SECTION 028213

ASBESTOS ABATEMENT

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies the procedures for disturbance and removal of existing asbestos-containing materials (ACM) and disposal of removed materials. The results of the testing for ACM are listed in the Building Asbestos Survey Report bound in the Appendix. Also see Document 003126.
   1. The Building Asbestos Survey report was compiled by an ELAP certified laboratory.
   2. In order to determine asbestos content, samples were analyzed by polarized light microscopy (PLM) and/or transmission electron microscopy (TEM).
   3. The report is intended for State Design and estimate purposes only, and is included to provide bidders with the same information available to the State.
   4. The Bulk Samples are representative of like materials in the Work area. All ACM may not have been sampled.

B. Type of Asbestos Abatement Project:
   1. Minor Asbestos Abatement Project: An asbestos project involving the removal, disturbance, repair or handling of less than 10 square feet or 25 linear feet of ACM.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Existing Hazardous Material Information: Document 003126.

B. Summary of the Work: Section 011000.

C. Construction Facilities and Temporary Controls: Section 015000.

D. Removals, Cutting, and Patching: Section 017329.

1.03 REFERENCES

A. New York State Department of Environmental Conservation (DEC) 6NYCRR:
   1. Part 360 Solid Waste Management Facilities.
   2. Part 364 Waste Transporter Permits.
   3. Part 370 Hazardous Waste Management System-General.
   4. Part 371 Identification and Listing of Hazardous Wastes.
   5. Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities.
   6. Part 373 Hazardous Waste Management Facilities.

B. Occupational Safety and Health Administration (OSHA): Asbestos Regulations (29 CFR Part 1926.1101).

C. U.S. Environmental Protection Agency (USEPA):
   1. National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule.
   2. Asbestos Emergency Response Act (AHERA) (40 CFR Part 763, Subpart E).

D. New York State Department of Labor (DOL): Industrial Code Rule 56.

1.04 DEFINITIONS

A. Authorized Personnel: Facility or the Director's Representative, and all other personnel who are authorized officials of any regulating agency, be it State, Local, Federal or Private entity who possess legal authority for enforcement or inspection of the work.

B. Clearance Criteria: Shall be determined and established by a Certified Asbestos Project Monitor with an independent testing lab employed by the Director's Representative, conforming to all standards set forth by all authorities having jurisdiction, mentioned in the references, and issue the certification of cleaning.

C. Site Specific Variance: Relief in accordance with section 30 of the Labor Law from specific sections of Industrial Code Rule 56 for a specific project.

D. Phase I & II: Asbestos Project phases as defined and subcategorized in ICR 56-2.

1.05 ABBREVIATIONS

A. ASTM: American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

B. CFR: Code of Federal Regulations
Government Printing Office
Washington, DC 20402

C. DOL: New York State Department of Labor
Harriman State Office Building Campus
Albany, NY 12240

D. NIOSH: National Institute for Occupational Safety and Health
Building J.N.E. Room 3007
Atlanta, GA 30333

E. OSHA: Occupational Safety and Health Administration
200 Constitution Avenue
Washington, DC 20210

F. USEPA: United States Environmental Protection Agency

401 M Street SW
Washington, DC 20460

1.06 ASBESTOS SITE SPECIFIC VARIANCE

A. If a site specific variance is sought, the application must be submitted by the contractor's NYS DOL Certified Asbestos Project Designer with 14 days after the Contract Agreement is approved by the Comptroller. Forward the required forms to the Department of Labor for their action.

1.07 SUBMITTALS

A. Product Data: Catalog sheets, specifications and installation instructions for each item specified.

B. Asbestos Site Specific Variance Submittals; if a site specific variance is sought submit the following:
   1. One copy of the completed DOSH-751 and DOSH-465 forms.
   2. One copy of the New York State Department of Labor site specific variance decision.

