathering asbestos bulk samples for the purpose of preparing an asbestos inspection report and accompanying inventory. An inventory identifies the locations, quantities and condition of all asbestos in the facility. The asbestos inventory list is used to conduct Periodic Surveillance and assist in performing pre-alteration assessments for construction projects and maintenance activities.

All occupied GSA-controlled federally owned facilities, constructed before 1998, must have an Asbestos Inspection for ACM performed in them. These must be performed by an EPA-accredited Asbestos Inspector or Management Planner. The specific requirements of each state regarding who conducts inspections and how they are conducted must be verified, including the methods of sample analysis, before proceeding with inspections.

Additional inspections can be conducted at the discretion of the regional Environmental, Health, Safety, & Fire Protection (EHSF) program office responsible for asbestos. All future building inspections must contain a detailed cost estimate using the scope of work, attached here (available only to GSA employees).

Periodic Surveillance

Asbestos Periodic Surveillance involves a physical walkthrough of a facility using the most current Asbestos Inspection inventory list to note any visible changes in asbestos presence or condition. Periodic Surveillance must be performed at least annually in all GSA-controlled federally owned facilities that contain ACM or PACM, except for materials that are permanently enclosed. The Asbestos Inspection inventory list used for Periodic Surveillance must be updated accordingly as ACM is discovered to have been removed or undiscovered ACM is found.

Air Monitoring

A region can voluntarily elect to conduct air monitoring in facilities based on previous sampling results or based on the consideration of specific situations. If conducting air monitoring, air samples must be collected using Phase Contrast Microscopy (PCM) following the NIOSH 7400 collection and analytical method and can be further analyzed by the EPA AHERA method for Transmission Electron Microscopic (TEM) analysis if required. The total number and location of air samples must be identified to be representative of the fireproofed areas of the facility and areas impacted by the fireproofing. The number and location of samples must be selected to be roughly representative of the fireproofed and affected HVAC zones in the facility. Each sample must be compared to the benchmark of 0.01 fibers per cubic centimeter (f/cc) or 70 s/mm^2(structures per square millimeter). Any areas with samples above these thresholds must be inspected for potential contamination, cleaned and resampled as necessary until subsequent air concentrations are reduced below these thresholds. Affected occupants must be notified of any air samples that exceed the benchmark in accordance with the Risk Management Notification policy (PBS 2400.1).

Operations and Maintenance Plans

If part of contract requirements, O&M contractors conducting asbestos work must develop a site-specific plan that includes the standard procedures used to address ACM maintenance, repair, and cleanup. The procedures should match the actual steps used by the O&M or other contractor(s) responsible for performing asbestos O&M activities. O&M plans should be considered living documents and as such, be updated as procedures are changed. The facility O&M contractor or the service contract Contracting Officer’s Representative is responsible for maintaining the asbestos O&M plan.

Notifications

Occupied Facilities

All GSA-controlled federally owned facilities that contain ACM must annually notify employers of employees of the presence, location, and quantity of ACM or PACM as described below and as required by OSHA. Notification must also be provided to prospective bidders and each contractor working in the facility about the presence, location, and quantity of ACM or PACM at the beginning of their contract.

An optional standardized template (available only to GSA employees) is available for use, but does not have to be used if a similar process has already been developed.

Non-occupied Facilities

For Non-Occupied facilities, a general disclosure to employers of employees who may enter the facility of the potential hazards, including the presence of ACM or PACM, should be provided. This could include language in the contract, a posted notice, or other forms of verbal and written communication.

An optional standardized template (available only to GSA employees) is available for use, but does not have to be used if a similar process has already been developed.

Project Notification

Projects within the facility that may impact ACM or PACM must be communicated to and coordinated with occupant agencies and contractors in accordance with OSHA requirements.

An optional standardized template (available only to GSA employees) for project notification is available for use, but does not have to be used if a similar process has already been developed.

Fiber Release Episode

Asbestos notification must also be sent to affected occupants for any Fiber Release Episode involving asbestos, or in accordance with the Risk Management Notification policy (PBS 2400.1).

