

MAE EANES MIDDLE SCHOOL ASBESTOS ABATEMENT AND DEMOLITION 1901 HURTEL STREET - MOBILE, ALABAMA 36605

ADDENDUM NO. 2

To: ALL PERSPECTIVE BIDDERS

From: Gary Jackson, Program Coordinator

Neighborhood Network Department-Municipal Enforcement

Date: July 19, 2021

This Addendum forms a part of, and modifies, the Request for Bidders Documents for the above referenced project, dated June 30, 2021. Acknowledge the receipt of this **Addendum No. 2** and all subsequent Addenda, if any, in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

ATTACHMENTS:

Item 1. Thompson Engineering – Revised Testing Results and Specifications:

- Addition Test Result: Abestos Analysis of Bulk Material via EPA 600/R-93/116 -SEE ATTACHMENTS – EXHIBIT A
- Asbestos Abatement Specifications Former Mae Eanes School Reissued July 19,
 2021 SEE ATTACHMENT EXHIBIT B

NEW ITEM:

A. <u>CONSTRUCTION FENCE</u>: The contractor shall place and maintain a 6' high chain link Construction Fence around the perimeter of the active construction site for safety purposes until completion of the work and accepted by the City of Mobile. This shall include all of the areas to be removed, layout and disturbed.

CONTRACTORS QUESTIONS AND ANSWERS:

- I see in the bid package it says to send the bids to City of Mobile /elevator lobby outside office of the city clerk/ We plan to send our by Fed/ex. Can you provide the address exactly how it should read so that our bid will be delivered by Fed/ex?
- Could you please let me know if we send our bid fed ex, where we are to deliver it to. And where the receptacle, marked "City of Mobile Bids" is located. And if and when they will time stamp the bid. Mail-In Bids shall be sent to the following address and "Must" be received before 2:15 p.m. on Wednesday, July 21, 2021.

CITY OF MOBILE
Attn: Office of the City Clerk
205 Government Street
9th Floor South Tower / Room 910
Mobile, Alabama 36602

- Will the prime general contractor's bidding on this project be responsible for removing, handling, hauling, disposing, and written documentation with a waste manifest/recycling report the universal waste (mercury containing lamps, PCB containing light fixture ballasts, and mercury containing thermostats) throughout the school? Yes, the Contractor will be required to properly dispose and document the removal of all of the contents located in the buildings and on the site as indicated.
- So I just wanted to be clear, about the construction debris, so does inert building material have to go to a construction and demolition landfill (C&D), or can inert building material be crushed and used as beneficial re-use in leu of a construction and demolition landfill?

 Building material can be recycle to the Contractor discretion. All recycle materials must be clean of all hazardous contents.
- I would like to set up I date and time that I can come back to Mae Eanes and look in the cafeteria to get a count on all those TV 's that are there so I can get an accurate cost for properly disposing them since they are considered E Waste and cant legally just be disposed of in a regular C & D landfill. The facility will be open on Monday, July 19th & Tuesday, July 20th upon request of the Contractor.
- Can a site plan be provided for the property showing the limits of the work?, See Construction Plan Sheet C101
- Does the scope stop at the basketball court or does it also include the baseball and football fields. Contractor shall remove all baseball field and football field contents. (Field Goals, chain link fencing etc.)
- Has a Stormwater Pollution Prevention Plan been submitted to the State for approval or is it
 the responsibility of the General Contractor? No; The Land Disturbance Application has
 been submitted by Dorsey & Dorsey Engineering to the City of Mobile Engineering
 Department and Building Mobile-Permitting. Permit No: ENG-0976888-2021

- Will City Permits be required? Yes, at "No Cost" to the Contractor. See Supplementary Instructions to Bidders 00220-5; City of Mobile Building Permit No. BLDC-076889-2021
- footnote: If Zillow is right, there are several trees on the backside of the football field that are on the property. Do these trees also need to be removed to the property line? All mature tress shall remain on the site, unless other indicated to be removed. See Construction Plan Sheet C101
- Does the onsite storm sewer have to be removed to the edge of the property? No, see Construction Plan Sheet C101
- Does the onsite sewer system have to be removed from site? No, see Construction Plan Sheet C101
- When tree stumps, footing, storm and sewer system are removed, does the fill require compaction? No What are the requirements? Fill and Erosion control; Contractor shall provide sloping from the center out at 1%.
- Has the following items been tested for abatement and is there a report? Yes,
 - o Roofing material and how many layers See attachment Exhibit A and B
 - o Window Glazing, See attachment Exhibit A and B
 - Spray on fire retardant on concrete roofing deck, See Testing Report in Specification Documents, Exhibit 10
- Can the city of mobile have power poles installed on site for the contractor to use for power during the demo to prevent generators being brought in and being a noise nuisance. No, If the Contractor choose to have temporary power on the site, the Contractor shall include the cost of installing a temporary power poll in their bids.
- Will the General contractor be able to use any of the fire hydrants near by to access water for the asbestos removal. Contractor shall coordinate with the MAWSS for all cost associated with using the existing Fire Hydrants
- Is there an area that can be used as a lay down yard and to install a job site trailer/office The contractor can used the existing pave parking lot areas and or basketball court etc. as a lay down site for operations. For Security purpose, you may want to used the parking in front by the Gymnasium Building.
- SEE ATTACHMENTS: THOMPSON ENGINEERING REPORT

NO MORE ADDENDUMS WILL BE ISSUED BEFORE THE BID DATE.

