

Asbestos Abatement Project Specification

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Buffalo, NY 14214

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Project Description:

The subject property located at 2929 Main Street, Buffalo NY that is comprised of four (4) independent structures. The property is expected to undergo Asbestos Abatement prior to the renovations by the Lincoln Gardens Associates, LLC. An asbestos survey has been completed and serves as the basis for this document. Excerpts from that survey, detailing locations and quantities of ACM can be found in Appendix A.

ASBESTOS ABATEMENT GENERAL NOTES

1. The Asbestos Abatement Contractor shall perform all asbestos abatement in accordance with the Contract Documents, and all applicable local, State and Federal regulations and standards.
2. The Asbestos Abatement Contractor shall obtain and maintain NYS Asbestos Certification, per Section 3.
3. The owner will contract with an independent licensed firm who will be responsible for monitoring Asbestos Abatement work and to be referenced here as the Project Monitor. (See Section 10 – Project Monitoring)
4. Contractor shall remove and properly dispose of asbestos containing materials (ACM), including, but not limited to, those identified in Appendix A.
5. All asbestos abatement work shall comply with the requirements under 12 NYCRR Part 56 (Rule 56), and variances to that Code obtained by, or pending to, the Owner as well as asbestos safety practices per US DOL (OSHA) 29CFR1926.1101.
- 7.. The provisions of any asbestos specific variance obtained by the contractor may not be implemented until and unless the Project Monitor issues written approval, and as described by the Project Manager.

SECTION 1

SUMMARY OF THE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, general provisions of Contract, including all sections of this Specification, apply to work of this section.

1.2 PROJECT/WORK IDENTIFICATION

- A. General: The project consists of the abatement of certain asbestos containing materials including those listed in Appendix A.
- B. Contract Documents: Defined as:
 - 1. Bid Document and Specification
 - 2. Contract as supplied by Owner.

Other related requirements and conditions that are not indicated on the Contract Documents include, but are not necessarily limited to the following:

- a. Applicable Codes and Regulations
 - b. Notices and Permits
 - c. Existing Site Conditions and Restrictions on Use of the Site
 - d. Work Performed Prior to Work under this Contract
 - e. Alterations and Coordination with Existing Work
 - f. Work to be performed Subsequent to Work Under this Contract
 - g. Alternates
- C. Summary by References: Work of the Contract can be summarized by references to the Contract, General Conditions, Supplementary Conditions, Specification Sections, Drawings, addenda and modifications to the Contract Documents issued subsequent to the initial printing of this project manual and including but not necessarily limited to printed material referenced by any of these. Work of the Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon including weather conditions and other forces outside the contract documents.

1.3 SCHEDULE OF WORK

- A. The contractor shall provide a plan of action incorporating project schedule, including start and completion dates. Schedule shall be subject to the approval of, and commensurate with demolition plans of the Owner.
- B. All work required must be completed by the date indicated above including **Air Monitoring as specified in SECTION 8**. All site remediation work under terms of contract must be completed by dates determined by the Owner.

1.4 PLAN OF ACTION

- A. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination areas, the sequencing of remediation work, the interface of trades involved in the performance of work, methods to be used to assure the safety of adjacent building occupants, their visitors, visitors to

the site, and workers employed by contractors, and other authorized personnel, a disposal plan including location of approved disposal site, and a detailed description of the methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, closing out of the building HVAC system, method of removal to prohibit visible emissions in work area, and packaging of removed debris. The Project Monitor prior to commencement of work must approve the plan.

1.5 INSPECTION

- A. Prior to commencement of work, inspect areas in which structure, surfaces, and equipment or of surrounding properties that could be misconstrued as damage resulting from the work. Photograph or videotape existing conditions as necessary to document conditions. Submit to Project Monitor prior to starting work.

1.6 POTENTIAL EXPOSURE HAZARD

- A. The disturbance or dislocation of asbestos containing materials may cause contamination to be released into the building's atmosphere, thereby creating a potential health hazard to workmen and building occupants. Apprise all workers, supervisory personnel, sub-contractors and consultants who will be at the job site of the seriousness of the hazard and the proper work procedures that must be followed.
- B. Where in the performance of the work, workers, supervisory personnel, sub-contractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified asbestos containing materials, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to asbestos containing materials. Such measures shall include the procedures and methods described herein, and compliance with regulations of applicable federal, state and local agencies.

1.7 STOP WORK

- A. If the Project Monitor, Project Manager, or Superintendent presents a written stop work orders immediately and automatically stop all work. Do not recommence work until authorized in writing by the Owner or Project Monitor.

1.8 CONTRACTOR USE OF PREMISES

- A. General: The contractor shall limit his use of the premises to the work and hours indicated within contract, so as to allow for undisturbed use of the property by the Owner and/or its tenants.
- B. Use of the Site: Confine operations at the site to the areas and hours permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed or trespassed onto. Conform to site rules and regulations affecting the work while engaged in project construction. The appropriate authority will reprimand persistent violators.
 - 1. Keep existing driveways and entrances serving the premises clear and available to the Project Monitor, Owner and his employees at all times. Do not use these areas for parking or storage of materials.
 - 2. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated, per direction of site supervisor. If additional storage is necessary obtain and pay for storage off site.

3. Lock automotive type vehicles, such as passenger cars and trucks and other mechanized or motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place or accessible to unauthorized persons.
 4. Parking: Available the site superintendent will designate parking areas. Parking will be restricted to only those areas indicated.
- C. Contractors Use of the Existing Building: Maintain areas within, around and outside of buildings in a safe and orderly condition in compliance with all applicable OSHA standards. Repair damage caused by construction operations. Take all precautions necessary to protect the building and exterior surfaces during the construction period.
- D. Utilities:
Contractor is responsible for securing adequate electrical and utility services
- E. Water:
Contractor is responsible for securing adequate water supply to all remediation activities.

1.9 OWNER OCCUPANCY

- A. Full Owner Occupancy: The Owner and its tenants will occupy adjacent sites during the entire period of construction. Cooperate fully with the Owner or its representatives during construction operations to minimize conflicts and to facilitate Owner usage. Perform the work so as not to interfere with the operations of the Owner or tenants.

1.10 SUBMITTALS

- A. Before the Start of Work: Submit the following to the Project Monitor for review. Do not begin work until these SUBMITTALS, per section 3, are returned with Project Monitor action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.
1. Plan of Action: Submit as a written report in the same manner as product data.
 2. Inspection: Report on inspection carried out as required by this section. Include copies of all photographs, videotapes, etc. Submit in the same manner as product data.
 3. Health & Safety Plan
 4. Affirmative Action Plan

END OF SECTION

SECTION 2

CODES, REGULATIONS, AND STANDARDS

PART 1 - GENERAL

2.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including all sections of this Specification, apply to this section.

2.2 SUMMARY

- A. This section sets forth governmental regulations and industry standards, which are included and incorporated herein by reference and made a part of the specification. This section also sets forth those notices and permits which the Owner knows and that both must be applied for and received, or which must be given to governmental agencies before start of work.
 - 1. Requirements include adherence to work practices and procedures set forth in applicable codes, regulations and standards.
 - 2. Requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with codes, regulations, and standards.

