

TEXAS A&M UNIVERSITY
Asbestos Operations & Maintenance Program

2023

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I. INTRODUCTION

Asbestos is a naturally occurring fibrous mineral of several distinct types. Its unusual properties of non-combustibility, high tensile strength, noise reduction/absorption, thermal insulation, etc. have made it useful in a wide variety of products and applications. There are six types of asbestos: Chrysotile, Amosite, Crocidolite, Tremolite, Actinolite, and Anthophyllite. Chrysotile is the most commonly used type of asbestos and was a component of hundreds of commercially-available products. Asbestos use began over one hundred years ago and was considered to be the best available product for its intended use at the time.

A. Definitions

Words and abbreviations used in this written program are defined as found in *Attachment A: Glossary of Acronyms and Terms*.

B. Types of ACM/ACBM

The following list of products includes some (but not all) materials that are known to potentially contain asbestos, based on their history and/or usage:

- Cement Pipes
- Elevator Brake Shoes
- Cement Wallboard
- HVAC Duct Insulation
- Cement Siding
- Boiler Insulation
- Asphalt floor tiles
- Breaching Insulation
- Vinyl Floor Tile
- Vinyl Sheet Flooring
- Ductwork Flexible Fabric Connections
- Cooling towers
- Floor Backing
- Pipe Insulations (corrugated air-cell, block, etc.)
- Construction Mastics (floor tile, carpet, ceiling tile, etc.)
- Heating and Electrical Ducts
- Acoustical Plaster
- Electrical Panel Partitions
- Decorative Plaster
- Electrical Cloth
- Textured Paints/Coatings
- Electric 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 Paper Products
- Packing Materials (for wall/floor penetrations)
- Fire Doors
- High Temperature Gaskets
- Caulking/Putties
- Laboratory Hood/Table Tops
- Adhesives
- Laboratory Gloves
- Wallboard
- Fire Blankets
- Joint Compounds
- Fire Curtains
- Vinyl Wall Coverings
- Elevator Equipment Panels
- Spackling Compounds

C. Asbestos-related Health Effects

Though a naturally occurring mineral, asbestos has been determined to be a toxic and/or dangerous substance that should be avoided. People who come in contact with asbestos may or may not develop health effects related to their exposure. The risk of asbestos-related disease depends on factors such as:

- Amount of asbestos
- Duration, mode, and frequency of exposure
- Existing health conditions related to respiratory system
- Whether the exposed person smokes tobacco

Exposure to asbestos usually occurs by breathing asbestos fibers in the air. Fibers can be released into air when asbestos is disturbed in its natural form in soil or rock, or in its commercial application within certain products. Disturbance as a result of weathering, erosion, crushing, cutting, breaking, drilling, abrading, sawing, or grinding can release asbestos fibers.

II. PURPOSE

Texas A&M University is committed to providing a safe environment for all students, faculty, staff, and visitors, and is obligated to comply with the Texas Department of State Health Services (TDSHS) Texas Asbestos Health Protection Rules (TAHPR) and the Environmental Protection Agency (EPA) National Emission Standards for Hazardous Airborne Pollutants (NESHAP). In accordance with this, Texas A&M Environmental Health and Safety (EHS) has developed this asbestos program to provide information about asbestos and related procedures that should be followed to effectively limit risk of exposure and protect the health of building occupants.

III. SCOPE

This Asbestos Program applies to all Texas A&M University owned, leased, and operated facilities. All Texas A&M University faculty, staff, students, visitors, and contractors should comply with this program as administered by Environmental Health & Safety (EHS). Revisions to this program shall be made by the senior Industrial Hygienist or other qualified individual designated by the EHS Director.

IV. RESPONSIBILITIES

A. Environmental Health and Safety will

- a. Obtain and maintain the TDSHS-issued Asbestos Management Planner Agency license.
- b. Maintain a team of licensed individual Asbestos Management Planners.
- c. Provide limited asbestos inspection survey reports as requested.
- d. Use an AIHA-accredited laboratory to analyze samples taken.
- e. Maintain all inspection/survey records.
- f. Investigate concerns or complaints with asbestos-related activities in university facilities.
- g. Provide awareness-level asbestos training in university's online learning system.

B. Asbestos Management Planners will

- a. Complete required initial and refresher trainings to obtain and maintain the individual Asbestos Management Planner license.
- b. Conduct inspections/surveys upon request in accordance with the Texas Asbestos Health Protection Rules (TAHPR) to determine the presence or absence of asbestos in building materials prior to disturbance during construction, renovation, and/or demolition activities.
- c. Assess by visual inspection and handling of building materials to determine the friability, condition, and approximate quantity and locations of the asbestos-containing material to be disturbed.
- d. Reference previous survey data for the building to determine homogenous materials and the need for new sampling.