END OF ADDENDUM 2





EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578 http://www.EMSL.com / miamilab@emsl.com

Attention: Ed Kryger

Thompson Engineering, Inc. 2970 Cottage Hill Road

Suite 190

Mobile, AL 36606

Project: Mae Eanes Demo

EMSL Order: 172103990

Customer ID: THOM50 **Customer PO:**

Project ID:

Phone: (251) 665-5526

Fax: (251) 665-5505

Received Date: 07/16/2021 9:50 AM

Analysis Date: 07/16/2021

Collected Date:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

		Asbestos			
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
COM 1 A	Window Caulk	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
172103990-0001		Homogeneous			
COM 1 B	Window Caulk	Gray Non-Fibrous		98% Non-fibrous (Other)	2% Chrysotile
172103990-0002		Homogeneous			
COM 2 A 1	Asphalt Roofing	Brown/Black Fibrous	60% Cellulose 10% Glass	30% Non-fibrous (Other)	None Detected
172103990-0003		Heterogeneous			
COM 2 A 2	Asphalt Roofing	Black Fibrous	30% Cellulose	70% Non-fibrous (Other)	None Detected
172103990-0004		Heterogeneous			
COM 2 B 1	Asphalt Roofing	Black Fibrous	15% Glass	85% Non-fibrous (Other)	None Detected
172103990-0005		Heterogeneous			
COM 2 B 2	Asphalt Roofing	Brown/White Fibrous	60% Cellulose 10% Glass	30% Non-fibrous (Other)	None Detected
172103990-0006		Heterogeneous			
COM 2 B 3	Asphalt Roofing	Black Non-Fibrous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
172103990-0007		Homogeneous			
COM 2 C 1	Asphalt Roofing	Black Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
172103990-0008		Homogeneous			
COM 2 C 2	Asphalt Roofing	Black Fibrous	10% Glass	90% Non-fibrous (Other)	None Detected
172103990-0009		Heterogeneous			

Analyst(s)					
Edgar Rodriguez	(9)				

Kimberly Wallace, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis, Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP. NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. N. Miami Beach, FL NVLAP Lab Code 200204-0

Initial report from: 07/16/2021 10:57:57



Asbestos Bulk Building Materials - Chain of Custody

EMSL Order Number / Lab Use Only

172103990

EMSL Analytical, Inc. 19501 NE 10th Ave. Sky Lake Ind. Park, Bay.

North Miami Beach, FL 33179 PHONE: (305) 650-0577

EMAIL: miamilab@emsl.com

Customer ID:	Bitting ID:	Briting ID:			
Company Name. Thompson Engineering, Inc. Contact Name: Ed Kryger Street Address: 2970 Cottage Hill Road Suit City, State, Zip: Mobile AL 36606 Phone: 251-665-5526	5 Company Name: Thompson	Company Name: Thompson Engineering, Inc.			
Contact Name: Ed Kryger	e 190				
Street Address 2970 Cottage Hill Road Suit	e 190 E Street Address: 2970 Cotta				
E City, State, Zip: Mobile AL 36606	Country: US City, State, Zip. Mobile	AL Country:			
Phone: 251-665-5526					
Email(s) for Report ekryger@thompsonengineer		thompsonengineering.com			
Project Man Former Dame	Project Information	Purchase			
lame/No: IVIAE Earles Demo	Face	Order.			
MSL LIMS Project ID. US State where samples collected. AL State of Connection (CT) must select project location: accidents, Exist, will provide) Commercial (Taxable) Residential (Non-Taxable)					
Sampled By Name: Ed Kryger Sampled	By Signature, SQLQ CYTON Turn-Around-Time (TAT)	No of Samples (9)			
	32 Hour 48 Hour 72 Hour	96 Hour 1 Week 2 Wook			
PLM - Bulk (reporting limit)	Test Selection	TEM - Bulk			
Prim EPA 600/R-93/118 (<1%)	TEM - Bulk	-			
PLM EPA NOB (<1%) POINT COUNT	☐ TEM EPA NOB ☐ NYS NOB 198.4	(Non-Friable-NY)			
<u> </u>	=	93/116 w Milling Prep (0.1%)			
	Othe	r Tests (please specify)			
400 (<0.25%)1,000 (<0 1%)	, , , , , , , , , , , , , , , , , , ,				
NIOSH 9002 (<1%)					
NYS 198.1 (Friable - NY)					
NYS 198 6 NOB (Non-Friable - NY) NYS 198.8 (Vermiculite SM-V)	Positive Stop - Clearly Identifie	d Homogeneous Areas (HA)			
Sample Number HA Number	Sample Location	Material Desemption			
COM 1 A 100	HALL WINDOW	WINDOW CAULK			
COM 1 B CA	FETERIA WINDOW	WINDOW CAULK			
COM 2 A 1 100	HALL ROOF	ASPHALT ROOFING			
COM 2 A 2 100	HALL ROOF	ASPHALT ROOFING			
COM 2 B 1 100	HALL ROOF	ASPHALT ROOFING			
COM 2 B 2 MA	IN OFFICE ROOF	ASPHALT ROOFING			
	IN OFFICE ROOF	ASPHALT ROOFING			
	C FLASHING (Main Office)				
COM 2 C 2 A/C	FLASHING (Main Office)	ASPHALT ROOFING			
		and Patentian ata			
Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)					
Method of Shipment: Fedex . Sample Condition Upon Receipt: (2000)					
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EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.





ASBESTOSABATEMENT SPECIFICATIONS FORMER MAE EANES SCHOOL 1901 HURTEL STREET MOBILE, ALABAMA

Reissued July 19, 2021

Prepared for:

CITY OF MOBILE 205 GOVERNMENT STREET MOBILE, ALABAMA 36602

PROJECT NO.: 21-1101-0124

Frederick W. Rowell Sr., P.E.
Alabama AHERA Project Designer

2970 Cottage Hill Road Suite 190 Mobile, AL 36606 251.666.2443 ph. /251.666.6422 fax www.thompsonengineering.com

A THOMPSON HOLDINGS, INC. COMPANY

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SECTION 01015 ASBESTOSABATEMENT SCOPE OF WORK

1.1 The Site

The City of Mobile is demolishing the former Mae Eanes school, located at 1901 Hurtel Street. Prior to demolition all asbestos-containing floor tiles and mastic, and window glazing, are to be removed and disposed of by the Contractor in accordance with United States Environmental Protection Agency (USEPA) and Alabama Department of Environmental Management (ADEM) regulations. Locations of the asbestos-containing floor tile and mastic are depicted in the drawing attached. However, the exact limits and quantity of the Work are the sole responsibility of the Contractor and they are responsible for removal of all asbestos-containing materials (ACM) at no additional cost to the Owner, and they shall verify all conditions, quantities and situations adjoining the Work.

