



TEXAS TECH UNIVERSITY™

Operating Policy and Procedure

OP 60.08: Asbestos Compliance and Abatement Program

DATE: March 23, 2021

PURPOSE: The purpose of this Operating Policy/Procedure (OP) is to establish a campus asbestos compliance and abatement program that will comply with Occupational Safety and Health Administration (OSHA) regulations, Environmental Protection Agency (EPA) regulations, and Texas Department of State Health Services (TDSHS) regulations relating to asbestos exposure. This OP defines the roles and responsibilities of parties involved in the asbestos program.

REVIEW: This OP will be reviewed in September of every fourth year by the Asbestos Compliance Manager with substantive revisions forwarded to the Managing Director of Environmental Health & Safety (EH&S), the Managing Director of Operations Division Engineering Services, the Managing Director of Building Maintenance & Construction (BMC), and the Associate Vice President for Operations.

POLICY/PROCEDURE

1. Overview

Asbestos is the name for a group of natural minerals that separate into strong, very fine fibers. These fibers are heat-resistant and extremely durable, making their qualities very useful in construction and industry for fireproofing, insulation, structural strengthening, sound dampening, cost savings, and aesthetics. The potential of an asbestos-containing product to release fibers is dependent upon several factors, including its location and its degree of friability. Friability means that it can be crumbled with hand pressure and, therefore, is likely to emit fibers when disturbed. Asbestos-containing materials (ACM) contain greater than one percent asbestos when analyzed by polarized light microscopy techniques.

2. Funding

Appropriated funds will be used for (1) the support of comprehensive asbestos building surveys; (2) ensuring the safe and proper removal of ACM; (3) the proper disposal of ACM; and (4) the training of university personnel who, in the course of routine activities, might come into contact with ACM. Asbestos abatement requirements identified as part of a renovation project, either by a requesting department or by Facilities Planning & Construction (FP&C), will be funded from the project budget or other approved source, and the cost of the survey may be included. Asbestos abatement requirements in auxiliary campus buildings will be funded by the responsible department, and costs for any type of asbestos surveys will be included.

3. Texas Tech University Asbestos Program

The asbestos program at Texas Tech University consists of the following two separate entities:

- a. Asbestos Compliance Management Section – The Asbestos Compliance Management Section is under Operations Division Engineering Services (ODES). It is responsible for training, surveying, sampling, analysis, quality control, recordkeeping, and communication to other departments.
- b. Insulation/Abatement Shop – The Insulation/Abatement Shop is in the Building Maintenance & Construction (BMC) Department of Operations Division. It is responsible for repair, encapsulation, abatement, transportation, and disposal.

Each department operates under departmental procedures that meet or exceed governmental regulations. Each department shall operate independently of the other to minimize any potential conflict of interest. Federal and state regulatory agencies with jurisdiction over asbestos at TTU are the Environmental Protection Agency, the U.S. Department of Transportation, the Texas Department of State Health Services, and the Texas Commission on Environmental Quality. Additional agencies with limited jurisdiction are the Railroad Commission of Texas and the Texas Department of Public Safety. Additionally, employees of private contractors working at TTU are subject to the regulations promulgated by the United States Department of Labor Occupational Safety and Health Administration.

4. Responsibilities

A successful program requires commitment at all levels of management. Program responsibilities are as follows:

- a. Operations Division Engineering Services (ODES)

Survey campus facilities and perform bulk sampling of suspected materials to determine the presence or absence of asbestos. After completion of surveys, evaluate the survey data to determine the potential for asbestos fiber release.

- (1) Systematically rank, in order from worst to best, asbestos locations posing the greatest threat of exposure.
- (2) Conduct appropriate training classes for the abatement team, custodial staff, and others who frequent areas where asbestos exposure is a possibility.
- (3) Keep departmental heads informed of abatement projects and progress being made in their area. If, at any time, it is suspected that a fiber release has occurred that could endanger public health, building occupants will be asked to vacate the suspected area until a survey can be conducted to determine the extent of the problem. Results of the survey will be reported to the following individuals:
 - (a) Academic Support and Facilities Resources (ASFR) Assistant Director (academic facilities)
 - (b) Appropriate vice president
 - (c) Associate Vice President for Operations

