SECTION 02 82 13

ASBESTOS ABATEMENT FOR UTILITIES

PART 1 GENERAL

1.1 SUMMARY

A. Scope:

1. Provide all labor, materials, equipment, and incidentals as shown, specified and required for all removal and disposal of material containing or coated with ACM.

B. Section Includes:

- 1. Cutting or removal of pipelines coatings containing or coated with ACM.
- 2. Monitoring of Work area during cutting and cleaning operations.

1.2 REFERENCES

- A. Comply with applicable provisions and recommendations of the following, except where otherwise shown or specified:
 - 1. ANSI/AIHA Z9.2, Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems.
 - 2. ANSI/ISEA Z87.1, Occupational and Educational Eye and Protection Devices.
 - 3. ANSI Z88.2, Respiratory Protection.
 - 4. ASTM D4397, Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications.
 - 5. ASTM E1368, Practice for Visual Inspection of Asbestos Abatement Projects.
 - 6. NFPA 10, Portable Fire Extinguishers.
 - 7. NFPA 90A, Installation of Air Conditioning and Ventilating Systems.
 - 8. NFPA 101. Life Safety Code.
 - 9. NFPA 701, Methods of Fire Tests for Flame Propagation of Textiles and Films.
 - 10. NIOSH NMAM, NIOSH Manual of Analytical Methods.
 - 11. UL 586, High-Efficiency, Particulate, Air Filter Units.
 - 12. USEPA 340/1-90-018, Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance.

1.3 DEFINITIONS

A. ACM: Asbestos-containing material.

1.4 SUBMITTALS

- A. Product Data: Manufacturer information on respirators and air monitor.
- B. Manufacturer's Certificate: Products meet or exceed specified requirements.
- C. Qualification and certification Statements:
 - Qualifications and certifications for contractor, on-Site representative, and disposal firm.

1.5 QUALITY ASSURANCE

- A. Perform Work according to OSHA and North Carolina Department of Public Health standards.
- B. Contractor: Company certified in repairing, modifying, cleaning, or removing AC pipe or ACM-coated pipe as specified in this Section.
- C. On-Site Representative: Person trained and certified in performing Work of this Section.
- D. Disposal Firm: Company certified in packaging and hauling ACM to disposal site.
- E. Active Waste Disposal Site: Solid waste disposal site permitted to accept ACM waste.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials according to manufacturer instructions.
- B. Respirators Not in Use:
 - 1. Store in sanitary location that protects respirators from dust, sunlight, heat, extreme cold, excessive moisture, and potentially damaging chemicals.
 - 2. Place in plastic bags or closed containers.

PART 2 PRODUCTS

2.1 RESPIRATORS

- A. Manufacturers:
 - 1. Furnish materials according to 29 CFR Part 1926, CFR 11 Part 30, and 29 CFR Part 1910.
- B. Description:
 - 1. Comply with manufacturer's recommendations, 29 CFR Part 1926.1101, and shall be approved by the Mine Safety and Health Administration and NIOSH (MSHA/NIOSH) for use in environments containing airborne Asbestos fibers.
 - 2. Type: Half-face mask; reusable after washing.
 - 3. Maintenance: Replaceable filters and cartridges only.
 - 4. Single-use respirators are not acceptable.
 - a. Filters: Type H, high-efficiency particulate air (HEPA). As a minimum a powered-air purifying respirator (PAPR) equipped with HEPA cartridges shall be worn during startup of Asbestos removal activities, unless otherwise approved in writing by the CIH.
- C. Performance and Design Criteria:
 - 1. Application: Asbestos abatement for concentrations up to 10 times permissible exposure limit (PEL).
 - 2. Design: Low profile.

2.2 AIR MONITOR

A. Manufacturers:

1. Furnish materials according to N.C. General Statute §130A-444 through 452 - Asbestos Hazard Management, 10A NCAC 41C .0601 - Asbestos Hazard Management Program, and 40 CFR 61-141-157 Subpart M, standards.

PART 3 EXECUTION

3.1 PREPARATION

A. Perform ACM removal without damage to or contamination of adjacent Work or existing area.

3.2 APPLICATION

A. Cutting and Disposal:

- Transport removed piping to a central staging area to cut for transport or disposal.
- Deposit pipeline pieces in leakproof metal collection box secured with tarpaulin covers.
- 3. Transport filled boxes to an approved landfill.
- 4. A licensed and certified asbestos supervisor will accompany transport vehicles to manage transport process.
- 5. Maintain supply of fresh water near cutting operation to keep freshly cut areas of ACM damp while cutting piping.
- 6. Individually wrap each joint of piping and pipe ends prior to loading.

3.3 FIELD QUALITY CONTROL

A. Sample Testing:

- When required in Bid Form, test pipe or pipe coating for asbestos prior to repairing, modifying, or removing pipelines by removing samples of pipe or coating along entire length of piping to be removed and have testing laboratory determine quantity of asbestos that may be present.
- 2. Testing and evaluation, including obtaining of samples, shall be by Owner's designated independent testing firm.

END OF SECTION