2.3 CODES AND REGULATIONS

- A. General Applicability of Codes and Regulations, and Standards: Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.
- B. Contractor Responsibility: The contractor shall assume full responsibility and liability for the 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, Project Monitor, its successors and assigns harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulations on the part of himself, his employees or his subcontractors.

- C. Federal Requirements that govern asbestos containing materials remediation, hauling and disposal of waste materials include but are not limited to the following:

OSHA: U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA), including but not limited to:

Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite,
29 CFR 1910.1001 and 1926.1101
Code of Federal Regulations

Lead Exposure in Construction
29 CFR 1926.62
Code of Federal Regulations

Hazardous Waste Operations & Emergency Response
29 CFR 1910.120
Code of Federal Regulations

Blood borne Pathogens
1910.1030
Code of Federal Regulations

Respiratory Protection
Title 29, Part 1910, Section 134 of the
Code of Federal Regulations

Construction Industry
Title 29, Part 1926, of the
Code of Federal Regulations

Access to Employee Exposure and Medical Records
Title 29, Part 1910, Section 2 of the
Code of Federal Regulations

Hazard Communication
Title 29, Part 1910, Section 1200 of the
Code of Federal Regulations

Specifications for Accident Prevention Signs and Tags
Title 29, Part 1910, Section 145 of the
Code of Federal Regulations

DOT: U.S. Department of Transportation, including but not limited to:
Hazardous Substances
Title 29, Part 171 and 172 of the
Code of Federal Regulations

EPA: U.S. Environmental Protection Agency (EPA), including but not limited to:

National Emission Standard for Hazardous Air Pollutants
(NESHAPS)
National Emission Standards for Asbestos
Title 40, Part 61, Sub-Part A, and revised Sub-Part M (revised Sub-Part B) of the
Code of Federal Regulations

Toxic Substances Control Act (TSCA)
Lead; Renovation, Repair & Painting
40 CFR 745
Code of Federal Regulations

Resource Conservation & Recovery Act (RCRA)

40 CFR 261
Code of Federal Regulations

D. Other Federal Requirements

US Clean Air Act, 42 U.S.C. section 7401, *et seq.* , as amended by Public Law 101-549, November 15, 1990

E. State Requirements

New York State Department of Labor Industrial Code Rule 56: Asbestos

New York State Department of Labor Mold Program

NYS DEC Solid Waste Management Regulations 6 NYCRR 360 et al
Contractor is responsible for proper characterization and disposal of solid wastes generated during demolition.

NYS DEC Hazardous Waste Management Regulations 6 NYCRR 370 et al
Contractor is responsible for proper characterization and disposal of hazardous wastes.

NYS DEC Division of Air Resources 6 NYCRR 200
Contractor is responsible for compliance with all applicable state provisions, including those governing fugitive dust emissions

NYS DEC Division of Environmental Remediation 6 NYCRR 375-6 Remedial Program Soil Cleanup Objectives

NYSDEC Division of Water "NYSE Standards & Specification for Soil Erosion & Control" 2005

F. Local Requirements: Abide by all local requirements that govern asbestos abatement work or hauling and disposal of asbestos containing materials.

2.4 STANDARDS

A. General Applicability of Standards: Except to the extent that more explicit or more stringent requirements are written directly into the Contract Documents, all applicable standards have the same force and effect (and are made part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies are bound herewith.

B. Contractor Responsibility: The contractor shall assume full responsibility and liability for the compliance with all standards pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The contractor shall hold the Owner, Project Monitor, Owner's successors and assigns harmless for failure to comply with any applicable standard on the part of himself, his employees, or his sub-contractors.

C. Standards that apply to asbestos containing materials remediation or hauling and disposal of waste materials include but are not limited to the following:

American National Standards institute (ANSI)

1430 Broadway
New York, New York 10018
(212) 354-3300

Fundamentals Governing the Design and Operation of Local
Exhaust Systems
Publication z9.2-79

Practices for Respiratory Protection Publication z88.2-80

American Society for Testing and Materials (ASTM)
1916 Race Street
Philadelphia, PA 19103
(215) 299-5400

2.5 GUIDANCE DOCUMENTS (APPENDIX H) - NOT APPLICABLE

2.6 NOTICES

A. U.S. Environmental Protection Agency

Send Written Notification as required by USEPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations (40 CFR 61, Subpart M) to the regional Asbestos NESHAPS Contact at least 10 working days prior to beginning any work on asbestos-containing materials. Send notification to the following address:

**REGION 2:
Asbestos NESHAPS Contact
Air & Waste Management Division
USEPA
26 Federal Plazas
New York, NY 10007
(212) 264-4479**

1. Notification: include the following information in the notification sent to the NESHAPS contact:
2. Name and address of owner or operator
3. Description of the facility being demolished or renovated, including the size, age, and prior use of the facility.
4. Estimate of the approximate amount of friable asbestos material present in the facility in terms of linear feet of pipe, and surface area on other facility components. For facilities in which the amount of friable asbestos materials less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) or 1 cubic meter (35 cubic feet) on other facility components, explain techniques of estimation.
5. Location of the facility being demolished or renovated.
6. Scheduled starting and completion dates of demolition or renovation.
7. Nature of planned demolition or renovation and method(s) to be used.

8. Procedures to be used to comply with the requirements of USEPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations (40 CFR 61 Subpart M).
9. Name and location of the waste disposal site where the friable asbestos waste material will be deposited.

For facilities being demolished under an order of a State or local governmental agency, issued because the facility is structurally unsound and in danger of imminent collapse, the name, title, and authority of the State or local governmental representative who has ordered the demolition.

B. State and Local Agencies:

Send written asbestos notification as required by industrial Code Rule 56 a minimum of the ten (10) days prior to beginning any work on asbestos containing materials to the Division of Safety and Health's Asbestos Control Program to include:

1. Send the name, address, and asbestos handling number of the contractor for the project to:

Asbestos Coordinator
NYS Department of Labor
State Office Campus, Room 154, Albany, NY 12240
2. The address and description of the building or area, including size, age, and prior use of the building or area.
3. The amount of asbestos material present in square and/or linear feet.
4. The proposed starting and completion dates for abatement.
5. The procedures and equipment that will be employed.

2.7 PERMITS

- A. All permits, fees, licenses and inspections required by government agencies, regulatory agencies, utility companies, or others during the course of the work shall be obtained and paid for by the contractor.
- B. The costs of all required permits, licenses, etc. shall be included in the contract sum.

2.8 POSTING AND FILING OF REGULATIONS

- A. Posting and Filing of Regulations and all Medical Emergency Numbers: Post all notices required by applicable federal, state and local regulations in a highly visible area. Maintain two (2) copies of applicable federal, state and local regulations and standard. Maintain one copy of each at job site. Keep on file in Contractor's office one copy of each.
- B. Within 10 days of the completion of such work, the air monitoring firm shall inform the building/facility owner and employers of employees who will be working in the area of the current location and quantity of PACM and/or ACM remaining in the area and final monitoring results, if any.