- (d) Engineering Services Managing Director
 - (e) Facilities Planning & Construction
- (4) Notify the ASFR Assistant Director and/or the appropriate vice president of those projects requiring the relocation of employees or students. An estimated time of displacement will be provided with updates as needed.
 - (5) Maintain permanent files of written documents, employee exposure records, medical exams, and training.
 - (6) Perform air sampling and analysis on asbestos projects conducted by BMC and private contractors as required.
 - (7) Ensure the required degree of accuracy and precision in the program by implementing quality control to include:
 - (a) Instrument calibration
 - (b) Sample control chain-of-custody
 - (c) Data validation
 - (d) Inter-laboratory program testing
 - (e) Intra-laboratory program testing
 - (8) Provide FP&C, ODES, BMC, and Auxiliary Services with submittal requirements and minimum acceptable standards for asbestos-related contractors, asbestos engineering firms, and asbestos technical services firms.
 - (9) Participate in the pre-planned abatement meetings scheduled by Operations Division, FP&C, and Auxiliary Services for assurance of compliance with appropriate regulations.
 - (10) Serve as the intermediary and contact point for all TTU activities involving regulatory agencies.
 - (11) Along with a representative from BMC and a representative from FP&C, determine which jobs are beyond the scope of the Insulation/Abatement Shop team and should be contracted to an outside asbestos abatement firm.
 - (12) Inform the Managing Director of Operations Division Services (Custodial Services) and/or the managing director of the appropriate Auxiliary Services department of the impact of the project on custodial and maintenance services.
 - (13) Inform Custodial Services when their services are to be stopped and then restarted.
 - (14) Ensure ACM waste and ACM-contaminated waste are properly disposed of in an approved manner at approved landfills.
 - (15) Prepare a written project design for all asbestos abatement projects with a scope of work greater than 160 square feet or 260 linear feet conducted inside a public building.

- (16) Provide required notification of asbestos abatement projects at TTU to proper regulatory agencies.
 - (17) Provide notification of asbestos abatement projects at TTU to all departments potentially impacted by any asbestos abatement activities.
- b. Building Maintenance & Construction
- (1) In compliance with appropriate regulations, perform the removal, encapsulation, enclosure, and repair on those materials determined to contain asbestos.
 - (2) Conduct a pre-abatement conference for all planned projects. Attendees to include:
 - (a) ODES Asbestos Compliance representative
 - (b) EH&S representative
 - (c) Building Maintenance & Construction Managing Director
 - (d) Insulation Shop Foreman
 - (e) Planning and Administration Associate Managing Director, Academic Support and Facilities Resources
 - (f) Auxiliary Services managing director
 - (g) Jobsite abatement supervisor
 - (h) Building users
 - (3) Prepare a written plan of action to be followed on all non-emergency asbestos abatement projects.
 - (4) Prepare the worksite before abatement begins by posting proper signage; notifying users; shutting down the heating, ventilating, and air conditioning systems; sealing off the area with polyethylene; and performing other details as determined in the pre-abatement meeting.
 - (5) Transport and dispose of all ACM in compliance with appropriate regulations. A hazardous waste manifest will be requested and obtained from EH&S.
 - (6) Notify ODES Asbestos Compliance and EH&S immediately of any unplanned release of suspected asbestos.
 - (7) Along with representatives from ODES Asbestos Compliance and FP&C, determine which jobs are beyond the scope of the Insulation/Abatement Shop and would be recommended for completion by an outside asbestos abatement contractor. Contracted work and asbestos engineers will be under the direction of FP&C or ODES project manager(s).
 - (8) When a *Customer Project Request* (CR), service work order, or departmental self-help request involving demolition, modification, or construction is received from a

department or FP&C, ODES Asbestos Compliance shall be notified so that a survey of the worksite can be conducted.

- (9) Supervisors in BMC shall be responsible for ensuring that their personnel are properly trained and equipped with personal protective equipment prior to initiation of work in asbestos-contaminated work areas or in areas with suspected or known ACM. Training shall include, but not be limited to, a two-hour asbestos awareness class and a class covering proper maintenance and use of personal protective equipment.
- (10) All supervisors in BMC shall ensure that those areas in which their personnel will work are inspected for ACM. Such inspections may consist of a review of asbestos building surveys or visual inspection of the work area by supervisory personnel from the Insulation/Abatement Shop or by personnel from ODES Asbestos Compliance.
- (11) Supervisors in BMC shall ensure that all building materials used for new construction or maintenance activities, including, but not limited to, floor tile, floor tile adhesive, caulking, plaster, and roofing materials, are asbestos free. In the event a requirement is identified that can only be satisfied by the use of an ACM, ODES Asbestos Compliance shall be notified. The supervisor must submit in writing to ODES Asbestos Compliance a request for utilization of the ACM. This request must be provided **prior** to use of the ACM.
- (12) Supervisors in the BMC Insulation/Abatement Shop shall be responsible for ensuring that their personnel are properly trained and equipped with personal protective equipment and that all engineering controls are in proper working order prior to the initiation of work that will result in the disturbance of ACM. Training shall include, but not be limited to, those requirements promulgated by the Texas Department of Health and the Environmental Protection Agency. All university personnel disturbing ACM at TTU must be licensed with the Texas Department of Health.