1.2 Scope of Work

1.2.1 Asbestos

Work in this contract includes all labor and materials necessary to remove and dispose of the following:

- All asbestos-containing floor tiles and mastic from the entire facility (approximately 67, 900 square feet). Refer to Section 02021 Asbestos C Resilient Floor Covering for work particulars.
- All asbestos-containing window glazing from the entire facility. Contractor, at their option, may remove and dispose of each window unit. Refer to Section 02022 Asbestos Removal –Window Glazing for work particulars.

1.2.2 Site Conditions

Prior to Contractor commencing work, the Owner (via contracted General Contractor) shall remove all debris from areas to be abated. Contractor shall coordinate work activities accordingly.

1.2.3 Schedule

Work shall commence within twenty days of receiving a Notice to Proceed from the General Contractor, and shall finish all work within sixty calendar days of commencement.

1.3 Respiratory Protection

Workers shall wear respiratory protection during all activities, which may disturb ACM. The following presents the minimum respiratory protection that will be worn during the related activities:

Pre-cleaning the work area, constructing the containments, and handling containers of ACM.

1/2 face dual cartridge HEPA Filter Respirators

Gross Removal of ACM, Clean up of Work Area and Encapsulation

1/2 face dual cartridge HEPA Filter Respirators

In all cases, should fiber levels exceed 0.2 f/cc, then the Contractor shall use powered air purifying respirators (PAPR) until the cause of the elevated fiber levels is corrected and levels below 0.2 f/cc are documented.

Refer to Section 02020, "Asbestos Removal" for additional information.

1.4 **SUBMITTALS**

A. With Bids:

- 1. Copy of Contractor's Certification by ADEM, as an Asbestos Abatement Contractor.
- 2. Name and license of the proposed landfill to accept the ACM.
- 3. List of the five most recent asbestos projects completed, dollar amount of project, and name and phone number of the Owner.

B. Prior to Work:

- 1. Copy of asbestos abatement notification filed.
- 2. Name(s) and copy of Safe State Certification of the Supervisor(s).
- 3. Proof that all required permits, site location, and arrangements for transportation and disposal of the ACM has been obtained.

C. Project Completion:

- 1. Copy of Project log book, which includes a list of personnel and copies of their certifications, daily sign-in sheets, daily reports, and completed Waste Shipment Records.
- 2. Copy of all air monitoring conducted during the project.

SECTION 01050 ASBESTOS PROJECT MONITOR

The Owner will provide an Asbestos Project Monitor to conduct all air monitoring required for the entire project. The Asbestos Project Monitor shall, at a minimum, have successfully completed a NIOSH 582 course or equivalent, and an EPA approved Supervision of Asbestos Abatement Projects course.

All air monitoring for this project shall be conducted in accordance with NIOSH Method 7400, latest revision. Air monitoring required for this project is outlined in Section 02110, "Air Monitoring and Clearance Testing". It is required that the Asbestos Project Monitor be on site at all times asbestos materials are being removed and air monitoring is being conducted.

SECTION 02020 ASBESTOS REMOVAL

1.0 GENERAL

1.1 Scope

This Section covers removal of friable asbestos-containing materials (ACM) inside of a building.

1.2 <u>Description of Work</u>

- A. All work shall be conducted by competent persons who are knowledgeable, qualified and trained for the particular work they will perform.
- B. The Contractor shall supply all labor, materials, equipment, services, insurance and incidentals that are necessary or required to perform the Work in accordance with applicable governmental regulations and these Specifications.

1.3 **Definitions**

- A. <u>Abatement</u>: Procedures to decrease or eliminate the source of fiber release from ACM. Procedures include encapsulation, enclosure and removal.
- B. <u>Air Filtration Equipment</u>: A portable local filtration system equipped with HEPA filtration and capable of maintaining a constant, low velocity flow to filter and trap contamination out of the air within the Work area. This equipment also establishes a reduced pressure within the Work area.
- C. <u>Airlock</u>: System for permitting ingress and egress without permitting air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways at least three feet apart.
- D. <u>Airlock Doorway</u>: A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two or three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway; or by using a rigid gasketed door and HEPA filter vents.

- E. <u>Air Cell</u>: Insulation normally used on pipes and duct work that is comprised of corrugated cardboard that is frequently comprised of asbestos combined with cellulose or refractory binders.
- F. <u>Air Monitoring</u>: The process of measuring the fiber and/or asbestos content of a specific volume of air in a stated period of time. Two common types of air monitoring for asbestos abatement are by phase contrast microscopy (PCM) or transmission electron microscopy (TEM).
- G. Amended Water: Water to which a surfactant has been added.
- H. <u>Asbestos</u>: The asbestiform varieties of serpentine (chrysotile, antinolite), riebeckite (crocidolite), commingtonite-grunerite (amosite), anthophylite, and actinolite-tremolite. For purposes of determining respiratory and worker protection, both the asbestiform and non-asbestiform varieties of the above minerals and any of these materials that have been chemically treated and/or altered shall be considered as asbestos.
- I. <u>Asbestos-Containing Building Material</u>: Surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a building.
- J. <u>Asbestos-Containing Material (ACM)</u>: Any material containing more than 1% of asbestos of any type or mixture of types.
- K. <u>Authorized Person or Visitor</u>: The building owners, or their authorized representative, or any representative of a regulatory or other agency having jurisdiction over the Project.
- L. <u>Clean Room</u>: An uncontaminated area or room, which is a part of the personnel decontamination unit with provisions for storage of worker's street clothes and protective equipment.
- M. <u>Critical Barrier</u>: Seal applied to openings connecting the abatement area with adjacent spaces that will not be included in the containment. Critical barriers shall not be exposed to the gross removal environment. Examples of openings requiring critical barriers include, but are not limited to: HVAC vents and diffusers; doorways; windows; air plenums; and floor, wall and ceiling penetrations. Critical barriers shall be semi-rigid and sealed with at least one layer of 6-mil plastic sheeting.
- N. <u>Decontamination Unit</u>: A series of connected rooms, with airlock doorways between any two adjacent rooms, for the decontamination of workers and of materials and equipment. A decontamination facility always contains at least one air lock.

