PHYSICAL PLANT
OPERATING POLICY AND PROCEDURE

PP/OP 04.07: Insulation, Asbestos Containing Building Materials and Asbestos Abatement Procedures

DATE: April 17, 2008

PURPOSE

The purpose of this Physical Plant Operating Policy and Procedure (PP/OP) in conjunction with TTU OP 60.08 is to establish policy and provide supervisors and employees guidance for execution of work projects involving insulation removal, and asbestos containing building material abatement.

REVIEW

This PP/OP will be reviewed in April of each every four years by the director of building maintenance and construction with input from the manager of environmental health and safety with recommendations forwarded to the managing director for physical plant.

POLICY AND PROCEDURE

1. General Policy

   a. Definitions

      (1) **Asbestos**: includes materials with any concentration of the following asbestiform mineral; Chrystotile, Amosite, Crocidolite, Tremolite, Anthophyllite, and Actinolite.

      (2) **Asbestos fibers**: asbestos fibers longer than five micrometers.

      (3) **Asbestos containing building materials**: building materials containing greater than one percent asbestos.

   b. References

      (1) U. S. Environmental Protection Agency (EPA) publication EPA 560/5-85-024, revised 11-20-90.

      (2) U. S. Department of Labor Occupational Safety and Health Administration (OSHA) Title 29 CFR part 1910.1001 revised 7-98, Construction 29CFR 1926.1101, Custodial 40CFR 61 NESHAPS.
c. Accountability

(1) The Insulation Shop is responsible for the implementation and maintenance of an active insulation, asbestos containing building material abatement program. The overall asbestos management program Texas Tech University is the responsibility of Environmental Health and Safety (EH&S).

(2) The insulation shop foreman/tradesman leader will ensure every Physical Plant employee involved with removal, disposal, and/or encapsulation of asbestos will complete annual training requirements for asbestos abatement and use of protective equipment.

(3) Because regulatory information is updated rapidly, coordination with EH&S will be initiated each instance work involving asbestos materials is identified.

2. Procedures

a. Insulation and Asbestos Containing Building Material Removal

(1) Only certified personnel assigned to the Insulation Shop or under the direct supervision of the Insulation Shop will be involved in removing insulation and asbestos containing building materials. Building Maintenance and Construction (BMC) shops will contact the insulation shop foreman for advice and assistance when dealing with any and all type of insulation and building materials.

(2) If insulation or building materials are determined to be asbestos, the insulation or building materials will be removed in accordance with approved procedures and regulatory requirements.
b. Medical Surveillance Program

The supervisor will schedule applicable shop personnel for an asbestos physical examination. Asbestos physicals shall be conducted by a board certified occupational medicine physician. The results of asbestos physicals shall be received and reviewed prior to the assignment of work involving the disturbance or potential disturbance of asbestos containing materials. The insulation shop foreman will schedule all post-employment, annual, and separation asbestos physical examinations. All examinations must be in accordance with OSHA Asbestos Standard 29 CFR 1926. 1101, EPA Worker Protection Rule 40 CFR part 763 and the Texas Department of State Health Services as per the Texas Asbestos Health Protection Rules 295.31-295.73.

c. Record Keeping and Documentation

Permanent personnel records will be maintained on all employees involved with asbestos related activities. This requirement applies to all personnel in the Physical Plant involved in the removal and disturbance of asbestos containing materials. These records will be maintained for 30 years beyond employee's employment separation date.

d. Supervision and Training

Supervisors and asbestos workers must be trained and licensed annually by the state of Texas before being involved in asbestos abatement projects. All training records will be included in employee's permanent personnel record.

e. Worker Protection

Approved protective respiratory equipment and required personal protective equipment will be provided by Texas Tech University. Requirements for protective equipment are identified in the EPA, OSHA, the TSHS standards and regulations as well as product manufacturer's material safety data sheets. Guidelines are addressed in TTU OP 60.08

f. Performance of Asbestos Removal/Abatement Projects

All asbestos abatement projects will be classified as preplanned or emergency removal.

(1) Preplanned abatement projects
(a) Prior to starting any planned abatement project, EH&S will be contacted by the insulation shop foreman for assignment of a project manager.

(b) A joint meeting will be scheduled to define the project scope and procedures to be used. The following personnel will attend:

[1] EH&S representative
[2] Supervisors with personnel assigned job duties on the specified project
[3] Insulation Shop foreman
[4] Academic Support and Facilities Resources Director
[5] Auxiliary facility manager (if required)
[7] Building users (if required)
[8] Mechanical Superintendent

(c) The appropriated funds for each fiscal year will be encumbered on a BMC customer project request (CR). Each individual insulation removal or abatement project will be identified, controlled, planned, and scheduled using a separate CR.

