### **WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS** DIVISION 0 – AE AND PROFESSIONAL SERVICES

#### **SECTION 005008 – ASBESTOS**

#### PART 1: GENERAL

- 1.1. Any deviation from the following instructions must be approved during design by WVU Facilities Management Personnel and WVU Environmental Health and Safety (EHS).
- 1.2. The purpose of the standard is to ensure all employees and workers dealing with any construction, repair, or renovation projects containing asbestos follow the guidelines established for proper handling and disposal of the material. All workers, on the University property, shall use this process for all asbestos abatement related work.
- 1.3. All asbestos abatement projects shall comply with State, Federal, and Local regulations as well as WVU design guidelines.
- 1.4. The following section is to be used as a guideline in order to assist in developing and selecting appropriate abatement protocols. These are the classifications and related training requirements per WV Code:
  - A. Small Abatement:
    - 1. Small abatement is > 3 to  $\le 49$  square feet or 3 to  $\le 260$  linear feet (glove bag).
      - a. Qualified asbestos workers shall have a current WV Asbestos Worker license.
      - b. An asbestos design shall be available upon request from EHS.
      - c. Regulated work area shall use glove bag and/or wet removal methods per EPA guidelines.
      - d. Asbestos waste shall not exceed one waste bag per job.
  - B. Medium Abatement:
    - 1. Medium abatement is  $\geq$  50 square feet or < 260 linear feet (glove bag).
      - a. Qualified asbestos abatement contractors shall have a current WV Asbestos Contractor license.
      - b. Qualified asbestos workers shall have a current WV Asbestos Worker or Supervisor license.
      - c. Follow OSHA/EPA/State asbestos abatement guidelines.
      - d. Asbestos project design must be approved by EHS and on-site.
      - e. Negative pressure containments must be exhausted outside building.
      - f. Notify EHS when project has been scheduled.
      - g. Perform third-party visual and final air clearance using EHS approved sampling methods (PCM vs TEM).
      - h. Contractor shall provide air sampling results to Project Manager (PM) who shall provide to EHS.
      - i. Building occupant relocation may be required.
      - j. Night, weekend, or holiday work scheduled may be required.

#### C. Large Abatement:

- 1. Large abatement is >160 square feet or >260 linear feet.
  - a. Includes all requirements in the above sections as well as:
  - b. Notify EHS prior to planning stage of project.
  - c. 10-days prior to work notification needs submitted to Federal and State agencies and copy provided to PM who shall provide to EHS.
  - d. Project may require continuous third-party perimeter air monitoring using PCM methods for floor tile/mastic work. TEM clearance methods may be necessary for friable materials abatement.
- 1.5. WVU Asbestos Abatement Best Practices
  - A. For friable asbestos-containing building materials (ACBM), Class I Projects, contractors shall adhere to WVU's best practices as listed below as well as state and federal regulations pertaining to asbestos work.
    - 1. Abatement area shall be clear of furnishings. This is usually completed by WVU staff prior to contractors beginning abatement work, unless other arrangements are agreed to by the Project Manager and Contractor.
    - 2. Post Asbestos Warning signs at each regulated area.
    - 3. Containment areas and de-con areas shall be lined in 6 mil black plastic wherever in view of the public.
    - 4. All perimeter doors must be covered in 6 mil black plastic to prevent building occupants from inadvertently entering abatement areas.
    - 5. Exhaust air must be vented outside the building and away from walk ways or building air intakes.
    - 6. A manometer shall be visible during abatement to ensure a minimum of -0.02 column inches of water pressure is maintained inside the containment as required by OSHA and documentation of pressure readings shall be provided to the Project Manager.
    - 7. Asbestos workers are not permitted to wear protective suits and respirators anywhere outside of the abatement area.
    - 8. Noise levels must be kept to a minimum to prevent disruption of building occupants.
    - 9. Only No-Odor mastic remover shall be used.
    - 10. Pre-labeled asbestos bags are not permitted for use as general trash bags.
    - 11. The WVU Project Manager shall contract the third-party air monitor services at their discretion.
    - 12. No un-authorized WVU personnel will enter the containment. The WVU Project manager can authorize a trained employee to enter the containment during or after working hours.
    - 13. The project manager may have a third-party monitor perform exterior perimeter monitoring on large projects involving > 50 square feet of friable material.
    - 14. Asbestos waste (even though properly bagged) must not be stored in public areas.

15. Dumpsters shall be double lined, labeled, and secured. If a truck or trailer is used in lieu of a dumpster, the load shall be covered and secured, and have proper signage.

### PART 2: PLANNING

- 2.1. The WVU EHS department shall be notified in the planning stages of all planned or emergency asbestos abatement.
- 2.2. Obtain any available existing asbestos data or surveys from EHS.
- 2.3. As needed, an asbestos survey shall be performed prior to renovation and/or demolition activities by a WV licensed Asbestos Inspector. The inspection and sampling procedures shall follow the specifications of 40 CFR Part 63, Subpart E.
- 2.4. Large projects require a professional hazardous materials consultant to develop an asbestos abatement design. Often the same firm can conduct the survey, develop the asbestos design, and conduct the third party air monitoring.
- 2.5. EHS should be consulted to determine the appropriate air monitoring analysis, for example, PCM versus TEM.
- 2.6. Contractors shall submit the required 10-day notification and asbestos design to the WVDEP and all other appropriate agencies and CC the PM, who shall transmit to EHS to review and approve.

# PART 3: EXECUTION

- 3.1. Notify EHS that abatement activities are ready to begin.
- 3.2. Any asbestos containing materials within the project area are to be removed or enclosed/encapsulated, following all federal, state and local regulations, prior to potential disturbance. WVU will hire the third-party asbestos monitoring firm.
- 3.3. All removals, repairs, encapsulation or any activities which may disturb asbestos containing materials must be performed in accordance with National Emission Standard for Hazardous Air Pollutants (NESHAP), WV State Regulations, Title 64 West Virginia Legislative Rules Division of Health Series 63, and 29 CFR 1926.1101.
- 3.4. Under no circumstances should any contractor disturb potential asbestos containing materials prior to the materials being tested.
- 3.5. Asbestos containing materials shall be disposed of at EPA licensed landfills per EPA regulations. Transportation of asbestos shall follow all pertinent DOT standards (49 CFR parts 171 and 172).

## **PART 4: COMPLETION**

- 4.1. Final clearance results shall be reviewed with WVU PM and EHS prior to disassembly of containment areas.
- 4.2. Submittals:
  - A. Close out documents for all asbestos abatements shall be submitted to the WVU PM whom shall transmit to EHS.
  - B. Contractors shall provide PM with copies of the waste shipping manifests as soon as possible. PM shall transmit copies to EHS.
  - C. Air monitoring shall be performed by a qualified third-party professional hired by WVU. Air monitoring results (Final Clearance Report) shall be provided to PM by third-party. PM shall transmit it to EHS.

END OF SECTION 005008