- O. <u>Encapsulation</u>: The sealing of asbestos surfaces involving application of a material (encapsulant) that will envelop or coat the fiber matrix and eliminate fiber fallout and protect against impact damage.
- P. <u>Enclosure</u>: Procedures necessary to completely enclose material containing asbestos behind airtight, impermeable, permanent barriers.
- Q. <u>Equipment Room</u>: A contaminated area or room that is part of the personnel decontamination unit with provisions for storage of contaminated clothing and equipment.
- R. <u>Fixed Object</u>: A unit of equipment or furniture in the Work area that cannot be removed from the Work area.
- S. <u>Glovebag</u>: A sack (typically constructed of 6-mil transparent polyethylene or polyvinylchloride plastic) with inward projecting long sleeve gloves, which is designed to enclose an object from which an asbestos-containing material is to be removed.
- T. HEPA Filter: A high efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97% of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
- U. <u>HEPA Vacuum Equipment</u>: Vacuuming equipment with a HEPA filter system.
- V. <u>Log Book</u>: A notebook or other book containing essential project data and daily project information and a daily project diary. This book is kept on the Project site at all times.
- W. <u>Mini-Enclosure</u>: A method with limited applications for removing small amounts of friable asbestos containing material typical for small-scale, short duration type projects.
- X. <u>NESHAP</u>: National Emissions Standard for Hazardous Air Pollutants, 40 CFR Part 61.
- Y. <u>N.E.C.</u>: National Electrical Code.
- Z. <u>NIOSH</u>: National Institute for Occupational Safety and Health.
- AA. <u>Non-Friable Asbestos-Containing Material</u>: Material that contains more than 1% asbestos and that cannot be crumbled, pulverized, or reduced to powder by hand pressure when dry is considered a Non-Friable ACM. NESHAP regulations divide Non-Friable materials into the following two groups:

- 1. <u>Category I Non-Friable Asbestos-Containing Material</u> includes asbestos-containing packings and gaskets, asbestos-containing resilient flooring materials, and asbestos-containing asphaltic roofing products.
- 2. <u>Category II Non-Friable Asbestos-Containing Material</u> includes any asbestos-containing material other than Category I Non-Friable materials that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.
- AB. Occupational Safety and Health Administration.
- AC. <u>PCM</u>: Phase contrast microscopy is used to determine the level of fibers in the air. Procedures are outlined in NIOSH Method 7400, Revision No. 3
- AD. <u>Personnel Decontamination Unit</u>: That portion of a containment work area designed for controlled passage of workers, and other personnel and authorized visitors, typically consisting of a clean room a shower room and an equipment room.
- AE. <u>Personal Monitoring</u>: Sampling of the asbestos fiber concentrations within the breathing zone of an employee.
- AF. PPE: Personal Protective Equipment.
- AG. <u>Protection Factor</u>: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
- AH. Regulated Asbestos-Containing Material (RACM): includes all asbestos-containing materials; Category I Non-Friable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; and Category II Non-Friable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.
- AI. <u>Removal</u>: The act of removing asbestos-containing or contaminated materials from the structure under properly controlled conditions to a suitable disposal site.
- AJ. Respirator: A devise designed to protect the wearer from the inhalation of harmful atmospheres.

- AK. Shower Room: A room between the clean room and the equipment room in the personnel decontamination unit with hot and cold or warm running water and suitable arranged for complete showering during decontamination. The shower room comprises an air lock between the contaminated and ambient clean area.
- AL. <u>Surfactant</u>: A chemical wetting agent added to water to improve penetration.
- AM. <u>TEM</u>: Transmission electron microscopy is used to determine the levels of structures of asbestos in the air. Guidelines are set forth in the AHERA regulations.
- AM. <u>Time Weighted average (TWA)</u>: The average concentration of a contaminant in air during a specific time period.
- AO. <u>Wet Cleaning</u>: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils that have been dampened with amended water or diluted removal encapsulant and afterwards thoroughly decontaminated or disposed of as asbestos-contaminated waste.
- AP. Work Area: The area where asbestos related work or removal operations are performed and which is isolated to prevent the spread of asbestos dust, fibers or debris, and to prevent entry by unauthorized personnel.

1.4 **REGULATIONS**

- A. <u>General Applicability of Regulations</u>: Except to the extent that more explicit or more stringent requirements are written directly in the contract documents, all applicable codes, regulations, statutes, laws and rules have the same force and effect (and are made a part of the contract documents by referenced) as if copies are directly included into the contract documents, or as if published copies are bound herewith.
- B. <u>Contractor Responsibility</u>: The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State and local regulations pertaining to work practices, hauling, disposal, and 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. The Contractor shall hold the Owner and the Owner's representatives harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other

- regulation on the part of themselves, their employees, or their subcontractors.
- C. Federal Requirements, which govern asbestos abatement work or hauling and disposal of asbestos waste materials include, but are not limited to the following:
 - 1. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) including, but not limited to:
 - a. Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules 29 CFR 1910.1001 and 29 CFR 1926.58.
 - b. Respiratory Protection 29 CFR 1910,134
 - c. Access to Employee Exposure and Medical Records 29 CFR 1910.20
 - d. Hazard Communication
 29 CFR 1910.1200 and 29 CFR 1926.59
 - 2. U.S. Environmental Protection Agency (EPA) including but not limited to:
 - a. National Emission Standards for Hazardous Air Pollutants (NESHAP)
 40 CFR 61
 - b. Identification and Listing of Hazardous Wastes 40 CFR 261
 - 3. U.S. Department of Transportation (DOT) including but not limited to:
 - a. Shippers--Hazardous Materials Regulations 49 CFR 171 and 172
- D. State and Local Requirements that govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:
 - 1. Alabama Department of Environmental Management, Air Division.