2.9 SUBMITTALS

- A. Before Start of Work: Submit the following to the Project Monitor for review. No work shall begin until these submittals are returned with Project Monitor action stamp indicating that the submittal is returned for unrestricted use or final-but-restricted use.
- B. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance to the Work including:
1. State and Local Regulations: Submit copies of codes and regulations applicable to the work.
 2. Notices: Submit notices required by federal, state and local regulations together with proof of timely transmittal to agency requiring notices.
 3. Permits: Submit copies of current valid permits required by state and local regulations.
 4. Licenses: Submit copies of all State and local licenses and permits necessary to carry out the work of this contract.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 3

SUBMITTALS

PART 1 - GENERAL

3.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including all sections of this Specification, apply to this section.

3.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for SUBMITTALS required for performance of the WORK, including:

- Contractor's Construction Schedule**
 - Submittal Schedule (see 3.5)**
 - Personal Monitoring Data**
 - Daily Construction Reports**
 - Shop Drawings**
 - Product Data**
 - Insurances**
 - Miscellaneous SUBMITTALS**

- B. Administrative Submittals: Refer to **SECTION 2 (Codes and Regulations)** for requirements for administrative SUBMITTALS. Such SUBMITTALS include, but are not limited to:

- Permits
 - Applications for Payment
 - Performance and Payment Bonds
 - Insurance Certificates
 - List of Sub-Contractors

3.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of SUBMITTALS with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
- B. Coordinate each submittal with fabrication, purchasing, testing, delivery, other SUBMITTALS and related activities that requires sequential activity.
- C. Coordinate transmittal of different types of SUBMITTALS for related elements of the work so processing will not be delayed by the need to review SUBMITTALS concurrently for coordination.
- D. The Project Monitor reserves the right to withhold action on a submittal requiring coordination with other SUBMITTALS until related SUBMITTALS are received.
- E. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process SUBMITTALS, including time for resubmittals.
- F. Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent SUBMITTALS. The Project Monitor will promptly advise the Sub-

contractor when a submittal being processed must be delayed for coordination.

- G. If an intermediate submittal is necessary, process the same as the initial submittal.
- H. Allow two weeks for reprocessing each submittal.
- 1. No extension of Contract Time will be authorized because of failure to transmit SUBMITTALS to the Project Monitor sufficiently in advance of the work to permit processing.
- J. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from contractor to Project Monitor using a transmittal form. SUBMITTALS received from sources other than the contractor will be returned without action. On the transmittal record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements. Including minor variations and limitations. Include contractor's certification that information complies with Contract Document requirements.

3.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Schedule: Provide proposed detailed schedule including work dates, work shift time, number of employees, dates of start and completion including dates of preparation work, removals, Contractor activities and final inspection dates on a per building basis.
- B. Indicate Clearance of each Work Area in advance of the dates established for Clearance. Allow time for testing and other Owner's Project Monitor procedures necessary for certification of clearance.
 - 1. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for Owner's Representative's procedures necessary for certification of Substantial Completion.
- C. Phasing: Provide notations on the schedule to show how the sequence of the work is affected by requirements for phased completion to permit work by separate Sub-contractors and partial occupancy of the Owner prior to Substantial Completion.
- D. Work Stages: indicate important stages of construction for each major portion of the work, including testing and installation. Include indication of start and finish times for the following:
 - i. Removal of uncontaminated debris and materials
 - ii. Preparation of the Work Area
 - iii. Asbestos containing materials Removal
 - iv. Clearance Testing
 - v. Substantial Completion
- E. Distribution: Print and distribute copies to the Project Monitor, Owner, contractor, sub-contractor and other parties required to comply with scheduled dates. Post copies in the Project Monitor's field office; project meeting room and temporary field office.
- F. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- N. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have

been recognized or made. Issue the updated schedule concurrently with report of each meeting.

3.5 SUBMITTAL SCHEDULE

- A. Contractor shall adhere to the following submittal schedule for SUBMITTALS prior to, during, and after completion of the work.
- B. Legible copies of the following items are to be submitted **before the start** of the Asbestos Abatement project:
- i. NYSDOL Contractor's License (DOH - 432)
 - ii. NYSDOL Asbestos Handling Certifications (DOSH - 442)
 - iii. Proof of current (within the last 12 months) Physical Examination for all persons to be employed on the project.
 - iv. Material Safety Data Sheets for all products to be used by personnel on the project
 - v. Standard Operating Procedures to be followed during the project
 - vi. Respiratory Protection Program to be followed during the project
 - vii. Listing of Disposal Clothing, Eyewear and Head Protection
 - viii. Contaminated Sediment & Soil Remediation Health & Safety Plan
 - ix. Insurance Certificates:
 1. General Liability
 2. Workers Compensation
 - x. Project Notification:
 1. NYSDOL
 2. EPA
 - xi. Waste Hauler's Permit
 - xii. Name and Address of Landfill(s) to be used
- C. Legible copies of the following items be submitted to the project monitor on a **daily basis** once remediation activities have begun:
1. Project Log Book Entries
 2. Daily Sign-in Log
 3. Work Area Entry/Exit Log
 4. Hauler's Departure Log
 5. Minutes from weekly Safety Meeting
 6. Any and All changes to the contract should any occur
- D. Legible copies of the following must be submitted within ten (10) days of the **completion** of the project:
1. Personal Air Sampling Records:
 - a. Chain of Custody Forms
 - b. Laboratory Reports
 2. Waste Manifest(s), shipment Records, and Landfill Receipts
 3. Contractor's certificate of visual inspection
 4. Submittal requirements per contract document.
 5. Clearance Air Monitoring Results
- ### 3.6 PERSONAL MONITORING DATA
- A. Personal Air Sampling Records: Contractor is responsible for provision of personal exposure monitoring analysis data for asbestos, cadmium, lead and mercury per OSHA 29 CFR 1926.

Analysis documentation shall be submitted to Project Monitor per employer obligation outlined in those regulations, no less than seventy-two (72) hours from initial and ongoing exposure assessment.

3.7 PRODUCT DATA

- A. Collect Product Data into a single submittal. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."
- B. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 - Manufacturer's printed recommendations
 - Compliance with recognized trade association standard
 - Application of testing agency labels and seals
 - Notation of dimensions verified by field measurements
 - Notation of coordination requirements
- C. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- D. Submittals: Submit five (5) copies of each required submittal. The Owner's Representative will retain four (4), and will return the one marked with action taken and corrections or modifications required.
- E. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
- F. Distribution: Furnish copies of final submittal to installers, sub-contractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
- G. Do not proceed with installation until applicable copy of Product Data application is in the installer's possession.
- H. Do not permit use of unmarked copies of Product Data in connection with construction.

3.8 PROJECT MONITOR'S ACTION

- A. Except for SUBMITTALS for record, information or similar purposes, where action and return is required or requested, the Project Monitor will review each submittal, mark to indicate action taken, and return promptly.