C. Project Managers will

- a. Complete asbestos awareness training.
- b. Obtain an asbestos survey from EHS prior to any construction, renovation, or demolition activity that will disturb potentially asbestos-containing building materials as described in Section I.B. of this program document.
- c. Submit an asbestos survey request (*Attachment B*) to EHS, including a detailed scope of work and/or project drawings.
- d. Coordinate asbestos abatement activities as required, including filing notifications, paying notification fees, maintaining applicable records, and obtaining appropriate project design and air monitoring.
- e. Notify EHS of abatement activities at least ten business days prior to the abatement start date, including project location, amount of ACM/ACBM to be removed, project design and duration, and name of abatement contractor.
- f. Be responsible for payment of any fines incurred as the result of non-compliance with this program and/or applicable regulations.

D. Abatement Contractors will

- a. Maintain appropriate licensure with TDSHS.
- b. Determine the right course of action to encapsulate or remove the ACM/ACBM, based on the condition of material, budget availability, and intricacy of the project.
- c. Ensure that only appropriately-trained and/or licensed individuals are working on the project.
- d. Ensure abatement activities are performed in accordance with applicable state and federal regulations.

E. Facility Managers will

- a. Complete asbestos awareness training if scope of work includes the need to identify or coordinate activities that may disturb potentially asbestos-containing building materials as described in Section I.B. of this program document.
- b. Notify EHS of any potentially asbestos-containing building material in an unsafe or unsound condition.

V. CONSTRUCTION, RENOVATION AND/OR DEMOLITION ACTIVITIES

All construction, renovation, or demolition activities that may disturb potential asbestos containing building materials require an asbestos survey prior to disturbance. Regardless of age of the structure, an asbestos survey request should be submitted to EHS as early as possible to ensure adequate time to complete the assessment. An asbestos inspection or survey can be omitted only if all building materials to be disturbed will be presumed to contain asbestos and abated accordingly. Suspect building material shall not be presumed to be free of asbestos without survey by an appropriately licensed individual and/or sampling with lab analysis.

VI. ASBESTOS INSPECTIONS/SURVEYS

Upon request, EHS performs asbestos inspections/surveys in Texas A&M University facilities. Any building material to be disturbed prior to construction, renovation, or demolition activities must be assessed by an appropriately licensed management planner to determine if the material is suspect to contain asbestos. All inspections/surveys are to be conducted in accordance with TAHPR, which includes a minimum of three samples of homogenous materials to rebut the presence of asbestos.

Building material containing 1% or more of asbestos by weight is considered asbestos-containing material and thus regulated by TDSHS.

Inspection and survey results are provided by EHS to requestors as a written report, which may include photos, diagrams, material descriptions, recommendations, and other appropriate information. The inspection report is limited and may only be used as described therein. Copies of previous survey reports are available upon request but may not be used in place of a new survey for a project scope not referenced in the report without express written permission from EHS.

VII. ASBESTOS-RELATED ACTIVITIES

Any activity that will disturb potential asbestos containing building material must be performed by trained and/or licensed professionals in accordance with TAHPR. This includes but is not limited to requirements for asbestos survey, abatement project design, air monitoring, timely notification, and recordkeeping.

Any other disturbance of asbestos-containing materials is prohibited.

A. Residual Floor Covering Institute (RFCI)

Certain removal activity of resilient floor covering is allowed under RFCI practices. This exemption from standard abatement regulations is strictly limited to intact resilient floor-covering material that is non-friable and will remain intact and not sanded, ground, mechanically chipped, drilled, abraded,

cut, or sawed. Shearing, slicing, or punching the flooring does not by itself make this section inapplicable to the flooring material.

B. Notifications

Notification of asbestos abatement or demolition must be submitted to TDSHS at least 10 working days before the asbestos abatement or demolition start date in the manner required by TDSHS. TDSHS must be notified of any demolition of a public building whether or not asbestos has been identified. TDSHS must be notified of any renovation operation if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed meets or exceeds the NESHAP threshold, in accordance with 40 CFR §61.145 (relating to Standard for demolition and renovation) of 160 square feet of surface area, 260 linear feet of pipe length, or 35 cubic feet of facility components where the length or area could not be measured. Notification must be submitted in accordance with NESHAP. If a project start date, stop date, phased project schedule, scheduled work day, or time changes from the current notified date, schedule, scheduled work day, or time, an amended notification must be submitted to TDSHS as required by TAHPR.

Additionally, written notification of abatement activities must be made to EHS at least 10 working days before the asbestos abatement or demolition start date. Note: the notification to EHS is **in addition to** notifications required by the State of Texas and does not take the place of any state-required notification.