c. Facilities Planning & Construction

- (1) Contact ODES Asbestos Compliance a minimum of twelve weeks prior to the initiation of any large-scale project that may involve asbestos materials or be suspected of containing asbestos materials so that a survey, bulk sampling, and assessment can be scheduled and conducted. In the event the ODES Asbestos Compliance Manager determines the requested work cannot be accomplished by the available resources, the respective FP&C project manager shall be notified. The project manager is responsible for the acquisition of licensed personnel outside the university with sufficient resources to complete the request.
- (2) Notify ODES Asbestos Compliance and EH&S immediately of any suspected asbestos fiber release episodes caused by or attributed to contractor personnel.
- (3) Hold back a minimum of five percent of payment on all contracted abatement work until ODES Asbestos Compliance has received and approved all submittal requirements from the contractor or the university's representative.
- (4) Involve ODES Asbestos Compliance in all final inspections of contracted abatement projects.
- (5) Along with representatives from ODES Asbestos Compliance and BMC, determine which jobs are beyond the scope of the BMC Insulation/Abatement Shop and would be

recommended for completion by an outside asbestos abatement contractor. Contracted work and asbestos engineers will be under the direction of FP&C or ODES project manager(s).

- (6) Project managers shall ensure building materials for new construction projects and/or renovation/repair projects shall be asbestos free. A written certification stating the project was completed without the use of ACM shall be furnished to ODES Asbestos Compliance by the primary contractor when the project is completed. Should a special circumstance arise in which only a product containing asbestos can be utilized and there are no known substitutes, the FP&C project manager shall inform the ODES Asbestos Compliance Manager. A written statement shall be provided that will justify the use of the special ACM **prior** to the use of the product.
- d. Operations Division Planning and Administration (ODPA) Academic Support and Facilities Resources (ASFR) Assistant Director
 - (1) Responsible for the relocation of employees or students in those academic areas to be abated or areas having asbestos contamination. This effort shall be coordinated with the appropriate vice president and/or dean of the departments affected.
 - (2) Inform the appropriate vice president and/or dean of the affected departments of any possible utility shutdowns.
 - e. Appropriate Vice President, Dean, and/or Director
 - (1) Responsible for the relocation of employees or students in their areas of responsibility where it is determined that there is asbestos contamination or areas to be abated. This should be coordinated with the ASFR Assistant Director.
 - (2) Keep building occupants informed of possible utility shutdowns.
 - f. TTU Procurement Services
 - (1) Review documents of all abatement projects before going out for bids.
 - (2) Set the time and place and be responsible for the opening of all bids on contracted abatement projects.
 - (3) Maintain all certificates of insurance for all contractors and service managers.
 - (4) Evaluate insurance carriers presented by asbestos contractors and/or asbestos design professionals for financial stability. An annual review of insurance requirements shall be conducted to ensure proper coverage.
 - g. Operations Division Services (Custodial Services)
 - (1) Custodial Services will be responsible for ensuring that their employees take the two-hour asbestos awareness course offered by ODES Asbestos Compliance, which will detail proper cleaning procedures to follow in areas known to contain asbestos.
 - (2) Custodial Services will be responsible for ensuring that those employees under its direction are informed of all asbestos projects that might affect their job responsibilities.

h. Students

Students will not knowingly be used in areas or projects that could pose an asbestos exposure.