C. Quality Control Submittals:
   1. Notification Compliance Data: Within 2 days after notification is sent to the regulatory agencies submit one copy of each notice sent to each regulatory agency (USEPA and DOL).
   2. Asbestos Removal Company Data: Name and address of proposed asbestos removal company and abatement contractor license issued by DOL.
   3. Asbestos Worker Certification Data: Name and address of proposed asbestos abatement workers and licenses issued by DOL.
   4. Work Plan: For information only, submit one copy of the work plan required under Quality Assurance Article.
   5. Waste Transporter Permit: One copy of transporter's current waste transporter permit from NYS DEC (NYS Part 364 Permit).
   6. Landfill: Landfill to be used for ACM disposal shall be licensed to receive asbestos waste by NYS DEC (NYS Part 360 Permit) and by USEPA. Out of state landfills shall provide licenses from local agencies having jurisdiction.
   7. Negative Air Pressure Equipment: Copy of manufacturer's and performance data of all units and HEPA filters used.

D. Asbestos Work Closeout Submittals:
   1. Waste Shipment Records and Disposal Site Receipts: Copy of waste shipment record and disposal site receipt showing that the ACM has been properly disposed.
      a. Waste shipment record and disposal site receipt must be received within 35 days of the ACM waste leaving the Site. If receipts are not received within the specified time period, the Director's Representative will notify USEPA in writing within 45 days of the ACM waste leaving the Site.

E. Contract Closeout Submittals:
   1. Daily Log: Submit copy of Project Monitor's daily air sample log and a copy of Asbestos Abatement Contractor's Daily project log.
   2. Air Monitoring Data: Submit copy of air test results and chain of custody.

1.08 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with the referenced standards.

B. Pre-Work Conference: Before the Work of this Section is scheduled to commence, a conference will be held by the Director's Representative at the Site for the purpose of reviewing the Contract Documents, discussing requirements for the Work, and reviewing the Work procedures.
   1. The conference shall be attended by the Contractor, the asbestos removal subcontractor, and the testing laboratory employed by the Director.

C. Work Plan: At the conclusion of the pre-work conference, before the physical abatement Work begins, prepare a detailed work plan.
   1. The work plan shall include, but not be limited to, work procedures, types of equipment, details of equipment used, decontamination unit locations, crew size, and emergency procedures for fire and medical emergencies and for failure of containment barriers.
   2. If a site specific variance is sought, do not finalize the work plan until the Department of Labor decision is received.

1.09 PROJECT CONDITIONS

A. In addition to the postings required by law, post at the entrance to the abatement area the following documents:
   1. Copy of the printed Work plan.
   2. Copy of Industrial Code Rule 56.

B. Shut-down of Air Handling System: Complete the Work of this Section within the time limitation allowed for shut-down of the air handling system serving the work area.
   1. The air handling system will not be restarted until approval of the air monitoring tests following the last cleaning.
   2. If total shut down of the system is not acceptable, follow all regulations for local isolation and provision for temporary HVAC as per DOL regulations.

C. Maintain electric services to those portions of the building and remaining facility not a part of the asbestos abatement work area at all times. Follow all regulations for electric power shut down exemptions as per DOL regulations.

D. Do not obstruct any aisle or passageway so as to reduce its required width as an exit.

1.10 HEALTH AND SAFETY

A. Where in the performance of the work, workers, supervisory personnel or sub-contractors may encounter, disturb, or otherwise function in the immediate vicinity of contaminated items and materials, all personnel shall take appropriate continuous measures as necessary to protect all ancillary building occupants from the potential ACM exposure.
   1. Such measures shall include the procedures and methods described herein and shall be in compliance with all applicable regulations of Federal, State and Local agencies.

1.11 FIRE PROTECTION, EMERGENCY EGRESS AND SECURITY

A. Establish emergency and fire exits from the work area containment. Provide first aid kits and two full sets of protective clothing and respirators for use by qualified emergency personnel outside of the work area.

B. Provide a logbook throughout the entire term of the project. All persons who enter the regulated abatement work area or enclosure shall sign the logbook. Document any intrusion or incident in the log book.

1.12 PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT

A. Workers must wear personal protective equipment for all projects as per OSHA and DOL regulations. Provide respiratory protection in accordance with OSHA regulation 1910.134 and ANSI Z88.2.