3.9 Insurances

- A. Legible copies of the following items are to be submitted **with bid**, in advance of award of project.
 - 1. Environmental General Liability: Remediation firm shall be required to carry

Environmental General Liability for the following:

a. "Release of asbestos into the environment during abatement."

b. Each policy shall comply with following

-True occurrence Policy with no Sunset Provision

-\$ 1,000,000 (one million) per occurrence

-The Owner, corporate affiliates, assessors and assigns shall be named as an additional insured

-The Carrier shall be licensed to conduct business within the State of New York

-There shall be a minimum 30-day notice of cancellation

-the Owner reserves the right to review each policy and reject any and all unacceptable policies

- B. Contractor shall be responsible for provision of all insurance requirements as outlined on "Bid Form"

3.10 BONDING

- A. Bid, payment, performance, labor and/or materials bonds, as required by the Owner, shall be distributed by a Treasury Listed Company, licensed to conduct business in New York State.
- B. Each bidder may be required to furnish a Bid Security (Proposal Guarantee), payable to the Owner, or by Bid Bond, conforming to law, and satisfactory to SECTION 3 requirements and the Owner.
- C. The successful bidder may be required to furnish a Performance and Payment Security for one hundred percent (100%) percent of the amount of contract, either by bank cashiers' check, payable to the owner, or by Performance and Payment Bond, conforming to law, and satisfactory to SECTION 3 requirements and the Owner.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 4

PROJECT DECONTAMINATION

PART 1 - GENERAL

4.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including all sections of this Specification, apply to work in this section.

4.2 DESCRIPTION OF REQUIREMENTS

- A. General Decontamination of the Work Area following remediation of ACM, LBP, mold & pigeon waste.
- B. If the asbestos abatement work is on undamaged and non-friable materials, the decontamination procedure is a three step procedure with one cleaning of the first layer of the Primary Barrier plastic to remove contamination, one cleaning of the second layer the Primary Barrier, cleaning of the space following removal of the second layer thus preventing contamination of the building when the Work Area isolation barriers are removed.
- C. In both cases operation of the pressure differential system is used to remove airborne fibers generated by the abatement work.

4.3 RELATED WORK SPECIFIED ELSEWHERE

- A. Removal of gross debris is integral with the performance of remediation work and as such is specified in the appropriate work section(s) of these specifications:
 - 1. **Section 6. Removal of Asbestos containing materials**
- B. Work Area Clearance: Air testing and other requirements that must be met before release of contractor and re-occupancy of the work area are specified in **SECTION 8 Air Monitoring**.
- C. Visual inspection: Project Monitor shall conduct a visual inspection at each abatement location as specified in **SECTION 9 Project Monitoring**.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

4.4 GENERAL –Asbestos Abatement Contractor performs this work and must be certified per Section 3.

- A. Work of this SECTION includes the decontamination of air in the Work Area which has been, or may have been, contaminated by the elevated airborne levels generated during remediation activity, or which may previously have had elevated fiber levels due to friable asbestos-containing materials in the space.
- B. Work of this SECTION includes the cleaning, and decontamination of all surfaces (ceiling, walls, and floor) of the Work Area, and all furniture or equipment in the Work Area.

4.5 START OF WORK

- A. The following cleanup procedures shall be required after completion of all removal activities:
1. Cleanup Tools and Equipment. All accumulations of asbestos waste materials shall be containerized utilizing HEPA vacuums or rubber or plastic dustpans, squeegees or shovels. Metal shovels shall not be used to pick up or move waste. HEPA vacuums shall be used to clean all surfaces after gross cleanup.
 2. First Cleaning: All surfaces in the work area shall be first wet cleaned using rags, mops and sponges. To pick up excess liquid and wet debris, a wet-purpose shop vacuum may be used and shall be decontaminated prior to removal from the work area.
 3. First Sheeting Removal: The cleaned, exposed barrier layer of plastic sheeting shall be removed from walls and floors. Windows, doors, HVAC system vents and all other openings shall remain sealed. Decontamination enclosure systems shall remain in place and be utilized.
 4. Second Cleaning and Sheeting Removal: After the first cleaning, at least twelve hours shall be allowed for asbestos to settle. Thereafter all objects and surfaces in the work area shall be HEPA vacuumed and/or wet cleaned. The remaining plastic on walls and floors only, shall then be removed. All windows, doors, HVAC system vents and all other openings shall remain sealed.
 5. Third Cleaning: After the second cleaning, at least twelve hours shall elapse before HEPA vacuuming and/or wet cleaning all surfaces in the work area. The negative pressure ventilation units shall remain in continuous operation during the settling periods and the third cleaning.
 6. Removal of Waste: All containerized waste shall be removed from the work area and holding area to specified landfill certified to accept this waste.
 7. Removal of Tools and Equipment: All tools and equipment shall be removed from the work area and decontaminated.
 8. Clearance Air Monitoring: the owner shall conduct Clearance air monitoring, as per the schedule for air sampling and analysis. Other trades and other occupants can enter the space to do their work following clearance.
 9. Removal of isolation Barriers: The isolation barriers shall be removed only after satisfactory clearance air monitoring results has been achieved.

4.6 VISUAL INSPECTION

- A. After final cleaning perform a complete visual inspection of the entire Work Area including: all surfaces, ceiling, walls, floor, decontamination unit, all plastic sheeting, seals over ventilation openings, doorways, windows, and other openings; look for debris from any sources, residue on surfaces, dust or other matter. During visual inspection sweep entire work area including walls, ceilings, ledges, floors, and other surfaces in the room with exhaust from forced air equipment (leaf blower with approximately 1 horsepower electric motor or equivalent). If any debris, residue, dust or other matter is found repeat final cleaning and continue decontamination

procedure from this point. When the area is visually clean, and if after sweeping of all surfaces with leaf blower, no debris, residue, dust or other material is found, complete the certification at the end of this section. Visual inspection is not complete until confirmed in writing, on the certification, by Project Monitor.

- B. Temporary Lighting: Provide a minimum of 100-foot candles of lighting on all surfaces in the areas to be subjected to visual inspection. Provide hand held lights providing 150 foot-candles at 4 feet capable of reaching all locations in work area. Contractor shall provide this lighting.
- C. Lifts: Provide ladders, scaffolding, and lifts as required providing access to All surfaces in the area are to be subjected to visual inspection. Access is to allow touching of all surfaces.

4.7 AIR MONITORING & CLEARANCE

- A. Owner shall contract air-monitoring activities per 12 NYCRR56.4 to an independent, licensed air monitoring firm/laboratory. An accredited laboratory shall perform analysis per 12NYCRR56. All sampling personnel shall maintain certification per 12NYCRR56.
- B. This Section sets forth required pre, prep, work-in-progress and post-remediation monitoring, clearance and public re-occupancy testing requirements in and out of the work area as set forth in 12 NYCRR 56.4. Work shall be performed according to requirements set forth in 12 NYCRR 56.4.
- C. Air monitoring firm shall also conduct clearance evaluations for lead hazard control, pigeon waste removal and sediment & soil remediation screening.

4.8 LOCKDOWN

- A. Encapsulant Use during Cleanup: If so determined by the owner's representative and the project monitor. After first cleaning and prior to first sheeting removal and after the work area has been rendered free of visible residues, a thin coat of an encapsulating agent shall be applied to any surfaces in the work area which have remaining ACM & LBP and are not the subject of removal or other remediation activities. These will be included in the O&M manual.