Supervisors of a GSA employee involved in a Fiber Release Episode that results in exposure to airborne asbestos must document and report it to the Employee Safety and Occupational Health Program within the Office of Administrative Services. An optional standardized template (available only to GSA employees) for documentation of asbestos exposure is available for use, but does not have to be used if a similar process has already been developed.

Warning Signs

To minimize the risk of exposure, warning signs must be posted in spaces that contain ACM or PACM that are likely to be damaged, removed, or disturbed. Signs must be posted at the entrances to all mechanical spaces that contain ACM or PACM. If a mechanical space has multiple entrances, signs must be posted at each entrance. Alternative posting formats or locations can also be developed as long as they meet the same intent. Signs shall be specific to the space and may need to be modified following an abatement project. Typically, occupant agency spaces do not require signage because ACM and PACM in those areas are not likely to be damaged, removed, or disturbed. Standardized signage is available here (available only to GSA employees).

Projects

Response Actions

Asbestos that can no longer be managed in place through O&M activities, or which must be disturbed during a planned construction project is subject to one or more of the following response actions, to be performed in compliance with EPA 40 C.F.R. Part 61:

- Removal (also called abatement). The physical stripping or removing asbestos material from equipment or a substrate.
- Repair. Restoring damaged asbestos to an undamaged state.
- Encapsulation. Application of a coating (such as paint or epoxy) to an asbestos surface to render the asbestos nonfriable or lockdown any loose asbestos fibers.
- Enclosure. Construction of a physical barrier around the asbestos material or equipment to protect against physical contact.
- Dismantling. The physical removal of an intact asbestos insulated building component or equipment (e.g., fire door, transite panels, etc.) that does not disturb the asbestos.
- O&M. The process of maintaining asbestos during facility O&M activities through cleanup, repair and/or small-scale, short-duration removal.

More information about Federal Facility Compliance with the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 C.F.R. §61 Subpart M) is available in the EPA Compliance Advisory (available only to GSA employees).

All construction projects in GSA-controlled federally owned, must be assessed for potential asbestos impact early in the planning or design process, through a pre-alteration assessment. Asbestos was never completely banned in the United States, and some imported products have recently been found to contain asbestos. Therefore, even newly constructed or renovated

facilities could have asbestos materials. Vermiculite materials may also be contaminated with asbestos and should therefore be PACM for facilities constructed before 1994 until testing proves otherwise.

Pre-Alteration Assessments

The OSHA Construction Standard, 29 CFR 1926.1101, mandates that surfacing and thermal systems insulation in buildings constructed before January 1, 1981, are considered PACM unless proven otherwise. GSA considers materials replaced by non-asbestos alternatives after January 1, 1981, as exempt from the aforementioned OSHA requirement, provided that such replacements are properly documented. While buildings constructed after 1980 are not subject to specific regulations, OSHA requires building owners to exercise due diligence in identifying any potentially asbestos-containing materials.

Moreover, the EPA NESHAP (40 C.F.R. §61 Subpart M) necessitates a thorough inspection of the affected facility, where demolition, repair, or alteration work will occur, before commencing such activities. It is noteworthy that the NESHAP does not address the construction date of the building. Despite a significant decline in the use of asbestos-containing building materials over the past few decades, it is imperative to recognize that asbestos has not been entirely banned. Presently, asbestos may still be found in certain products like drywall mud and flashing cement. Hence, before designing a demolition, repair, or alteration project, an evaluation must be conducted to ascertain the presence of asbestos in the project area. This assessment involves reviewing any available asbestos surveys and consulting with GSA regional environmental, health, and safety offices.

A pre-alteration assessment must be conducted on the portion of the facility that will be affected by the renovation or demolition operation to inspect and evaluate the presence, location, and quality of asbestos-containing materials to determine whether and to what extent asbestos may be disturbed (41 CFR 102-80.15). PACM and suspected asbestos must undergo sampling and testing or be treated as asbestos-containing. In areas that are not readily accessible but will be impacted by the project, "destructive" samples must be collected and tested, or suspect materials are to be considered PACM.