B. Workers must be trained as per OSHA and DOL requirements, have medical clearance and must have recently received pulmonary function test (PFT) and respirator fit tested by a trained professional.
   1. A personal air sampling program shall be in place as required by OSHA.
   2. The use of respirators must also follow a complete respiratory protection program as specified by OSHA.

PART 2 PRODUCTS

2.01 DISPOSAL BAGS

A. Type: Minimum 6 mil thick, black, and preprinted with a Caution Label.

2.02 EQUIPMENT

A. Temporary lighting, heating, hot water heating units, ground fault interrupters, and all other equipment on site shall be UL listed.

B. All electrical equipment shall be in compliance with the National Electric Code, Article 305 - Temporary Wiring.

2.03 GLOVE BAGS

A. Type: Minimum 6 mil thick, clear, fire retardant polyethylene. Select glove bag sizes appropriate for the size and location of the project.

2.04 NEGATIVE AIR PRESSURE UNITS

A. Type: Local exhaust system, capable of maintaining negative air pressure within the containment, and provides for HEPA filtration of efficiency not less than 99.97 percent with 0.3 micron particles. Equip the unit with filter alarms lights and operation time meter.

2.05 PLASTIC SHEETS

A. Type: Minimum 6 mil thick, clear, fire retardant polyethylene.

2.06 RESPIRATORS

A. Type: As approved by the Mine Safety and Health Administration (MSHA), Department of Labor, or the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services.

2.07 VACUUM CLEANERS

A. Type: Vacuums equipped with HEPA filters.

PART 3 EXECUTION

3.01 ASBESTOS-CONTAINING MATERIAL HANDLING AND REMOVAL PROCEDURES

A. Comply with the standards referenced in Part 1 of this Section.

3.02 CLEAN UP PROCEDURES

A. Comply with the standards referenced in Part 1 of this Section.

3.03 PROJECT AIR SAMPLING, MONITORING AND ANALYSIS

A. Air Sampling and Analysis: The Director will employ the services of an independent testing laboratory to perform air sample monitoring. The laboratory shall use the methods described in standards referenced in Part 1 of this Section.
   1. The equipment, duration, flow rate, calibration of equipment, number and location of samples are as per ICR 56-4.
   2. Air sampling technician shall be on site to observe and maintain air sampling equipment for the duration of the air sampling collection.
   3. Period of time permitted between completion of air sample collection and receipt of results on the project site shall be equal or less than 48 hours.

B. If air samples collected outside the regulated work area indicate airborne fiber concentrations at or above 0.01 fibers per cubic centimeter, or the established background level, which ever is greater, work shall stop immediately for inspection of barriers and negative air ventilation systems. Clean up surfaces outside the regulated work area using HEPA filter equipped vacuums and wet cleaning methods. Work methods shall be altered to reduce fiber concentrations to acceptable levels.

C. Elevated air sample results, if any, along with background and all other air sample results collected during Phase IIA through Phase IIC shall be submitted to the Commissioner of appropriate Asbestos Control Bureau within the same business day of receipt of results.

3.04 FINAL CLEANING AND CLEARANCE PROCEDURES

A. Negative Pressure Ventilation: Negative air pressure machines if used, shall remain in continuous operation during the entire length of the project.

B. Cleaning and Visual Inspection: After first, second, third cleaning and required waiting/settling and drying periods, perform a final visual inspection.
   1. Final clearance air sampling shall commence after the waiting/settling and drying time as per ICR 56 has elapsed.

C. Project Monitor Visual Inspection: The Director will employ the services of a DOL certified asbestos project monitor employed by an independent testing laboratory to perform visual inspection as required by ICR 56.