4.9 REMOVAL OF WORK AREA ISOLATION

- A. After all requirements of this section and **SECTION 8: Air Monitoring** has been met:
 - 1. Shut down and remove the Pressure Differential System. Seal HEPA filtered fan units, HEPA vacuums and similar equipment with 6-mil fire retardant polyethylene sheet and duct tape to form a tight seal at intake end before being moved from Work Area.
 - 2. Remove Personnel Decontamination Unit
 - 3. Remove the Critical Barriers separating the Work Area from the rest of the building. Remove any small quantities of residual material found upon removal of the plastic sheeting with wet wiping, HEPA filtered vacuum cleaners and local area protection. If significant quantities, as determined by the Project Monitors, are found then the entire area affected shall be decontaminated as specified in **SECTION 5, Cleaning & Decontamination Procedures**.
 - 4. Remove all equipment, materials, and debris from the work site.

5. Dispose of all asbestos containing materials as specified in **SECTION 7, Disposal of Asbestos containing materials.**

4.10 SUBSTANTIAL COMPLETION OF REMEDIATION WORK

A. Asbestos Abatement work is substantially complete upon meeting the requirements of this section and **SECTION 8, Air Monitoring**, including submission of:

1. Certificate of Visual inspection as required by **SECTION 9, Project Monitoring**
2. Receipts Documenting proper disposal as required by **SECTION 7, Disposal of Asbestos containing materials.**
3. Punch list detailing repairs and incomplete items.

4.11 CERTIFICATION OF VISUAL INSPECTION

A. Following this SECTION is a "Certificate of Visual inspection." This certificate is to be completed by the contractor and certified by the Project Monitor. Submit completed Certificate with Application for Final Payment. Final Payment will not be made until this Certificate is executed. Air monitoring & lead wipes will still need to be done after visual.

CERTIFICATE OF VISUAL INSPECTION

In accordance with **SECTION 4, Project Decontamination** the Contractor hereby certifies that he has visually inspected the Work Area (all surfaces including pipes, beams, ledges, walls, ceiling and floor, Decontamination Unit, sheet plastic, etc.) and has found no dust, debris or residue that may be attributed to ACM, LBP, mold and/or pigeon waste.

By: (Signature)_____ Date

(Print Name)

(Print Title)

PROJECT MONITOR CERTIFICATION

The Project Monitor hereby certifies that he has accompanied the sub-contractor on his visual inspection for ACM, LBP, mold &/or pigeon waste and verifies that this inspection has been thorough and to the best of his knowledge and belief, the Contractor's Certification above is a true and honest one.

By (Signature)_____ Date

(Print Name)

(Print Title)

END OF SECTION

SECTION 5

CLEANING AND DECONTAMINATION PROCEDURES

PART 1 - GENERAL

5.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including all other Specification Sections, apply to work of this section.

5.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Work Area Clearance: Specified in **SECTION 8, Air Monitoring**.
- B. Visual inspection: Specified in **SECTION 9, Project Monitoring**

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

5.3 WET CLEANING

- A. Accomplish wet cleaning during decontamination with paper towels or disposable rags:
 - 1. Immerse paper towel or rag in container of water with surfactant, or diluted removal encapsulant.
 - 2. Wring out.
 - 3. Fold into quarters.
 - 4. Wipe surface once and refold to a fresh face of cloth. Proceed in this manner until all available faces of paper towel or rag have been used.
 - 5. Dispose of paper towel or rag.
 - 6. Do not place rag back in container to rinse out or for any other purpose. If a used towel or rag comes in contact with water, empty container and refill.
 - 7. Material adhered to a surface with removal encapsulant may require the application of additional removal encapsulant to facilitate cleaning.

5.4 REMOVAL OF DEBRIS

- A. Work of this SECTION is limited to the cleanup of a small quantity of amassed debris that has fallen from an architectural finish, fireproofing, or thermal insulation on pipes boilers and other thermal equipment.
- B. Remove debris and decontaminate the area involved using the following sequence:
 - 1. Shut down all ventilation into room.
 - 2. Seal entry to work area with 6-mil fire retardant polyethylene. Slit polyethylene for entry. Install a flap to cover the slit automatically; tape slit closed after entry.
 - 3. Start HEPA vacuum before entering the area.
 - 4. Use the HEPA vacuum to clean a path at least 6 feet wide from the entry point of the work area to the site of the fallen material.

5. Remove all small debris with the HEPA vacuum.
6. HEPA vacuum surfaces of all pieces too large to be removed by the suction of the HEPA vacuum.
7. Pick up such pieces and place in the bottom of a 6 mil polyethylene disposal bag conforming to the requirements of **SECTION 7, Disposal of Asbestos containing materials**. Place pieces in the bag without dropping and avoiding unnecessary disturbance and release of material.
8. Remove all remaining visible debris with HEPA vacuum.
9. HEPA vacuums an area 3 feet beyond the location in which any visible debris was found in two directions each at right angles to the other.
10. Place a 6-mil fire retardant polyethylene drop cloth in accordance with State Regulation 12 NYCRR 56, immediately on top of the HEPA vacuumed area before performing any repair work on site from which fall-out occurred.
11. HEPA vacuum the site from which material fell removing all loose material, which can be removed by the vacuums suction.
12. Repair or remove remaining material.
13. HEPA vacuum ladder and/or any tools used and pass out of the work area.
14. HEPA vacuum all surfaces in the room starting at the top of wall and working downward to the floor. Then start at corner of floor farthest from Work Area entrance and work towards entrance.
15. HEPA vacuums the floor using a floor attachment with rubber floor seals and adjustable floor to attachment height. Adjust the height so that the rubber seals just touch the floor if carpeted and are within 1/16" of hard surface floors. Vacuum the floor in parallel passes with each pass overlapping the previous by one-half the width of the floor attachment. At the completion of one cleaning vacuum the floor a second time at right angles to the first.
16. Secure area from occupancy until air monitoring results per **SECTION 4, Project Decontamination** indicates that area is safe for re-occupancy.

5.5 CLEANING AND DECONTAMINATING OBJECTS

- A. Perform all work of decontaminating objects wherever possible on a fire retardant plastic drop sheet installed in conformance with **SECTION 5, Cleaning & Decontamination**.
 1. HEPA vacuums all surfaces of object and immediate area before moving the object.
 2. Pick-up object, if possible, and HEPA vacuum all surfaces.
 3. Hand to worker standing off-sheet who will wet-clean object, if possible, and place in storage location.
 4. Decontaminate area where object was located by HEPA vacuuming twice, in two perpendicular directions. Wet clean if necessary to remove any debris.
 5. Return object to its original location.