2.	Alabama Division.	Department	of	Environmental	Management,	Land

1.5 Decontamination Procedures

Each worker and authorized visitor shall, upon entering a Work area, remove street clothes in the clean room, don a respirator and clean protective clothing prior to entering the equipment room or the Work area enclosure.

All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from clothing prior to leaving the Work area; proceed to the equipment room and remove all clothing except respirators; still wearing the respirator proceed to the showers; clean the outside of the respirator with soap and water while showering; remove the respirator, thoroughly shampoo and wash themselves.

Following the showering and drying off, each worker and authorized visitor shall proceed directly to the clean room and dress in clean clothes. Before re-entering the Work area from the clean room, each worker and authorized visitor shall don a clean respirator and dress in clean protective clothing.

Contaminated work footwear can be stored in the equipment room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste.

Workers removing waste containers from the equipment decontamination enclosure shall enter the holding area from outside wearing a respirator and dressed in clean disposable coveralls. No worker shall use this system as a means to leave or enter the Work area.

Workers shall not eat, drink, smoke or chew gum or tobacco while in the Work area or clean room.

Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of asbestos-containing or contaminated materials prior to commencing actual asbestos abatement and until final cleanup and final clearance air monitoring is completed.

1.6 Equipment Removal Procedures:

In the Work Area, clean surfaces of contaminated containers and equipment thoroughly by wet wiping before moving such items into the equipment room for final cleaning through the clean room.

During work activities requiring decontamination procedures, the Contractor shall provide a means of communication for the workers inside the Work area without requiring personnel to enter or leave the Work area. This method of communications shall be a two-way radio, localized wire-connected telephone, or similar system. This communication system shall remain intact until final air

monitoring clearance is achieved. Then all equipment shall be wiped down, HEPA vacuumed or disposed of as asbestos-contaminated material.

Adequate shower facilities shall be provided by the Contractor. An employee leaving the Work area shall follow all decontamination procedures necessary or as described herein.

1.7 <u>Personnel</u>

The Contractor shall have a job superintendent present at all times while work on this Contract is in progress.

The Project Superintendent shall be thoroughly familiar and experienced with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. They should be knowledgeable of all EPA, OSHA, and NIOSH requirements and guidelines. They shall be trained in the proper use of all personal protection and safety equipment including, but not limited to, air purification and respiratory systems.

In addition to the Superintendent, the Contractor shall furnish one (1) or more foremen who are familiar and experienced with asbestos removal and its related work, safety procedures, and equipment.

- A. It is a requirement of this Specification that the superintendent and/or one or more of the Contractor's foremen be inside the Work area at all times while work is in progress.
- B. All superintendents and foremen shall have been trained by attending a five-day Supervision of Asbestos Abatement training course and have satisfactorily passed an examination following the training program. Only EPA approved training programs will be accepted.
- C. Workers shall, at a minimum, receive 32-hour training program by an approved training provider. Approval and course content shall be outlined in the EPA Model Accreditation Plan. In addition, workers shall attend an approved annual 8-hour refresher course. Workers shall also have annual certificates, if required, for the locale of the Project.

2.0 PREPARATION

2.1 Preparation

A. Separation of Work areas from adjacent areas of the facility.

- 1. Separate parts of the building that may be required to remain in use from parts of the building that will undergo asbestos removal, by means of airtight barriers, constructed as follows:
 - a. Build suitable rigid partitions and apply 3/8 inch minimum thickness sheathing on work side, if necessary.
 - b. Cover both sides of partition with double layer of plastic sheet with joints staggered and sealed with tape. Edges of partition at floor, walls, and ceiling shall be caulked airtight.
- 2. Shut down electric power that serves the Work area. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements. All power in the Work Area shall be on ground fault interrupter circuits.
- 3. Preclean fixed objects within the Work area, by HEPA vacuuming and/or wet cleaning as appropriate. Cover the objects with a minimum of 6-mil plastic sheeting and seal with tape.
- 4. Preclean the Work area using HEPA vacuuming or wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

B. Preparation of a Full Containment Area

- 1. Cover floor and wall surfaces with plastic sheeting sealed with tape. Use a minimum of two layers of 6-mil plastic sheeting on floors and two layers of 4-mil plastic sheeting on walls. Cover floors first and extend at least 12 inches up on walls, then cover walls with plastic sheeting to the floor level. The walls should overlap the floor material by a minimum of 12 inches.
- 2. Shut down and isolate heating, cooling, and ventilating air systems to prevent contamination and fiber dispersal. Physically blank off all supply and return air ductwork that leads to and from an isolated work area.
- 3. Seal off all openings, including but not limited to windows, corridors, doorways, skylights, ducts, grills, diffusers, and any other penetrations of the Work areas, with plastic sheeting (minimum of 4-mils thick) sealed with tape.

C. Pre-clean work area

1. Clean all moveable objects within the Work area using HEPA vacuum equipment and/or wet cleaning methods. Remove these objects from the Work area to a designated temporary storage location.

The second layer of floor sheeting may be black or dark in color. All joints in the plastic sheeting shall have a minimum of 12 inches of overlap and shall be securely sealed with tape to prevent leakage of air and water.

