

SECTION 02080 – ASBESTOS ABATEMENT PROCEDURES

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

- A. General: This section includes all work necessary for the removal, containment, and disposal of asbestos-containing material (ACM) identified in the Drawings in the Contract Documents.
- B. This section is included for the purpose of general abatement guidelines and procedures for general contractors.
- C. Related Work Specified in Other Sections: SECTION 01061 — GENERAL SAFETY AND ENVIRONMENTAL HEALTH REQUIREMENTS" applies to all work covered by this section.

1.2 QUALITY ASSURANCE

- A. Contractor Qualifications: The Contractor shall be licensed in the State of Alabama and shall be either a licensed asbestos abatement contractor or general contractor of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field).
- B. Asbestos Control Limits: As long as the identified ACM remains non-friable, air concentrations and sampling are not a requisite part of this section of work.

1.3 REFERENCES

- A. Code of Federal Regulations (CFR):
  - 29 CFR 1910 - Subpart C: General Safety and Health Provisions
  - 29 CFR 1926.1101 - Asbestos OSHA Standards for Construction
  - 40 CFR 61 - Subpart M: USEPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) - Asbestos
  - 29 CFR 1926 - Subpart E: Personal Protective and Life Saving Equipment
- B. State and Local Regulations, Contact:
  - Alabama Department of Environmental Management (ADEM)
  - Air Division
  - 1400 Coliseum Boulevard
  - Montgomery, Alabama 36110
  - (334) 271-7879

Department of Natural Resources and Environmental Management  
320 Fountain Circle  
Huntsville, Alabama 35801  
(256) 427-5750

#### 1.4 SUBMITTALS

- A. Submittals Prior to Beginning Work: Do not start work until following have been approved:
  - 1. Asbestos Abatement Plan: Provide a description of the method for disposal of ACM. Included in this shall be name, address, and telephone number of the disposal facility, copy of the Waste Shipment Record (WSR) to be used, and the name, address, and telephone number of the waste transporter.
  - 2. Provide a copy of the asbestos project notification that was made to the appropriate local or state regulatory authority, if applicable.
- B. Project Closeout Submittals: These submittals must be submitted and accepted for the project to be considered complete.
  - 1. Copies of all Waste Shipment Records for the disposal of ACM waste.
  - 2. Copies of all disposal records, landfill receipts, from the point of disposal of all ACM.

1.5 CONTRACTOR RESPONSIBILITY: The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, state, and local regulations pertaining to the protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, state, and local regulations, and shall hold the Owner harmless for failure to comply with any applicable safety or health regulation on the part of himself, his employees, or his subcontractors.

- A. Suspect Material: During the course of the project, if work involves disturbance of suspect material not previously identified, the Contractor shall have the material tested for asbestos content after notifying the Engineer. Immediately contact and coordinate with the COTR.
- B. Safety: The Contractor shall have full responsibility for the safe accomplishment of all asbestos abatement work included in this project.

#### 1.6 PROJECT/SITE CONDITIONS

- A. Means of Egress: Establish and maintain emergency and fire exits from the work area. The Contractor shall identify and mark all emergency exits from the work area. At least 1 emergency exit from the work area shall be provided in addition to the exit through the decontamination facility.
- B. Use of Existing Facilities: The use of existing restroom or other facilities for decontamination is prohibited.
- C. Air Handling Equipment: Air handling equipment serving the air handling zones where asbestos work will be accomplished must be locked off or must have both supply and return

air positively sealed off from the time the asbestos removal work starts until completion of the abatement.

- D. Access to Work Area: Only the Contractor's workers, governmental agency inspectors, authorized employees of the Government, the Owner and his representatives, and/or testing laboratory personnel shall have access to work areas.
- E. Use of Elevators: Not Allowed
- F. Contamination of Adjacent Areas: In the event any area in the building outside of a controlled work area should become contaminated as a result of the Contractor's work, the Contractor shall thoroughly decontaminate the affected area until the area has been visually inspected.
- G. Security: At all times asbestos control measures are in effect, the Contractor shall provide adequate security to prevent any unauthorized entry into a work area. These work areas shall never be left unattended unless access can be positively blocked. Asbestos contaminated waste materials shall also be provided adequate security to prevent access to the materials by unauthorized persons.
- H. Coordination of Work of All Trades: Coordinate the work of all trades to ensure that their work is performed in accordance with the applicable regulations and that the asbestos control limits are maintained at all times both inside and outside the asbestos work area.

## 1.7 SEQUENCING/SCHEDULING

- A. ~~Asbestos abatement work is required to be completed before renovation work can be started in the areas below the roofing.~~
- B. The asbestos work will be scheduled with the COTR a minimum of 2 weeks prior to the start of the asbestos work. The Owner will be given 48 hours notice prior to beginning the scheduled asbestos work. **All asbestos removal work will be conducted during non-core hours. Core hours are as determined by the Owner.**

## PART 2 PRODUCTS

2.1 EQUIPMENT: Equipment, including protective clothing and respirators, used in the execution of this contract and provided to visitors to the site shall comply with applicable Federal, State, and local regulations. Respirators shall conform to the OSHA requirements in 29 CFR 1926.1101.