(d) The insulation shop foreman/tradesman leader will prepare a submittal for the specified project, which shall include scope of work, work practices, and project checklist. It shall be submitted to the assigned project manager.
(e) The Insulation Abatement Shop foreman/tradesman leader will notify EH&S at least twelve (12) working days before the start of any planned abatement project for which the amount of asbestos containing materials to be disturbed is equal to or greater than 160 square feet, 260 linear feet, or 35 cubic feet. The 12 working day period will permit EH&S personnel to submit a properly prepared notification to state and federal regulatory agencies. For those projects for which the amount of asbestos containing material to be disturbed is less than 160 square feet, 260 linear feet, or 35 cubic feet, the notification period shall be five (5) working days.

(f) The foreman/tradesman leader will schedule the projects at the BMC weekly scheduling meeting and coordinate with other shops as required. It is the responsibility of the assigned BM&C foreman/tradesman leader to insure that any such scheduling and coordination is conducted prior to the initiation of work activities.

(g) The Insulation/Abatement Shop foreman/tradesman leader will comply with the established federal and state regulations for preparing the work area, initiating the approval work practices and installation of any required engineering controls prior to beginning abatement activity.

(h) Abatement work will be performed in accordance with state and federal regulations as well as all applicable TTU operating policies and procedures.

(i) It is the responsibility of the designated asbestos supervisor assigned to each of the projects involving asbestos abatement to advise the foreman/tradesman leader of any change in conditions during the implementation of the asbestos abatement work.

(2) Small emergency jobs

(a) When immediate asbestos abatement is necessary because of a utility failure or accidental fiber release, the insulation/Abatement shop foreman/tradesman leader and EH&S will be contacted for evaluation and scheduling of the work.
(b) Work orders will be issued separately for each abatement job.

(c) The insulation shop foreman will implement the required work practices and engineering controls required for proper completion of the emergency work.

(d) EH&S will provide any required notification to EPA and TDH-Asbestos for the emergency situation.

(e) Remaining procedures will be followed as outlined in paragraph f. (1) (f-h) above.

(3) Special handling procedures for asbestos containing roofing materials

(a) State licensure for the removal of asbestos containing roofing materials and asbestos contaminated roofing material is not required. However, specific personnel training requirements must be met based on the type, quality, and removal techniques. Roofing material will be cut and removed using wet methods.

(b) The Insulation Shop foreman will be notified by the Physical Plant project manager or the Facilities Planning and Construction project manager at least two working days in advance when the asbestos containing roofing materials will be ready for proper disposal.

(c) The contractor must take proper care when lowering asbestos containing materials to the ground to prevent any contaminant release or other unsafe condition.

g. Waste disposal

The job site asbestos abatement supervisor will notify EH&S prior to removal of any asbestos from the job site or from the primary location of the BM&C asbestos waste storage container. The Insulation/Abatement Shop foreman/tradesman leader will provide a waste manifest to EH&S 48 hours prior to any scheduled off campus disposal date. The following steps will be taken for disposal of asbestos-containing waste.

(1) The Insulation/Abatement Shop foreman/tradesman leader will ensure that each employee understands the appropriate labeling
techniques, wet methods, and packaging procedures.

(a) All asbestos-containing waste must be made thoroughly wet or at least to the extent the asbestos material will absorb water. As the asbestos is being removed and placed into bags the material should be kept as damp as possible.

(b) Approved disposal bags will be used at all times. The bag is considered full when it is half filled because asbestos saturated with water will be relatively heavy. Excess air must be vacuumed out of bags before they are sealed with duct tape. Bags will be placed in sealed metal containers and/or an enclosed trailer double-lined with 6 mil poly sheeting.

(2) Transportation to disposal site

(a) The Insulation/Abatement Shop foreman/tradesman leader will be responsible for the Asbestos Transporter License held by the University for the purpose of transporting its waste. The Insulation/Abatement Shop foreman/tradesman leader is responsible for the maintenance of required licensure.

(b) Asbestos transporters will:


[2] Provide personal protective equipment for employees who will be handling asbestos and training for its use as well as supervise their compliance.

[3] Establish and maintain records (number of bags, quantity of material, dates items put into waste storage location, locations asbestos containing building materials were taken from) of storing and transporting asbestos waste to disposal site.


(c) Waste from large abatement projects will be taken directly to the disposal site by the abatement personnel. No more than a 30-day accumulation of asbestos waste will be stored on
RESPONSIBILITIES

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<th>POSITION</th>
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<td>Director for Building Maintenance and Construction</td>
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Approved: ____________________________
Reader

Approved: ____________________________
Director for Physical Plant