D. Final Clearance Air Sampling: The Director will employ the services of an independent testing laboratory to perform final air sampling.
   1. The laboratory shall use the methods described in standards referenced in Part 1 of this Section.
   2. The equipment, duration, flow rate, calibration of equipment, number and location of samples are as per ICR 56-4.
   3. If initial Post-Abatement (Clearance Air) Monitoring results do not comply with the standards referenced in Part 1 of this Section the Contractor shall either re-clean or order a full set of TEM analysis.
      a. Results of the TEM analysis will be conclusive, and if the results do not comply with the standards referenced in Part 1 of this Section, the Contractor shall re-clean and additional full set of air samples will be collected and analyzed until the standards are met.
      b. All satisfactory PCM clearance air sample results along with background air sample results, if they are greater than or equal to 0.01 fibers per cubic centimeter, shall be submitted to the Commissioner of appropriate Asbestos Control Bureau within two business days of receipt of satisfactory clearance air results.
      c. All satisfactory TEM results of previously unsatisfactory PCM clearance air sample results, along with the unsatisfactory PCM results shall be submitted to the Commissioner of appropriate Asbestos Control Bureau within two business days of receipt of satisfactory clearance air results.

4. Prior to removal of isolation barriers the Director's Representative at the site will receive an affidavit from the air monitoring laboratory certifying the final air samples comply with the standards referenced in Part 1 of this Section.

E. Dismantling of Regulated Abatement Work Area:
1. Remove all tools and equipment after proper decontamination as per Part 1 of this section.
2. Dismantle and remove each tent enclosure and air lock and any barriers only after final clearance air monitoring has been performed and satisfactory results obtained.
3. All remaining polyethylene, duct tape, expandable foam and other barrier materials shall be bagged, wrapped, containerized and labeled as asbestos waste.
4. Remove all temporary hard walled barriers from site.
5. Dismantle any remote decontamination units and plastic sheeting shall be disposed as asbestos waste.
6. Remove all waste generated to the holding area, lockable trailer or dumpster.
7. Contractor's Supervisor shall certify in writing to the Director that abatement work is complete and no debris/residue remains.

3.05 DISPOSAL OF ASBESTOS-CONTAINING MATERIAL AND RELATED DEBRIS

A. Remove all waste generated as part of the asbestos project from the project site within ten calendar days from the site after completion of Phase IIC of the project or within one day of the waste disposal container/trailer becomes full, whichever occurs first.

B. Transport and dispose of all the asbestos-containing waste, related debris, and waste water to the approved disposal site.

C. All generated waste removed from the site must be documented, accounted for and disposed of in compliance with the requirements of USEPA NESHAP.

D. Comply also with the standards referenced in Part 1 of this Section.

3.06 RESTORATION

A. Remove temporary decontamination facilities and restore area designated for these facilities to its original condition or better.

B. Where existing work is damaged or contaminated, restore work to its original condition or better.

END OF SECTION

SECTION 028304

HANDLING OF LEAD CONTAINING MATERIALS

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies the requirements for the detection and prevention of lead dust, paint chips, or debris contamination of lead dust control work areas and areas adjacent to them, protection of workers, post-work cleaning, predisposal testing and appropriate disposal of removed material. The results of the testing for lead-containing materials are listed in the appendix.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Existing Hazardous Material Information: Document 003126.

B. Summary of the Work: Section 011000.

C. Construction Facilities and Temporary Controls: Section 015000.

D. Removals Cutting and Patching: Section 017329.

1.03 REFERENCES

A. New York State Department of Environmental Conservation (DEC) 6NYCRR:
1. Part 360 Solid Waste Management Facilities.
2. Part 364 Waste Transporter Permits.
3. Part 370 Hazardous Waste Management System-General.
4. Part 371 Identification and Listing of Hazardous Wastes.
5. Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities.
6 Part 373 Hazardous Waste Management Facilities.

B. New York State Department of Transportation (DOT): Follow all regulations of 49CFR Part 100 through 199.

C. Occupational Safety and Health Administration (OSHA): Lead Exposure in Construction: Interim Final Rule 29 CFR 1926.62.

D. U.S. Department of Housing and Urban Development (HUD): Guidelines for evaluation and control of Lead based paint hazards: Title Ten of Housing and Community Act of 1992.

E. U.S. Environmental Protection Agency (EPA): Resource Conservation and Recovery Act (RCRA) Section 3004 Hazardous and Solid Waste Amendments.

F. U.S. Environmental Protection Agency (EPA): Toxicity Characteristics Leaching Procedure EPA Method 1311.

1.04 DEFINITIONS

A. Authorized Personnel: Facility or the Director's Representative, and all other personnel who are authorized officials of any regulating agency, be it State, Local, Federal or Private entity who possess legal authority for enforcement or inspection of the work.