2.2 SEALERS – Not applicable.

## PART 3 EXECUTION

## 3.1 PROHIBITIONS

- A. The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:
1. High-speed abrasive disc saws.
  2. Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
  3. Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM and PACM.

~~3.2 ASBESTOS ABATEMENT IN FULL WORK AREA ENCLOSURES – Not applicable.~~

~~3.3 ASBESTOS ABATEMENT UTILIZING GLOVEBAGS – Not applicable.~~

~~3.4 ASBESTOS ABATEMENT OF VINYL ASBESTOS TILE (VAT) – Not applicable.~~

~~3.5 ASBESTOS ABATEMENT OF ASBESTOS CONTAINING ROOFS~~

~~A. Work Areas Outside of Building: Preparation of work areas are as follows:~~

- ~~1. Coordinate sequence of work on roof or siding to prevent water leakage into the building due to wet weather.~~
- ~~2. Post warning signs at all access points to roof (if applicable).~~
- ~~3. Place warning signs and asbestos warning ribbon around perimeter of work area.~~
- ~~4. Close, secure, and seal for duration of work all roof and wall openings and penetrations in work area except sanitary stack vents and storm water drains.~~

~~B. Removal of ACM Roofing Material~~

- ~~1. General: Perform all asbestos related work and comply with the general safety and health provisions in conformance with 29 CFR 1926.1101. When work involves removal of roofing material containing asbestos, a decontamination unit may not be required. However, disposable clothing and respiratory protection will be required. Disposable clothing may be worn over street clothing. Discard and dispose of the disposable clothing as asbestos contaminated waste when leaving the work area.~~
- ~~2. Roofing material shall be removed in an intact state to the extent feasible.~~
- ~~3. Wet methods shall be used where feasible.~~
- ~~4. Cutting machines shall not be allowed.~~
- ~~5. Unwrapped or unbagged roofing material shall be immediately lowered to the ground via covered, dust tight chute, crane or hoist, or placed in an impermeable waste bag or wrapped in plastic sheeting and lowered to ground no later than the end of the work shift.~~
- ~~6. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.~~

~~C. Special Safety Precautions: Discontinue all work if either of the following conditions develop:~~

~~1. Wind velocities or gusts in the work area exceed 15 miles per hour.~~

### 3.63.2 FIELD QUALITY CONTROL

#### A. Work Inspection

1. The A/E or his representative shall make visual inspection to insure:
  - a. Use of the approved asbestos working procedures by the Contractor's employees.
  - b. Disposal and transport of waste.
  - c. Coordination of non-abatement work in the project with the abatement work.
  - d. Sufficiency of warning signs posted and labeling on waste materials packaged for disposal.
2. Conduct joint inspection with the Contractor to verify completion of abatement work before the final cleaning work begins. Inspect again after final cleaning is completed. Verify that no visual trace of dust or debris is present in the work area.
3. Air Monitoring – Not applicable.

#### B. Site Inspections

1. While performing asbestos abatement work, in addition to inspection by the Owner or the Owner's Representative, the Contractor shall be subject to on site inspection by agency officials; by OSHA and EPA inspectors; and state enforcement officials.

### 3.73.3 CLEANUP AND DISPOSAL

A. Housekeeping: Essential parts of asbestos dust control actions are housekeeping and cleanup procedures. Maintain all surfaces in the work area free of accumulations of contaminated debris to prevent further dispersion. Use approved industrial vacuum cleaners equipped with a HEPA filter to collect dust and small scrap. The blowing down of the space with compressed air is forbidden. Post appropriate asbestos hazard warning signs. In all possible instances, workmen shall cleanup their own areas. Equip personnel engaged in cleaning up asbestos scrap and waste with necessary respiratory equipment and protective clothing.

#### B. Disposal of Contaminated Waste

1. Collect and dispose of friable asbestos waste, scrap, debris, bags, containers, consumable hand tools, and asbestos contaminated clothing which may produce airborne concentrations of asbestos fibers in sealed impermeable bags. Double bag prior to removing waste from work area. Prior to placing in bags, or containers, wet down asbestos wastes to minimize airborne fibers.
2. Asbestos waste materials shall be disposed of in accordance with all Federal regulations at a sanitary landfill approved for asbestos by the appropriate state or local authority.

3. Establish a temporary holding area approved by the Owner for properly packaged asbestos waste. Waste must be transported to the landfill in a covered vehicle or in sealed, rigid, impermeable containers.
  4. Provide copies of all waste shipment records to the Owner.
- C. Final Cleaning and Visual Inspection
1. All final cleaning shall be accomplished using HEPA vacuums and/or wet wiping methods. No visible dust or debris is allowed in the work area.
  2. The final visual inspection will be conducted jointly by the Contractor and the Contractor's Asbestos Testing Company. When the area has passed inspection the final clearance air sampling will be performed.
- D. Final Clearance Monitoring and Removal of Enclosure – Not applicable.
- E. Removal of Signs
1. Warning signs shall be removed when the work area has passed final visual inspection.

END OF SECTION