Texas A&M University files an annual consolidated notification of non-scheduled abatements as allowed by state regulations (separate O&M activities involving ACBM, each of which does not meet or exceed a threshold of 160 square feet of surface area, 260 linear feet of pipe length, or 35 cubic feet volume of facility components where the length or area could not be measured previously). An individual project that meets or exceeds this threshold must be notified separately and must not be notified as part of the consolidated notification. Any amount of asbestos abatement conducted under this annual notification must be appropriately recorded, and relevant information must be provided to EHS. Any records generated from O&M activities must be maintained per state requirements.

C. Fees

EHS is responsible for payment of fees related to individual Asbestos Management Planner and departmental Asbestos Management Planner Agency licensure.

Project managers and/or their employing company are responsible for payment of fees related to renovation/demolition notifications, abatement activities, asbestos surveys, and any fines that result from non-compliance with this program and/or applicable regulations.

VIII. RECORDKEEPING

Records will be kept in accordance with applicable state and federal laws and regulations, including Texas A&M University System record retention policies.

Individual recordkeeping responsibilities are described in Sections IV and VII of this program.

IX. REFERENCES

- Texas Department of State Health Services: Asbestos Program
- Asbestos Health Protection Law: Texas Occupations Code, Chapter 1954
- National Emission Standards for Hazardous Air Pollutants: Code of Federal Regulations, Title 40, Chapter 1
- Texas Asbestos Health Protection Rules: Chapter 296
- Occupational Safety and Health Administration: 29 CFR 1926.1101; 29 CFR 1910.1001
- Asbestos Hazard Response Act: 296.2(a).(2)

ATTACHMENT A
Glossary of
Acronyms and Terms

1. **Abatement:** Safe removal of asbestos containing building material
2. **ACM:** Asbestos containing material means any material which contains 1% or more of asbestos
3. **ACBM:** Asbestos containing building material is any surfacing, TSI or miscellaneous material that is found in buildings.
4. **AHERA:** Asbestos Hazard Emergency Response Act
5. **Asbestos:** A generic name given to a number of naturally occurring hydrated mineral silicates that possess a unique crystalline structure, are incombustible in air, and are separable into fibers. Asbestos includes the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite and actinolite.
6. **Asbestos Abatement Activities:** Asbestos abatement or any on-site preparations or clean-up related to the abatement.
7. **Category I nonfriable:** Packings, gaskets, resilient floor covering, and asphalt roofing products.
8. **Category II nonfriable:** Any material excluding Category I material that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
9. **Friable Material:** Material that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
10. **DSHS:** Department of State Health Services
11. **EHS:** Environmental Health and Safety
12. **Encapsulation:** The coating of asbestos containing material with a bonding or sealing agent to prevent the release of airborne fibers.
13. **Enclosure:** An airtight, impermeable, permanent barrier around asbestos-containing material to prevent the release of fibers.
14. **EPA:** U.S. Environmental Protection Agency
15. **HEPA:** High efficiency particulate air is a special type of filter used in equipment for removing asbestos fibers, e.g., vacuums, air filtration devices.
16. **Homogenous Sampling Area:** In accordance with AHERA definitions, an area of surfacing material, TSI, or miscellaneous material that is uniform in color and texture.
17. **O&M Activities:** Operations & maintenance activities are repairs, maintenance, renovation, installation, replacement, or clean-up of building materials or equipment.
18. **NESHAP:** The United States Environmental Protection Agency National Emissions Standard for Hazardous Air Pollutants, as described in Title 40 CFR, Part 61.
19. **Non-Friable:** Material that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
20. **RACM:** Regulated Asbestos containing material means; friable asbestos material, Category I nonfriable ACM that has become friable, Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or Category II nonfriable ACM that has a high probability of becoming or has become crumbled,

pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

21. **Renovation:** Additions to or alterations of a building by removal, repairing, and rebuilding.
22. **RFCI:** Resilient Floor Covering Institute's Recommended Work Practices are a defined set of instructions addressed to the task of removing all resilient floor covering structures whether or not they contain asbestos.
23. **Surface Material:** Material that is sprayed, troweled-on or otherwise applied to surfaces such as acoustical plaster on ceilings, fireproofing material, etc.
24. **Suspect Material:** Building materials that are suspected to contain asbestos (due to age of building, use of material, appearance, etc.) but has not yet been proven (by sampling, lab analysis and/or building records) to contain asbestos.
25. **TAC:** Texas Administrative Code
26. **TAHPR:** Texas Asbestos Health Protection Rule
27. **TSI:** Thermal System Insulation is material in building that is 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.

ATTACHMENT B
Asbestos Survey
Request Form