- 2. Maintain emergency and fire exits from the Work areas, or establish alternative exits satisfactory to fire officials.
- 3. Pressure Differential and Monitoring:

All full containment areas shall maintain a pressure differential of 0.04 inches of water between the work area and the unrestricted side of the ambient area. This shall commence at the beginning of any work that could possibly disturb ACM until the passing of final clearance sampling. Manometer/pressure reading instruments are to be inclined manometer type capable of 0-3" wg (0.1" wg increments) and shall be installed at representative locations at critical barriers. A continuous readout device/strip chart recorder shall be provided for each work area. Manometers shall also be used to monitor the pressure of the work area vs. the clean room of the decontamination chamber.

The project monitor shall document the manometer readings at least every four hours. This documentation of continuous readings from the strip chart recorder shall be submitted with daily monitoring reports. All manometers and strip chart recorder shall be installed and operational for as long as the area is under containment at each work area to provide continuous documentation of pressure differential.

4. All filtered air shall be exhausted outside the building to the ambient atmosphere. If this is not possible, then filtered air shall pass through an additional HEPA filtration device and exhaust to an area of the building approved by the Owner's representative.

D. Decontamination Units

Build suitable decontamination units described herein.

In all cases, access between contaminated and uncontaminated rooms or areas shall be through the decontamination unit previously described. Passage between any two rooms within the decontamination unit shall be through an airlock doorway.

- 1. Construct a personnel decontamination unit contiguous to the Work area. The unit shall consist of three totally enclosed chambers that conform to the following:
 - a. A shower room with two airlock doorways, one to the equipment room and one to the clean room. Plastic, if used, on shower room and adjoining equipment and clean rooms shall be opaque.
 - b. The shower room shall contain at least one shower with hot and cold or warm water. The shower enclosure should be constructed to ensure against any leaking.
- 2. Provide or construct an equipment decontamination unit consisting of two totally enclosed chambers as follows:
 - a. A washroom, constituting an airlock, with an airlock doorway to the Work area and an airlock doorway to the holding area. The washroom shall be at least three feet in length.
 - b. A holding area with an airlock doorway to the washroom and an airlock doorway to an uncontaminated area. The holding area shall be at least three feet in length.

E. Maintenance of the Full Containment Area

- 1. Ensure that barriers and plastic sheeting are properly sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery.
- 2. Visually inspect enclosures at the beginning of each shift.
- 3. Use smoke methods to test effectiveness of barriers when directed by the Owner.
- F. Asbestos removal work shall not commence until:
 - 1. Arrangements have been made for disposal of waste at an acceptable site.

- 2. Work areas and decontamination units and parts of the building required to remain in use are segregated.
- 3. All tools, equipment, and materials are at the site.
- 4. Arrangements have been made for building security.
- 5. All other preparatory steps have been taken and applicable notices posted and permits obtained.
- 6. Removal work will not begin until authorized by the Owner in writing, after an inspection of the abatement area has been inspected by the Project Monitor and the preparation is satisfactory.

2.2 Asbestos Removal

- A. Prepare a full containment as previously described.
- B. Remove and clean ceiling mounted objects, such as lights and other items not previously sealed off, that may interfere with ACM removal. Use hand-held water spraying and/or HEPA vacuum equipment during removal of fixtures as necessary to reduce fiber dispersal.
 - Decontaminate the objects, wrap in plastic and store for reinstallation upon completion of testing procedures, if required by the Owner.
- C. If present, remove ceiling tiles and grid system within the Work area and dispose of as contaminated waste. If approved by the Engineer, the grid system may be removed, decontaminated, sealed in plastic and stored for reinstallation.
- D. Provide adequate HEPA air filtration capacity to filter air from each room of the Work area that is contained. This may be accomplished by moving individual machines or ducting to individual rooms. Air filtration equipment shall be sufficient to provide filtered air changes of at least every 15 minutes from the containment.
- E. When scheduled to be removed per Plans and/or Scope of Work, remove carpeting, carpet backing, window curtains, etc. in sections of appropriate size for packaging and dispose of as contaminated waste.
- F. Spray asbestos material with amended water, using spray equipment capable of providing a "mist" application to reduce the release of fibers. Saturate the material sufficiently to wet it to the substrate without causing excess dripping. Spray the asbestos material repeatedly during work

- process to maintain wet condition and to minimize asbestos fiber dispersion.
- G. Protect all fixtures, grills, lockers and other non-removable equipment from amended water. Surfactants can cause oxidation. Also, protect painted surfaces and flooring.
- H. Remove the saturated ACM in manageable sections. ACM shall not be allowed to dry out. ACM shall not be allowed to fall more than 15 feet.
 - For heights up to 50 feet an inclined chute and/or scaffolding can be used to intercept the ACM. For heights exceeding 50 feet, provide enclosed dustproof chutes.
- I. Bulk asbestos material shall be bagged in 6-mil thick bags, before it dries. No ACM shall be allowed to lay in the containment overnight. Place the material in sealed containers. Place caution labels on containers in accordance with OSHA Regulation 29 CFR 1926.58 and DOT 49 CFR 171-177 if not already preprinted on containers. Clean external surfaces of containers thoroughly by wet wiping. Move containers to washroom, wet clean each container thoroughly, and move to holding area pending removal to uncontaminated areas. Ensure that containers are removed from the holding area by workers who have entered from uncontaminated areas dressed in clean coveralls and wearing respiratory protection. Ensure that workers do not enter from uncontaminated areas into the washroom or the Work area; ensure that contaminated workers do not exit the Work area through the equipment decontamination unit.
- J. When finished removing the ACM, all surfaces from which ACM has been removed shall be wet brushed and sponged or cleaned by an equivalent method to remove all visible material. During this work, the surfaces being cleaned shall be kept wet. At the Contractor's option, the layer of plastic exposed to the asbestos may be removed, leaving intact the final layer of plastic.

2.3 Cleanup

The following procedures should be followed in cleaning up the Work area.

- A. Wet clean all surfaces and remove all visible accumulation of ACM from the Work area including the top layer of plastic if not previously removed. Prepare the Work area for an initial visual inspection.
- B. Once the Work area has been inspected and is clean of visible accumulations of ACM, the Project Monitor will perform an initial clearance test with limits of 0.02 f/cc with NIOSH Method 7400, latest

revision. The Contractor will continue the wet cleaning process until the designated fiber level is achieved.