5.6 DECONTAMINATION OF ROOMS

- A. Shut down all ventilation into space.
- B. Seal entry to Work Area with 6-mil fire retardant polyethylene. Slit polyethylene for entry. Install a flap to cover the slit automatically; tape slit closed after entry.
- C. HEPA vacuum all surfaces in the room starting at the ceiling, then top of wall and working downward to the floor.
- D. HEPA vacuums the floor using a floor attachment with rubber floor seals and adjustable floor to attachment height. Adjust the height so that the rubber seals just touch the floor if carpeted and

are within 1/16" of hard surface floors. Vacuum the floor in parallel passes with each pass overlapping the previous by one half the width of the floor attachment. At the completion of one cleaning, vacuum the floor a second time at right angles to the first.

- E. Operate HEPA filtered fan unit in space for 24 hours minimum.
- F. At completion of Decontamination Work workers shall proceed to the decontamination unit.
- G. Secure area from occupancy until air monitoring results per **SECTION 8, Air Monitoring** indicates area is safe for re-occupancy.

END OF SECTION

SECTION 6

REMOVAL OF ASBESTOS CONTAINING MATERIALS

PART 1 - GENERAL

6.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including all other Specification Sections, apply to work of this section.

6.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Disposal of waste is specified in **SECTION 7, Disposal of Asbestos containing materials.**

6.3 EXPERIENCE

- A. The contractor shall demonstrate to the satisfaction of the Project Monitor that he/she has successfully completed at least five (5) projects of a like size and nature of this project. Contractor and their sub-contractors must provide proof of business operations under same name as bidder for last three (3) years. Contractor and any of its sub-contracted parties must list a record of past & present NYS Dep't of Labor 12 NYCRR 56 violations.

6.4 SUBMITTALS

- A. Before Start of Work: Submit the following to the Project Monitor for review. Do not start work until these submittals are returned with Project Monitor's action stamp indicating that the submittal is returned for unrestricted use.
 1. Surfactant: Submit product data, use instructions and recommendations from manufacturer of surfactant intended for use. Include data substantiating that material complies with requirements.
 2. Removal Encapsulant: Submit product data, use instructions and recommendations from manufacturer of removal encapsulant intended for use. Include data substantiating that material complies with requirements.
 3. NESHAP Certification: Submit certification from manufacturer of surfactant or removal encapsulant that, to the extent required by this specification, the material, if used in accordance with manufacturer's instructions, will wet Asbestos-Containing Materials to which it is applied as required by the National Emission Standard for Hazardous Pollutants (NESHAP) Asbestos Regulations (40 CFR 61.Subpart M).
 4. Material Safety Data Sheets: Submit the Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant, encapsulating material and solvent proposed for use on the work. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.
 5. Glovebag: Submit product data.

PART 2 - PRODUCTS

6.5 WETTING MATERIALS

- A. Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the material and retardation of fiber release during disturbance of the material equal to or greater than the provided by the use of one ounce of a surfactant consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.
- B. Removal Encapsulant: Provide a penetrating type encapsulant designed specifically for removal of Asbestos-Containing Material. Use a material which results in wetting of the Asbestos-Containing Material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of one ounce of mixture of 50% polyoxyethylene ester and 50% polyoxyethylene ether in five gallons of water.

6.6 POLYETHYLENE SHEET

A single fire retardant polyethylene film in the largest sheet size possible to minimize seams, 6-mil thick as indicated, clear, frosted, or black as indicated.

6.7 DUCT TAPE

Provide duct tape in 2" or 3" widths as indicated, with an adhesive that is formulated to stick aggressively to sheet polyethylene.

6.8 SPRAY CEMENT

Provide spray adhesive in aerosol cans that is specifically formulated to stick tenaciously to sheet polyethylene.

6.9 DISPOSAL BAGS

Provide 6 mil thick leak-tight polyethylene bags labeled as required by **SECTION 7, Disposal of Waste Material**.

6.10 FIBERBOARD DRUMS

Provide heavy-duty leak tight fiberboard drums with tight sealing locking metal tops.

6.11 PAPER BOARD BOXES

Provide heavy-duty corrugated paperboard boxes coated with plastic or wax to retard deterioration from moisture. Provide in sizes that will easily fit in disposal bags.

6.12 FELT

Standard felt approximately 1/16" thick and 36" to 72" in width.

6.13 GLOVE BAG

Provide minimum 6 mil polyethylene, polyvinylchloride or equivalent plastic sack, with two sealed inward projecting long-sleeved gloves or mittens, pre-printed with same warning notice as disposal bag, equipped with a pouch for storage tools, with designated location for wand or HEPA vacuum wand, and

sufficient capacity to hold removed materials and permit sealing as specified.

6.14 GARDEN SPRAYER

Provide a hand pump type pressure-can garden sprayer fabricated out of either metal or plastic, equipped with a metal wand at the end of a hose that can deliver a stream or spray of liquid under pressure.

PART 3 - EXECUTION

6.15 WORKER PROTECTION

Before beginning work with any material for which a Material Safety Data Sheet has been submitted provide workers with the required protective equipment and clothing. Sub-contractor is solely responsible to insure that appropriate protective equipment and clothing be used at all times.

- A. Comply with the following standards during all phases of this work:
29 CFR 1910.134, Respiratory Protection

6.16 WET REMOVAL

- A. Thoroughly wet to satisfaction of Project Monitor materials to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water or removal encapsulant. Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for amended water or removal encapsulant to penetrate material thoroughly. If amended water is used, spray material repeatedly during the work process to maintain a continuously wet condition. If a removal encapsulant is used, apply in strict accordance with manufacturer's written instructions. Perforate outer covering of any installation which has been painted and/or jacketed in order to allow penetration of amended water or removal encapsulant, or use injection equipment to wet material under the covering. Where necessary, carefully strip away while simultaneously spraying amended water or removal encapsulant on the installation to minimize dispersal of asbestos containing materials.
- B. Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels.
- C. Remove saturated material in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags, bend over and seal with minimum three wraps of duct tape. Clean outside and move to Wash Down Station adjacent to Material Decontamination Unit.

END OF SECTION

SECTION 7

DISPOSAL OF WASTE MATERIAL

PART 1 - GENERAL

7.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including all other Specification Sections, apply to work of this section.
- B. **Section 2, Codes and Regulations**, describes applicable federal, state and local regulations.

7.2 DESCRIPTION OF THE WORK

- A. This section describes the disposal of Waste Materials. Disposal includes packaging and transportation of waste materials.
- B. Other wastes to be transported and disposed in accordance with applicable USEPA, USDOT and NYSDEC requirements.

SUBMITTALS

- A. Before Start of Work: Submit the following to the Project Monitor for review. Do not start work until these submittals are returned with Project Monitors action stamp indicating that the submittal is returned for unrestricted use.
 - 1. Copy of state or local license for waste hauler.
 - 2. Name and address of landfill where regulated asbestos-containing waste materials are to be buried. Include contact person and telephone number.
 - 3. On a weekly basis submit copies of all waste shipment records and disposal site receipts to Project Monitor.