B. Containment: The enclosure within the building which establishes a contaminated area and surrounds the location where lead remediation is taking place and establishes a Lead Control Work Area.

C. Floor Surface Clearance Criteria: Shall be determined and established by an independent testing lab hired by the Director's Representative, conforming to all standards set forth by all authorities having jurisdiction, mentioned in the references, and issue the certification of cleaning. At a minimum no single post work lead wipe sample test values shall have reading levels greater than the levels established by pre-work wipe sampling test values, or greater than 40 mg/ft^2. Record levels in mg/ft^2.

D. Fixed Object: Mechanical equipment, electrical equipment, fire detection systems, alarms, and all other fixed equipment, furniture, fixtures or other items which cannot be removed from the work area.

E. HEPA: High Efficiency Particulate Absolute filtration efficiency of 99.97 percent down to 0.3 microns. Filtration provided on specialized vacuums and air filtration devices to trap particles.

F. Lead Based Paint (LBP): Paints or other surface coatings that contain lead equal to or greater than 1.0 milligrams per square centimeter or 0.5 percent of lead by weight.

G. Lead Dust Control Work Area: A cordoned off area with drop clothes or an enclosed area or structure with containment to prevent the spread of lead dust, paint chips, or debris from lead-containing paint disturbance operations.

H. PPE: Personal Protective Equipment.

1.05 ABBREVIATIONS

A. ASTM: American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

B. CFR: Code of Federal Regulations
Government Printing Office
Washington, DC 20402

C. DOT: Department of Transportation
Main Office, 50 Wolf Road
Albany, NY 12232

D. NIOSH: National Institute for Occupational Safety and Health

Building J, N.E. Room 3007
Atlanta, Georgia 30333

E. OSHA: Occupational Safety and Health Administration
200 Constitution Avenue
Washington, DC 20210

F. USEPA: United States Environmental Protection Agency
401 M Street SW
Washington, DC 20460

1.06 SUBMITTALS

A. Quality Control Submittals: Submit the entire Lead Abatement submittal package at the same time.
1. Worker' Qualifications: The persons removing lead containing/coated material and their Supervisors shall be personally experienced in this type of work and shall have been employed by a company with a minimum of one year experience in this type of work. Submit a copy of documentation of completion of the EPA lead renovators training program.
a. Name of lead supervisor on site during the work.
2. Detailed Work Plan: Submit one copy of the work plan required under Quality Assurance Article.
3. Waste Transporter Permit: One copy of transporter's current NYS DEC waste transporter permit.

B. Operation and Maintenance Data: Submit air filtration unit operation and maintenance data and manufacturer's catalog sheets for the HEPA filter.
1. Provide an affidavit stating that the HEPA filters to be used for this project are new and unused.

C. Contract Closeout Submittals:
1. Assessment Report compiled by a testing lab certifying that the work area has lead concentrations below the levels specified under the cleaning criteria.
2. Disposal Site Receipts: Copy of waste shipment record and disposal site receipt showing that the lead-containing materials have been properly disposed.

1.07 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with the referenced standards.

B. Pre-Work Conference: Before the Work of this Section is scheduled to commence, a conference will be held by the Director's Representative at the Site with the contractor and the lead handling subcontractor (if any) for the purpose of reviewing the Contract Documents, discussing requirements for the Work, and reviewing the Work procedures.

C. Detailed Lead-Containing Material Removal Work Plan: Before the physical

Work begins, prepare a detailed lead-containing material removal work plan.

1. The work plan shall include, but not be limited to, the location, size, and details of lead dust control work areas, containment, sequencing of lead containing material handling, work procedures, types of equipment, crew size, and emergency procedures for fire and medical emergencies.

1.08 PROJECT CONDITIONS

A. The pipe containing the lead-based paint will be removed in it's entirety, thereby not creating any disturbance of the lead-based paint. Work within this section will not be required, unless disturbance of the lead-based paint occurs.