- C. After successful completion of the initial air test and before the last layer of the plastic sheeting is removed, apply one coat of an asbestos encapsulant sealer following manufacturer's recommendations for application. The encapsulant sealer shall be compatible with any material to be reapplied to the surface.
- D. While still under respiratory protection, remove the final layer of plastic sheeting from the walls and floors after the sealant has dried. The seals on the windows, vents, doors, etc. shall remain, and HEPA filtration equipment and decontamination units shall remain in service.

Wet clean or HEPA vacuum work area underneath the plastic.

- E. Enter a 24-hour settling period. Dust, both visible and invisible, shall be allowed to settle within the Work area without being disturbed during this period.
- F. After the settling period, wet clean and/or HEPA vacuum all surfaces within the Work area. Once this cleaning operation is complete, visually inspect the Work area to ensure that it is free of contamination.
- G. The Asbestos Project Monitor shall conduct a thorough visual inspection and conduct final air clearance testing. Upon successful completion of the visual inspection that all surfaces in the Work area are dry and free of contamination, the final air clearance testing will be conducted.
- H. The final air clearance testing will consist of PCM air sampling, as applicable, with a maximum fiber level of 0.01 fibers per cubic centimeter of air (f/cc) being achieved prior to acceptance.

Aggressive sampling techniques will be used to re-entrain any fibers on the walls or floors in each area to be tested. The Contractor shall provide one (1) electric one Hp "Leaf Blower" and one (1) electric 20-inch box fan per 10,000 cubic feet of air volume in the Work area, for use by the Project Monitor during the aggressive sampling. The Contractor shall also provide the necessary electrical supply for these units. After sampling, the leaf blower and fans shall be cleaned by the Contractor and handled as if contaminated with asbestos.

Contractor shall continue cleaning the Work site until the accepted fiber level is achieved.

SECTION 02021 ASBESTOS REMOVAL – RESILIENT FLOOR COVERING

I. GENERAL

The Contractor shall remove and dispose of all asbestos-containing floor tile/covering mastic, as identified in the survey, using procedures outlined in this Section.

1.1 Execution

- A. Prepare areas as described in Section 02020, "Asbestos Removal" with the following exceptions:
 - 1. Since flooring material is the only asbestos-containing material to be removed from the Work area, do not install plastic sheeting on the floor. Install plastic sheeting on the walls at least 4 feet up from the floor. Install critical barriers and HEPA air filtration devices capable of exchanging air every 15 minutes.
 - 2. A personnel and equipment decontamination unit shall be constructed contiguous to the restricted area.
 - 3. Since this facility is vacant, the Contractor, at their option, may seal Work areas and shut down filtration devices for nights and weekends. This is only allowed if Work area air samples indicate fiber levels of 0.01 f/cc or less.
- B. Wet flooring with amended water to minimize fiber release during its removal. Use amended water sparingly and apply with a sponge or cloth to eliminate standing water and to prevent water from traveling on the floor. If approved in advance, a damp towel placed over the floor tile during removal may be used as an alternative to a direct application of amended water.
- C. Remove flooring by use of hand tools. Immediately remove flooring from Work area and place in an appropriate disposal container.
- D. As areas of subfloor are cleared of floor coverings, scrape up remaining adhesive and deposit scrapings in disposal bags. Clean floor of all adhesive residue by using an approved solvent and flowing manufacturer's instructions.
- E. Wet clean all surfaces (including walls and ceilings) in the flooring material removal area and proceed with Work Area preparation, if more ACM is to be removed.

- F. Once the area has dried, apply a coat of asbestos encapsulant sealer to all surfaces in the area.
- G. Final clearance testing will be conducted as presented in Section 02110, Air Monitoring and Clearance Testing.

SECTION 02022 ASBESTOS REMOVAL – GLAZING

I. GENERAL

The Contractor shall remove and dispose of all asbestos-containing window glazing and debris, or window unit entirely, using procedures outlined in this Section.

1.1 Execution

- 1. Restrict access to the work area with use of barricade tape and signs.
- 2. Install plastic sheeting on the ground within four feet of the exterior wall and window units to be removed.
- 3. A personnel and equipment decontamination unit shall be constructed contiguous to the restricted area.
- B. Wet glazing with amended water to minimize fiber release during its removal. Use amended water sparingly and apply with a sponge or cloth to prevent water from traveling into the wall cavity.
- C. Remove glazing by use of hand tools and in a manner to prevent debris from falling. Immediately remove glazing and debris and place in an appropriate disposal container.
- D. Wet clean all surfaces in the removal area.
- F. Once the area has dried, apply a coat of asbestos encapsulant sealer to all surfaces in the area.
- G. Work will be considered complete when a visual clearance inspection is conducted by the Supervisor and the Project Monitor.

SECTION 02110 AIR MONITORING AND CLEARANCE TESTING

1.0 ASBESTOS ABATEMENT

All air monitoring for asbestos abatement shall be conducted in accordance with NIOSH Method 7400, latest revision. Analysis will utilize phase contrast microscopy (PCM). The Owner will provide a certified Asbestos Project Monitor to collect and analyze all air samples on this project. Results of all air monitoring shall be made available to the Owner on a daily basis.

1.1 BACKGROUND SAMPLING

Prior to the Contractor mobilizing to the site, a set of five (5) background air samples inside and outside of the building shall be collected and analyzed. A detection limit of at least 0.005 fibers per cubic centimeter (f/cc) shall be obtained.

1.2 FULL CONTAINMENT

When a full containment is established, air sampling will be conducted as follows:

Barrier Sample: At least 2 continuously during each shift.
Clean Room Sample: At least 1 continuously during each shift.
Air Filtration Device Sample: At least 1 continuously during each shift.
Equipment Room Sample: At least 1 continuously during each shift.
Work Area Sample: At least 1 continuously during each shift.