PART 2 - PRODUCTS

7.4 ASBESTOS DISPOSAL BAGS

Provide 6 mil thick leak-tight polyethylene bags labeled with three labels with text as follows:

- A. First Label:
DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

- B. Second Label: Provide in accordance with U.S. Department of Transportation regulation on hazardous waste marking.49 CFR parts 171 and 172. Hazardous Substances: Final Rule. Published November 21, 1986 and revised February 17, 1987:
**RQ HAZARDOUS SUBSTANCE,
SOLID, NOS,
ORM-E, NA 9188
(ASBESTOS)**
- C. For asbestos-containing waste material to be transported off the facility site, label containers or wrap materials with:
1. The name of the waste generator; and
 2. The location at which the waste was generated.

PART 3 - EXECUTION

7.5 GENERAL

- A. Comply with the following standards during all phases of this work:
- 29 CFR 1926.1101, Worker Protection - Asbestos
 - 29 CFR 1910.134, Respiratory Protection
 - 40 CFR 61, Subparts A & M, NESHAP
 - 49 CFR 171& 172 Hazardous Substances
 - 6 NYCRR 364, Waste Collector Registration Regulations
 - 6 NYCRR 360, Solid Waste Management Regulations
- B. All waste is to be hauled by a waste hauler with all required licenses from all state and local authority with jurisdiction.
- C. Load regulated asbestos-containing waste material in disposal bags or leak-tight drums. All materials are to be contained in one of the following: Two 6 mil disposal bags or Two 6 mil disposal bags and a fiberboard drum or sealed steel drum with no bag.

7.6 ASBESTOS WASTE STORAGE CONTAINER

- A. All waste containers shall be enclosed and lockable (i.e. enclosed dumpster, trailer, etc.). OPEN CONTAINERS WILL BE PERMITTED ON SITE FOR STORAGE OF NON-FRIABLE ACM ONLY (i.e. open dumpster with canvas cover, etc.).
- B. The container shall be plasticized with a minimum of one (1) layer of 6-mil polyethylene on sides and two (2) layers of 6-mil polyethylene on the floor for friables only.
- C. While on-site, the container shall be labeled with DANGER sign:
DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST
- D. Any required Hauler's Permit numbers shall be stenciled on both sides and back of the container. The container will not be permitted to leave the site without proper

identification.

- E. Once the container is loaded at the site, the door(s) will be locked at all times.
- F. Carefully, load containerized waste in enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport, to insure that no unauthorized persons have access to the material.
- G. Do not store containerized materials outside of the Work Area. Take containers from the Work Area directly to a sealed truck or dumpster.

7.7 TRANSPORTATION AND DISPOSAL SITE

- A. Before the container is removed from the project site for transportation to the Disposal Site, the door(s) shall be locked. The locks shall be removed at the Disposal Site by the operator of the Disposal Facility and returned to the contractor.
- B. Do not transport disposal bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated as asbestos-containing waste and dispose of in accordance with this specification.
- C. Advise the landfill operator or processor, at least ten days in advance of transport, of the quantity of material to be delivered.
- D. The contractor shall give twenty-four (24) hour notification prior to removing any waste from the site. Waste shall be removed from the site only during normal working hours unless otherwise specified. No waste may be taken from the site without authorization from the Project Monitor.
- E. The contractor shall have the Hauler estimate the date and time of arrival at the Disposal Site.
- F. Upon arrival at the removal site, the Hauler must possess and present any valid Federal, State or Local Hauler's Permits that may be required. The Owner may verify the authenticity of the Hauler's Permit with the proper authority.
- G. The Hauler with the contractor and the Owner or Project Monitor shall inspect all materials in the transport container prior to taking possession and signing the waste shipment record (WSR).
- H. Random checks will be initiated at the Disposal Site to insure that the procedures outlined herein are complied with.

7.8 WASTE SHIPMENT RECORD (WSR)

- A. A waste shipment record (WSR) shall be utilized to document all wastes shipments.
- B. The WSR shall be completed by the contractor and verified by the Owner that all information and amounts are accurate and the proper signatures are in place.
- C. If WSR signed by Disposal Site Operator is not received by the Owner within 35 days of the date that the initial transporter accepted waste; the contractor must contact the owner/operator of the disposal site.

- D. A written report must be submitted by contractor to EPA if the Owner does not receive WSR within 45 days.
- E. Copies of all WSRs must be retained by the building owner for two (2) years.
- F. The contractor shall maintain a waste disposal log which indicates load number, date and time left site, container size, quantity of ACM, Hauler, any permit numbers, trailer and tractor license number, and date WSR as returned.

7.9 OTHER WASTE

- A. Other non-asbestos waste shall be transported and disposed in accordance with applicable state and Federal requirements. Verification that non-regulated wastes are properly disposed is required. Contractor/transporter shall supply Project Monitor with landfill dump tickets for non-regulated waste disposal on a weekly basis.

7.10 COMPLIANCE

- A. Failure to adhere to these procedures shall constitute a material breach of the Contract and the Owner shall have the right to and may terminate the Contract provided; however, the failure of the Owner to so terminate shall not relieve the contractor from future compliance.

END OF SECTION

SECTION 8

AIR MONITORING & CLEARANCE

8.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary conditions and other Specification, Sections 1 - 6 and appendices, apply to the work of this section.
 - 1. Visual inspection: required as a prerequisite of air testing, is set forth in **SECTION 4, Project Decontamination**.
 - 2. Air Monitoring: performed by the Owner during remediation work in accordance with 12 NYCRR 56.17 & **SECTION 4, Project Decontamination**.

8.2 SUMMARY

- A. Owner shall contract air-monitoring activities per 12 NYCRR56.4 to an independent, licensed air monitoring firm/laboratory. An accredited laboratory shall perform analysis per 12NYCRR56. All sampling personnel shall maintain certification per 12NYCRR56.
- B. This Section sets forth required pre, prep, work-in-progress and post-remediation monitoring, clearance and public re-occupancy testing requirements in and out of the work area. Work shall be performed according to requirements set forth in 12 NYCRR 56.4.
- C. Air monitoring firm shall also conduct clearance evaluations for lead hazard control, pigeon waste removal and sediment & soil remediation screening.

8.3 CONTRACTOR RELEASE CRITERIA

- A. The asbestos containing materials work area is cleared when the Work Area is visually clean and satisfies applicable regulatory requirements for public re-occupancy.

8.4 INSPECTION

- A. Work of this section will not begin until visual inspection described in **SECTION 4, Project Decontamination** is complete and has been certified by the Project Monitor.

8.5 CLOSE-OUT

- A. Air Monitor shall submit to owner record of testing activities in report format within ten (10) days of completion of remediation activities. Report shall include, at a minimum:
 - 1. Summary of project activities
 - 2. Sample locations.
 - 3. Sample/analysis summary.
 - 4. Analysis reports.
 - 5. Sample chains of custody.
 - 6. Personnel qualifications.
 - 7. Laboratory qualifications.

- B. Within 10 days of the completion of such work, the air monitoring firm shall inform the building/facility owner and employers of employees who will be working in the area of the current location and quantity of PACM and/or ACM remaining in the area and final monitoring results, if any.