Shut-down of Air Handling System: Complete the Work of this Section within the time limitation allowed for shutdown of the air handling system serving the work area.

B. Cover and seal all fin-tube radiator covers, diffusers, duplex outlets, speakers, smoke and heat detectors, etc. Use temporary plasticized partitions as required.

1. Prevent lead containing dust from entering hard to clean areas within the dust containment area.
2. Items judged to be too difficult to protect may be disconnected, removed and replaced at contractor's option.

C. Remove or encase all movable equipment in the work area with two layers of six mil fire retardant polyethylene sheeting.

D. Cut and altar existing materials as required to perform the work. Limit cutting to the smallest amount necessary. Core drill round holes and saw cut other openings where possible for removal work. Flame cutting, high speed grinding or welding is prohibited on lead painted surfaces.

1.09 HEALTH AND SAFETY

A. Where in the performance of the work, workers, supervisory personnel or sub-contractors may encounter, disturb, or otherwise function in the immediate vicinity of contaminated items and materials, all personnel shall take appropriate continuous measures as necessary to protect all ancillary building occupants from the potential lead exposure.

1. Such measures shall include the procedures and methods described herein and shall be in compliance with all applicable regulations of Federal, State and Local agencies.

1.10 FIRE PROTECTION, EMERGENCY EGRESS AND SECURITY

A. Establish emergency and fire exits from the lead dust control work area containment. Provide first aid kits and two full sets of protective clothing and respirators for use by qualified emergency personnel outside of the work area.

B. Provide a logbook throughout the entire term of the project. All persons who enter the regulated lead dust control work area or containment shall sign the

logbook. Document any intrusion or incident in the log book.

1.11 PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT

A. Workers must wear protective suits, protective gloves, eye protection and a minimum of half-face respirator with new HEPA filter cartridge for all projects. Respiratory protection shall be in accordance with OSHA regulation 1910.134 and ANSI Z88.2.

B. Workers must be trained per EPA, have medical clearance and must have recently received pulmonary function test (PFT) and respirator fit tested by a trained professional.
   1. A personal air sampling program shall be in place as required by OSHA.
   2. The use of respirators must also follow a complete respiratory protection program as specified by OSHA.

PART 2 PRODUCTS

2.01 RESPIRATORS

A. Type: Approved by the Mine Safety and Health Administration (MSHA), Department of Labor, or the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services.

2.02 VACUUM CLEANERS

A. Type: Vacuums equipped with new HEPA filters.

2.03 PLASTIC SHEETS

A. Type: Minimum 6 mil., clear, fire retardant polyethylene sheets.

B. Floor Protective Layer: Minimum 10 mil., reinforced polyethylene sheets.

2.04 DISPOSAL BAGS

A. Type: Minimum 6 mil thick, clear polyethylene bags with preprinted Caution Label. Properly containerize/drum prior to disposal.

2.05 EQUIPMENT

A. Temporary lighting, heating, hot water heating units, ground fault interrupters, and all other equipment on site shall be UL listed and shall be safe, proper, and sufficient for the purpose intended.

B. All electrical equipment shall be in compliance with the National Electric Code, Article 305 - Temporary Wiring.

PART 3 EXECUTION

3.01 PRE-WORK WIPE TESTING

A. The pipe containing the lead-based paint will be removed in it's entirety, thereby not creating any disturbance of the lead-based paint. Work within this section will not be required, unless disturbance of the lead-based paint occurs.

Testing: The Director's Representative will employ the services of an independent testing laboratory to perform the pre-work testing within the lead dust control work area and the areas adjacent to the lead dust control work area.

1. The testing lab will be New York State Department of Health, Environmental Laboratory Accreditation Program (NYS ELAP).

3.02 EMPLOYEE PROTECTION

A. Comply with all applicable Occupational Safety and Health Administration (OSHA) Requirements.

3.03 LEAD-CONTAINING/COATED MATERIAL HANDLING AND DISPOSAL

A. Handle and dispose of lead-containing materials in accordance with OSHA 1926.62 and the approved lead-containing material work plan. Use procedures and equipment required to limit occupational and environmental exposure to lead when material containing or coated with lead containing paint is handled and disposed of in accordance with referenced standards.