- 1.2.1. Following initial visual inspection at least five (5) air samples will be collected from the Work area. Initial clearance passes when all samples indicate 0.02 fibers per cubic centimeter of air (f/cc) or less.
- 1.2.2. Following final visual inspection at least five (5) air samples will be collected from the Work area using an aggressive sampling technique. The aggressive sampling technique involves aggressively blowing down all vertical and horizontal surfaces with a one horsepower leaf blower and installing and operating a 20-inch box fan for each 10,000 cubic feet of Work area. Final clearance passes when all samples indicate 0.005 f/cc or less with a volume collected of at least 1,200 liters.
- 1.2.3 If requested and paid for by the Owner, transmission electron microscopy (TEM) samples may be collected and analyzed for clearance. Samples will be collected and analyzed in accordance with AHERA regulations. Final clearance passes when all samples indicate 0.005 structures per cubic centimeter of air (st/cc) or less with a volume collected of at least 1,200 liters.

1.3 RESILIENT FLOOR COVERINGREMOVAL

During the removal of flooring material, air monitoring will be conducted as follows:

Barrier Sample:

At least 1 during each shift.

Clean Room Sample:

At least 1 during each shift.

Work area:

At least 1 during each shift.

- 1.3.1. Following initial visual inspection at least five (5) air samples will be collected from the Work area. Initial clearance passes when all samples indicate 0.02 fibers per cubic centimeter of air (f/cc) or less. If Work area samples have consistently indicated fiber levels of less than 0.02 f.cc the Contractor may skip collection of air samples.
- 1.3.2. Following final visual inspection at least five (5) air samples will be collected from the Work area using an aggressive sampling technique. The aggressive sampling technique involves aggressively blowing down all vertical and horizontal surfaces with a one horsepower leaf blower and installing and operating a 20-inch box fan for each 10,000 cubic feet of Work area. Final clearance passes when all samples indicate 0.01 f/cc or less with a volume collected of at least 1,200 liters.
 - 3.3.3 If requested and paid for by the Owner, transmission electron microscopy (TEM) samples may be collected and analyzed for clearance. Samples will be collected and analyzed in accordance with AHERA regulations. Final clearance passes when all samples indicate 0.01 structures per cubic centimeter of air (st/cc) or less with a volume collected of at least 1,200 liters.

1. WINDOW CAULKING REMOVAL

During the removal of window caulking, air monitoring will be conducted as follows:

Barrier Sample:

At least 1 during each shift.

Work area:

At least 1 during each shift,

1.4.1 Following a final visual inspection removal will be considered complete if Work area samples indicate fiber levels of less than 0.01 f/cc. If not, at least three (3) air samples will be collected from the Work area. Final clearance passes when all samples indicate 0.01 f/cc or less.

1.4 DURING ANY ACM REMOVAL

If at any time during the course of the work, airborne fiber concentrations exceed either the background concentrations or 0.010 fibers/cc via PCM outside the work areas, the Contractor shall halt asbestos abatement related activities and take corrective measures to reduce airborne fiber concentration (misting the air, wet wiping, HEPA vacuuming, etc.). Work will not commence again until the source of the contamination has been identified and additional air samples have been collected indicating that airborne fiber concentrations are below 0.01 fibers/cc or the background level. If this type of "incident" occurs, the Contractor will notify the Owner immediately and via written report within 24 hours. Other "trigger levels" requiring an "incident" report if exceeded, will be as follows:

1.	Barrier Sample	0.01 f/cc
2.	Clean Room Sample	0.01 f/cc
3.	Air Filtration Device Samples	0.01 f/cc
4.	Glovebag Samples	0.01 f/cc
5.	Equipment Room Samples	0.10 f/cc
6.	Work Area Samples	0.20 f/cc

2.0 PERSONAL AIR MONITORING

2.1 <u>Asbestos Abatement</u>

Personal air monitoring is the responsibility of the Contractor. Personal air monitoring shall be conducted in accordance with OSHA standards. Air monitoring should be conducted for all shifts workers wear respiratory protection. 25% of the workers should have an 8-hour time-weighted average (TWA) sample and a 30 minute short-term excursion level (STEL) sample collected and analyzed by PCM.

SECTION 02210 ASBESTOS DISPOSAL

All ACM generated from this project will be disposed of by the Contractor in a licensed and qualified asbestos landfill. The landfill used must be approved by the Owner.

ACM will be contained in either double 6-mil thick leak-tight polyethylene bags and steel drums which meet DOT Specification 17H, or in single 6-mil thick leak-tight polyethylene bags and placed in a fiberboard drum, or sealed in two layers of 6-mil thick polyethylene sheeting.

ACM containers shall be labeled as follows:

1. First Label: Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard:

DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD

2. Second Label: Provide in accordance with U.S. Department of Transportation regulation on hazardous waste marking. 49 CFR parts 171 and 172:

ASBESTOS NA2212 RQ

3. Third Label: Provide a permanent label on each container, listing the name of the facility owner and the location where the waste was generated, in accordance with the Environmental Protection Agency's Asbestos NESHAP Revision, 40 CFR Part 61.

The containerized ACM waste will be loaded in an enclosed truck for transport to the landfill. A single layer of 6-mil plastic sheeting will be installed on the floor and walls of the truck bed. Containerized waste will be removed from the building on a daily basis. The truck, used to transport asbestos-containing waste, shall be labeled with a sign bearing the following legend in accordance with the EPA's Asbestos NESHAP Revision, during loading unloading of the vehicle:

DANGER ASBESTOS DUST HAZARD CANCER AND LUNG DISEASE HAZARD Authorized Personnel Only

Workers handling the containers shall wear respiratory protection.

A completed copy of a Waste Shipment Record (WSR) shall be executed by appropriate parties and be submitted to the Owner. Environmental will inspect waste for shipment and sign all manifest.

ATTACHMENT A

Asbestos Abatement Drawing