i. Auxiliary Services and Intercollegiate Athletics

- (1) Contact ODES Asbestos Compliance a minimum of three (3) weeks prior to the initiation of any project that may contain ACM and/or suspected ACM so that a survey, bulk sampling, and assessment can be scheduled and conducted.
- (2) Notify ODES Asbestos Compliance immediately of any suspected asbestos fiber release episodes caused by or attributed to contractor personnel.
- (3) All projects or duties in which individuals may encounter damaged ACM or which may potentially result in the disturbance of ACM will require notification of ODES Asbestos Compliance. All projects or duties conducted in areas known to be contaminated with damaged friable ACM will require the use of personal protective equipment and procedures for the decontamination or disposal of contaminated clothing and equipment as outlined in the TTU asbestos program. The project manager and/or departmental supervisor shall be responsible for notification and implementation of the university's policies. Types of projects that might result in employee contact with asbestos are cable installation and repair, plumbing repair, electrical repair work, and renovation projects.
- (4) The managing director of each Auxiliary Services department, the Assistant Vice President for Auxiliary Services, and the Director of Intercollegiate Athletics shall ensure that employees involved in projects or duties that might potentially bring them into contact with ACM shall be trained. Appropriate training for individuals involved is the two-hour awareness training class.
- (5) The managing director of each Auxiliary Services department, the Assistant Vice President for Auxiliary Services, and the Director of Intercollegiate Athletics shall ensure that employees of the auxiliary whose job responsibilities might be impacted by any asbestos-related activity are informed of the activity.
- (6) The managing director of each Auxiliary Services department, the Assistant Vice President for Auxiliary Services, and the Director of Intercollegiate Athletics shall ensure that building materials for new construction and/or renovation/repair supplied by contractors and sub-contractors are asbestos free. A written certificate stating this shall be furnished to ODES Asbestos Compliance by the primary contractor at the close of the project. If a special circumstance arises in which only a product containing asbestos would be satisfactory and no known asbestos substitutes are available, the managing director of the Auxiliary Services department shall inform ODES Asbestos Compliance. A written statement justifying the use of the ACM shall be provided **prior** to use of the product.

j. Contractors

- (1) Contractors performing renovation and/or demolition activities at TTU shall ensure that their employees are trained in accordance with the provisions of [29 Code of Federal Regulations, § 1926.1101, Asbestos](#), as promulgated by the U.S. Department of Labor Occupational Safety and Health Administration. This requirement is not applicable to contractors whose employees would be working in buildings or facilities determined by

the university to be asbestos free or whose employees would be performing job duties that would not involve the potential to intentionally or accidentally disturb ACM, presumed ACM, or suspected ACM. Specific examples of job duties requiring such training are cable installers, demolition workers, electricians, and plumbers.

- (2) For each renovation or demolition project conducted at TTU in which there is a potential for the contractor's employees to accidentally or intentionally damage ACM or presumed ACM, the contractor shall obtain the services of an asbestos-competent person. The training requirements for the asbestos-competent person shall consist of either a 32-hour asbestos contractor/supervisor course or a 40-hour asbestos contractor/supervisor course. The asbestos-competent person shall have received this training or evidence of an 8-hour asbestos contractor/supervisor refresher course within the previous two years. Providers licensed in the state of Texas or accredited and approved by the EPA shall teach the training courses.
- (3) For each renovation or demolition project conducted at TTU in which there is a potential for the contractor's employees to accidentally or intentionally damage ACM or presumed ACM, the contractor, her/his employees, as well as the employees of sub-contractors working under contract for the project must have attended a two-hour asbestos awareness course or an annual asbestos awareness refresher course prior to the start of the project. This requirement is not applicable to contractors whose employees would be working in buildings or facilities determined by the university to be asbestos free, or whose employees would be performing job duties that would not involve the potential to intentionally or accidentally disturb ACM, presumed ACM, or suspected ACM. Specific examples of job duties requiring such training are cable installers, demolition workers, electricians, and plumbers.
- (4) The contractor shall provide evidence of training for the personnel covered by these requirements prior to the project start date.

k. Others

- (1) All projects or duties requiring individuals to perform cable installation, repair or installation of equipment, or renovation work that will require disturbance of potential ACM in tunnels, equipment rooms, attics, false ceilings, acoustically treated ceilings, or any area that might have asbestos contamination will require notification of ODES Asbestos Compliance or will be considered contaminated and will require appropriate protective equipment worn.
- (2) Medical examinations will be required before wearing a respirator (see [OP 60.05, Respiratory Protection Program](#)). These requirements are not limited to TTU personnel but shall also apply to individuals employed by outside contractors.
- (3) It shall be the responsibility of the project manager and/or departmental supervisor to ensure compliance with the TTU asbestos program and the TTU operating policies/procedures. Any TTU personnel who might potentially come into contact with or, as a result of job duties, accidentally disturb ACM shall have completed, at a minimum, the two-hour asbestos awareness training conducted by ODES Asbestos Compliance. Due to potential conflict of interest, ODES Asbestos Compliance personnel will not train personnel hired by or under the direction of private contractors.
- (4) Departmental supervisors shall ensure that building materials for new construction and/or renovation/repair supplied by contractors, sub-contractors, or departmental

employees shall be asbestos free. The primary contractor shall provide to the departmental supervisor at the completion of the project a written certificate stating that materials used in any construction and renovation projects were non-asbestos. If special circumstances arise in which only a product containing asbestos could be utilized and there are no suitable substitutes, the departmental supervisor shall inform ODES Asbestos Compliance. A written statement shall be provided to ODES Asbestos Compliance justifying the use of the ACM. ODES Asbestos Compliance shall be notified of the special requirement **prior** to the use of the product.