3.04 POST-WORK WIPE TESTING

A. The pipe containing the lead-based paint will be removed in it's entirety, thereby not creating any disturbance of the lead-based paint. Work within this section will not be required, unless disturbance of the lead-based paint occurs.

Testing: The Director will employ the services of an independent testing laboratory to perform the post-work testing within the lead dust control work area and the areas adjacent to the lead dust control work area.

1. The testing lab will be New York State Department of Health, Environmental Laboratory Accreditation Program (NYS ELAP).

3.05 CLEANING CRITERIA

A. The pipe containing the lead-based paint will be removed in it's entirety, thereby not creating any disturbance of the lead-based paint. Work within this section will not be required, unless disturbance of the lead-based paint occurs.

Cleaning criteria is separated into two categories; areas within the lead dust control work area, and areas adjacent to the lead dust control work area:

1. Surfaces within the Lead Dust Control Work Area: In each area where the lead containing/coated materials have been disturbed, compare the post work wipe sample values with the pre work wipe sample values. If any of the sample values exceed the pre work values, clean again and

schedule retesting until the lead levels are equal to or less than the pre work values or less than the HUD guidelines listed below. Any other surfaces inside the lead dust control work area that are not listed below shall be cleaned to the pre work values:

a. Floors: 40 micrograms of lead per square foot.
b. Window Sills: 250 micrograms of lead per square foot.
c. Window Troughs: 400 micrograms of lead per square foot.
d. Soil: 400 ppm in play areas and 1,200 ppm in bare soil in the remainder of the yard.

2. Areas Adjacent to the Lead Dust Control Work Area: In each area where the work has been performed, compare the post work wipe sample values with the pre work wipe sample values. If any of the sample values exceed the pre work values, the area has been contaminated by the work and cleaning is mandatory.
   a. Clean all affected surfaces and schedule retesting. If results still exceed pre work wipe sample values, clean again and schedule retesting until the following criteria is met or until the lead dust values are equal to or lower than the pre-work wipe sample values. Any affected surfaces that are not listed below shall be cleaned to pre-work levels.
      1) Floors: 40 micrograms of lead per square foot.
      2) Window Sills: 250 micrograms of lead per square foot.
      3) Window Troughs: 400 micrograms of lead per square foot.
      4) Soil: 400 ppm in play areas and 1,200 ppm in bare soil in the remainder of the yard.

3.06 CERTIFICATION OF CLEANING

The pipe containing the lead-based paint will be removed in it's entirety, thereby not creating any disturbance of the lead-based paint. Work within this section will not be required, unless disturbance of the lead-based paint occurs.

A. Schedule dust wipe testing with the Director's Representative at the site, when work area is ready for clearance testing.

B. Director's Representative will employ the services of an independent testing lab to perform clearance testing.
   1. Prior to removal of any isolation barrier, the Director's Representative will obtain a written affidavit and a final assessment report from the lab stating that the tests conform to all standards set forth by all authorities having jurisdiction, mentioned in the references.
   2. Schedule a walk-through inspection with the Director's Representative and obtain his written approval.

C. The Director's Representative shall have final determination of an acceptable clearance level.

3.07 PRE-DISPOSAL TESTING

A. Prior to disposal, the Director's Representative will employ the services of an

independent testing lab to perform clearance testing of the removed materials for toxicity in accordance with EPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP).

1. Test results indicating a value greater than 5 ppm lead or 5mg/L classifies the removed material as Hazardous Waste.

3.08 DISPOSAL OF LEAD-CONTAINING/COATED MATERIAL AND RELATED DEBRIS

A. Transport and dispose of lead-containing material classified as Hazardous Waste in accordance with the standards referenced in Part 1 of this Section.

B. Transport and dispose of lead-containing material classified as Non- Hazardous Waste in accordance with the standards referenced in Part 1 of this Section.

3.09 RESTORATION

A. Remove temporary decontamination facilities and restore area designated for these facilities to its original condition or better.

B. Where existing construction is damaged or contaminated during the course of performing this project, restore area to its condition or better.

END OF SECTION