**Table 2
ASBESTOS PROJECT AIR SAMPLING REQUIREMENTS**

Air Sampling Requirements by Asbestos Project & Regulated Abatement Work Area Size	Phase I B Background Air Sampling	Phase II A Work Area Preparation Air Sampling	Phase II B Asbestos Handling Air Sampling	Phase II C Final Cleaning & Clearance Air Sampling
LARGE ASBESTOS PROJECT OR LARGE SIZE REGULATED ABATEMENT WORK AREA	Required	Required ⁽⁵⁾	Required	Required ⁽⁶⁾
Minimum Samples Required ⁽¹⁾	5 Inside Regulated Abatement Work Area & 5 Outside Regulated Abatement Work Area in Building/Structure ⁽²⁾	1 per decontamination entrance/exit 1 per negative air exhaust or per bank of 5 exhausts 2 at critical barriers 1 outside the building/structure		5 Inside Regulated Abatement Work Area ⁽⁷⁾ & 5 Outside Regulated Abatement Work Area in Building/Structure ⁽²⁾
SMALL ASBESTOS PROJECT OR SMALL SIZE REGULATED ABATEMENT WORK AREA	Required	Not Required		Required ⁽⁶⁾
Minimum Samples Required ⁽¹⁾	3 Inside Regulated Abatement Work Area & 3 Outside Regulated Abatement Work Area in Building/Structure ⁽²⁾	0		3 Inside Regulated Abatement Work Area & 3 Outside Regulated Abatement Work Area in Building/Structure ⁽²⁾
MINOR ASBESTOS PROJECT OR MINOR SIZE REGULATED ABATEMENT WORK AREA	Not Required	Not Required		Required ^(3, 4)
Minimum Samples Required ⁽¹⁾	0	0		1 Inside Regulated Abatement Work Area & 1 Outside Regulated Abatement Work Area

Notes:

- (1) For sample location and total number required, see Subparts 56-6 through 56-9.
- (2) 1 sample outside the building/structure if entire building/structure is regulated abatement work area.
- (3) Required on glove bag failure or loss of integrity, or tent failure or loss of integrity.
- (4) Required for an Incidental Disturbance Project or if minor size regulated abatement work area is part of small or large asbestos project.
- (5) Required for all OSHA Class I and Class II Friable ACM asbestos projects.
- (6) During IIC final cleaning stage, air sampling as per Phase IIB is required.
- (7) One additional inside sample shall be required for every 5,000 sq. ft. above 25,000 sq. ft. of floor space within the regulated abatement work area.

- B. Report shall be delivered to owner within thirty (30) days of project completion and prior to final (or substantial) payment.

END OF SECTION

SECTION 9

PROJECT MONITORING

9.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary conditions and other Specification, Sections 1 - 7 and appendices, apply to the work of this section.
 - 1. Visual inspection: performed by the Owner during remediation work in accordance with 12 NYCRR 56.9 & SECTION 4, Project Decontamination.
 - 2. Air Monitoring: performed by the Owner during remediation work in accordance with 12 NYCRR 56.4 & SECTION 4, Project Decontamination.

9.2 SUMMARY

- A. Owner shall contract project monitoring activities to an independent, licensed firm/laboratory. All project monitoring personnel shall maintain certification per 12NYCRR56.
- B. This Section sets forth standards for project monitoring. These functions are summarized as conducted by a person who oversees the scope, timing, phasing and/or remediation methods to be used.

9.3 REVIEW OF METHODS AND WORK AREA PREP

- A. The project will become familiar with remediation methods intended for use on the project. Project Monitor should assess the work area for all relevant issues and concerns prior to the start of the project.

9.4 DOCUMENTATION REVIEW

- A. Prior to the start of the project, the Project Monitor will review all submittal from the contractor as required in SECTION 3, SUBMITTALS

9.5 TIME AND MATERIAL CHARGES

- A. Project Monitor shall be responsible to verify all unit fees, when applicable, as a condition of owners' acceptance.

9.6 VERIFICATION OF ADHERENCE TO CONTRACT SPECIFICATIONS

- A. Project Monitor shall verify that the work is being performed in compliance with the contract specifications. Where deviation is observed, this must be noted and the contractor advised of the failure to perform within the contract specification. Failure by contractor to adhere to contract specification may result in STOP WORK, notification to owner and/or claim of breach of contract.

9.7 VERIFICATION OF ADHERENCE TO REGULATIONS

- A. Project Monitor is to assure that the contractor adheres to all applicable regulations. Failure by contractor to adhere to applicable regulations may result in STOP WORK, notification to owner

and/or claim of breach of contract.

9.8 DAILY INSPECTIONS

- A. The Project Monitor will conduct and document daily inspections of the jobsite. The daily inspection checklist should include as a minimum;
 - 1. Project name
 - 2. Date
 - 3. Job number
 - 4. Project description
 - 5. Name of abatement firm and on-site supervisor
 - 6. Inspection of barrier integrity
 - 7. Verification that warning signs and labels are affixed to required surfaces
 - 8. Verification that appropriate air sampling has been conducted and documented
 - 9. Verification that protective clothing and respiratory protection have been used, cleaned and disposed of in appropriate containers.
 - 10. Verification that abatement procedures have been [performed in accordance with contract specifications and Federal, state and local regulations

9.9 VISUAL INSPECTIONS

- A. To verify the completeness of remediation activities, the Project Monitor will perform a visual inspection. This inspection will include entering all areas where abatement work has been conducted and inspecting all surfaces for the presence of residue and debris. The inspection may include the use of flashlights held near surfaces to illuminate debris, use of cloth wipes to detect evidence of dust and debris, and testing of encapsulated surfaces to assure that the encapsulated has been properly applied.
- B. The project monitor inspection for completeness of abatement and completeness of cleanup shall be performed as per the provisions of the current ASTM Standard E-1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects".
- C. If residue or debris is observed, the Project Monitor will require the area to be recleaned prior to permitting clearance air sampling. If abatement is incomplete, the contractor will be required to finish as necessary to comply with aforementioned project specifications and state of the art work practices.
- D. Project Monitor will complete "Certificate of Visual inspection" and obtain signature from contractor upon satisfactory completion of abatement activities in accordance with SECTION 4, Project Decontamination.
- E. An entry shall be made into the asbestos abatement contractor supervisor's daily log by both the supervisor and the individual performing the inspection detailing the findings of the visual inspection.
- F. The full name and NYSDOL asbestos handling certificate number of the certified individual performing the inspection shall also be documented in the supervisor's daily log.

9.10.1 PROJECT CONCLUSION

- A. At the conclusion of the project, the Project Monitor will assure that the work has been properly restored. The supervisor and Project Monitor will complete a final site walkthrough. Items that

should be addressed include;

1. Barriers, signs and warnings removed
2. Trash, debris and waste removed
3. Lock-out/tag-outs removed
4. Temporary utilities and tie-ins removed
5. Electrical fixtures, switches, lights, etc. restored to pre-abatement conditions
6. Keys, badges, passes returned to Owner
7. Damage identified and repairs agreed to in writing
8. Waste manifests, sampling reports and other project documentations complete.

END OF SECTION

APPENDIX A

ASBESTOS CONTAINING MATERIALS

An asbestos survey was completed by UNYSE that identified asbestos containing materials in multiple building products throughout the interior and exterior of the structure. An ACM Summary follows.

END OF DOCUMENT