5. Hazard Assessment and Response Actions

The following guidelines were adopted from regulations promulgated by the EPA:

- a. Following completion of a building survey and/or a specific job inspection, an assessment of the hazard posed by those materials determined or assumed to be ACM shall be made.
- b. Using criteria developed by the EPA, each homogenous area containing ACM will be evaluated to determine:
 - (1) Type of building material (surfacing, thermal, and miscellaneous)
 - (2) Friability or non-friability of the ACM
 - (3) Condition of the ACM
 - (4) Potential for further damage

Determination of the response action specified by the various categories must be made on a case-by-case basis. A given response action, applicable for the ACM condition category, shall be arrived at following consultations with all interested parties, which may include representatives from BMC and/or contractors, consultants, ODES Asbestos Compliance, EH&S, FP&C, ASFR, Vice Provost for Student Affairs and/or appropriate vice president, and Custodial Services. The main consideration involved in the selection of the response action shall always be the health and safety of the employees and students of Texas Tech University. Other factors that can be taken into consideration are funding, technical feasibility, and building use.

6. Restricted Use of Asbestos-Containing Materials at the University

Due to the hazards associated with the disturbance of ACM and the strict regulatory intent to minimize the environmental and occupational exposure to airborne asbestos fibers, it is the intent of the university to severely restrict the use of ACM in the construction of new facilities and the renovation of existing facilities. The use of an ACM, either in the case of new construction or in the case of renovation work, is limited to only those building materials for which there is no adequate non-asbestos substitute. Any such use of ACM must be approved in advance and in writing by ODES Asbestos Compliance. Any use of ACM not approved in advance by ODES Asbestos Compliance is prohibited, and any such use shall result in the removal of the material. The responsibility for such removal shall be that of the contractor and the university's project manager for the given project.

7. Comprehensive Asbestos Surveys for New Construction Projects

In order to ensure that materials used in the construction of new facilities or the renovation of existing facilities are non asbestos-containing, the university's project manager shall prepare or have prepared, as part of the construction work, a comprehensive asbestos survey for the new or extensively renovated facility. The comprehensive asbestos survey for new construction shall consist of the following:

- a. A signed letter from the architect for the project detailing those actions taken to ensure that the new materials used in the new construction work were non-asbestos.

Specific actions would include, but not be limited to, on-site periodic inspections by the architect or employees of the architect of product material labeling and a review of the contractor's final submittal, which would include the *Material Safety Data Sheets* for all materials used in the new construction work.

- b. A signed letter from the engineer for the project detailing those actions taken to ensure that the new materials used in the new construction work were non-asbestos.

Specific actions would include, but not be limited to, on-site periodic inspections by the engineer or employees of the engineer of product material labeling and a review of the contractor's final submittal, which would include the *Material Safety Data Sheets* for all materials used in the new construction work.

- c. A signed letter from the university's project manager for the project detailing those actions taken to ensure the new materials used in the new construction work were non-asbestos.

Specific actions would include, but not be limited to, on-site periodic inspections by the project manager or employees of the university of product material labeling, periodic letters to the contractor reiterating the university's desire to utilize non-asbestos building products, and a review of the contractor's final submittal, which would include the *Material Safety Data Sheets* for all materials used in the new construction work.

- d. A signed letter from the contractor for the project detailing those actions taken to ensure the new materials used in the new construction work were non-asbestos.

Specific actions would include, but not be limited to, site inspections by the contractor's project superintendent of product material labeling, an ongoing review of the *Material Safety Data Sheets* for all materials used in the new construction work, and maintenance of a complete, comprehensive submittal including copies of *Material Safety Data Sheets* for all products used in the construction or renovation work.

The university's project manager shall prepare or cause to be prepared a comprehensive asbestos building survey for new construction projects and/or projects involving the extensive renovation of existing facilities. The comprehensive asbestos building survey shall meet the requirements of the Texas Department of Health regulations. The project manager may elect to utilize either the *Material Safety Data Sheets* provided by the contractor for the materials installed or sample results for materials used in the construction work, provided the samples were analyzed by a laboratory licensed to perform polarized light microscopy analytical procedures in the state of Texas. The sample results shall be provided to the project manager during the construction work or collected from the building materials at the completion of the project. Regardless, the samples must be collected in accordance with the regulations of the Texas Department of State Health Services. The comprehensive asbestos survey shall detail the materials installed and figures

indicating the locations in the facility where the non-asbestos materials were installed. The comprehensive asbestos survey shall include the letters from the architect, engineer, contractor, and project manager regarding the efforts performed to ensure that no ACM were utilized in the construction or renovation of the facility.