Projects with the potential to disturb asbestos must implement controls to safeguard the construction contractor, building occupants, the public, and the environment. GSA adheres to state and local asbestos regulations where applicable, in addition to the Federal NESHAP, including notification requirements. Designers must seek guidance from GSA regional environmental, health, and safety offices for specific instructions.

Pre-alteration assessments typically involve the following steps:

1. Review the most current Asbestos Inspection or Periodic Surveillance listing for the facility.
2. Search the listing for locations, equipment, and materials likely to be included in the construction project.
3. Flag any materials or equipment in the listing that will likely be disturbed or demolished in the project.
4. Materials or equipment in the project that are not identified in the listing will need to be bulk sampled and laboratory analyzed to confirm whether they contain asbestos.
5. The project design will need to include an asbestos portion for any asbestos materials found to be impacted by the project, either from the listing review or from bulk material sampling and analysis.

Project Design

The asbestos portion of any construction project in a GSA-controlled federally owned facility must be designed or reviewed by an EPA-accredited asbestos project designer.

Project Notification to the State

Make sure to check the state's requirements for asbestos projects during the planning stages to determine if notification to the state is necessary before beginning renovation, alteration, or construction. This notification process may impact project schedule, so timely action is essential.

Project Monitoring

Project monitoring for asbestos is the use of an environmental or industrial hygiene consultant, unaffiliated with the asbestos removal contractor and independently hired by an AE, CMc, CMa, or GSA directly to oversee the asbestos work on a construction project. Project monitoring must be performed on all asbestos abatement projects in GSa-controlled federally owned facilities. Monitoring can vary based on site-specific circumstances, but typically involves the following activities:

- A review of the asbestos contractor’s technical submittals.
- Inspection of the initial asbestos removal work area setup.
- Air sampling before and during asbestos work except for Non-Occupied facilities that entail disturbance or removal of asbestos or during single small-scale, short-duration asbestos projects unless required by federal, state, or local regulations.
- Sampling during asbestos work generally consists of air samples collected:
    - Outside the regulatory work area or enclosure,
    - Opposite of a critical barrier, and
    - Outside any entrances and exits to the work area (decon area and loadout). Air samples collected outside the asbestos enclosure or work area(s) should remain below 0.01 f/cc or the background levels measured prior to abatement.

Levels above these thresholds will require some cleaning of the affected area(s) by the abatement contractor.

- Periodic inspection of the asbestos work being performed.
- Final visual inspection of the work area after all asbestos work is completed.
- Final air clearance sampling after the work area has passed visual inspection.

Air sampling before and during the asbestos work is compared either to the typically acceptable baseline of 0.01 f/cc concentration or to some ambient baseline fiber concentration measured in a clean space outside the work area. Asbestos work practices are required to be adjusted if the air concentrations exceed these baseline values. The asbestos contractor will also be required to make corrections to any unsafe practices or defects in their work area setup, observed by the monitoring professional.

Final air clearance is needed to determine if the asbestos work area is acceptable to be opened for further construction or general occupancy. Clearance air sampling should always be performed aggressively, and may only proceed once the asbestos work area has passed visual inspection. Clearance air sampling must preferentially consist of PCM following the NIOSH 7400 collection and analytical method, if not otherwise dictated by State and local regulations. TEM following the EPA AHERA sampling and analytical method may be used for clearance instead of PCM as follows:

- Whenever PCM analytical results are not sufficient,
- Construction activities or other similar characteristics will lead to PCM samples with false positive results, or
- At the discretion of the EHSF program office responsible for asbestos.

Air clearance is considered acceptable whenever all PCM air samples are less than or equal to 0.01 fibers per cubic centimeter (f/cc) or all TEM air samples are less than or equal to 70 structures per millimeter squared (s/mm2) and as further detailed in AHERA, blank corrected. Visual inspection and final clearance air sampling must be repeated whenever either fails and after the work area has been recleaned by the asbestos abatement contractor.

Cost Accounting

The cost associated with asbestos work for any construction project in GSA-controlled federally owned facilities must use the function code PGL26 in order to accurately account for asbestos-related agency costs, as required in GSA Chief Financial Officer Manual Volume 3 (CFO 4260.3).

Asbestos Inspections for GSA-controlled federally owned facilities, must include abatement cost estimates recorded in the FMA Asbestos templates. The unit cost estimates must be consistent and should be based on some defensible method such as the RS Means guides. Each template automatically calculates the overall abatement cost estimate for each asbestos material (quantity x unit cost) and the costs for all inspections and re-inspections are compiled and analyzed by the PBS Office of the Chief Financial Officer as part of the required agency annual asbestos financial liability reporting process.

Asbestos financial liability reporting relies on agency-wide unit cost values for each major asbestos category multiplied by the size of the entire GSA Federal facilities portfolio. The portfolio and unit costs are adjusted quarterly and annually to account for changes in the number of covered facilities and results from inspection or reinspection estimates. Facilities that appear to no longer have asbestos, for financial reporting purposes are requested to complete an Asbestos Confirmation Statement (ACS), attesting to the change. The current version of the ACS is available here (available only to GSA employees). Such facilities are excluded from future asbestos financial liability reporting.

GSA has determined that asbestos is a building shell cost, as reflected in the *Pricing Desk Guide,* 5th ed. at § 3.5.1. Therefore, all asbestos abatement or response actions performed as part of a customer agency project, including support work such as pre-alteration assessments and third-party monitoring should be funded by GSA. Whenever customer agency projects are fully funded via Reimbursable Work Authorization, GSA must provide rent consideration to credit the agency for the associated asbestos work. *See Pricing Desk Guide,* 5th ed. at § 3.5.1 (note).

Training

Training is required for individuals performing certain asbestos-related tasks. The EPA AHERA Model Accreditation Plan (EPA 40 C.F.R. Part 763 Subpart E, Appendix C) established accredited training curricula for the following disciplines:

- Asbestos Inspector (initial 3-day training duration)
- Asbestos Management Planner (Inspector completion plus initial 2-day training duration)
- Asbestos Project Designer (initial 3-day training duration)
- Asbestos Worker (initial 4-day training duration)
- Asbestos Contractor/Supervisor (initial 5-day training duration)

Asbestos training accreditation is delegated by the EPA to each state. States have the ability to require additional training for any discipline and may establish requirements for an asbestos project monitor discipline. Individuals successfully completing initial EPA-accredited training must complete an annual refresher course to retain their state certification for the respective discipline.

Asbestos Inspections, Pre-Alteration Assessments, and asbestos project designs for all GSA-controlled federally owned facilities must be performed by individuals successfully completing EPA accreditation in the following disciplines:

- Asbestos Inspections = Asbestos Inspector training
- Asbestos Pre-Alteration Assessments = Asbestos Inspector or Project Designer training
- Asbestos project designs = Asbestos Project Designer Training

GSA employees and delegated agency staff performing any of the above three activities must have completed the associated training as required by the EPA AHERA reauthorization act (ASHARA).

GSA Employee Asbestos Training. All PBS employees who have the potential to come in contact with asbestos during their routine job duties, based on their job hazard assessment, must complete the assigned OLU asbestos training course.

Asbestos O&M Training. Individuals performing routine maintenance, repair or small-scale, short-duration cleanup of asbestos on building equipment or components must complete asbestos O&M training. O&M contractors performing the aforementioned asbestos work within GSA-controlled federally owned facilities, must ensure their employees have completed the 16-hour training.

Leasing Requirements

GSA contract language for new leases has several clauses involving ACM. Standard and template lease contract language is reviewed annually to ensure all requirements are current and applicable. The building owner or lessor is required to certify whether the space being offered to GSA for a lease contains asbestos. Refer to the lease contract language for the specific lease requirements.