**SECTION 02 83 00**

**REMOVAL AND DISPOSAL OF LEAD-CONTAINING PAINT**

**PART 1 GENERAL**

* + - * 1. **DESCRIPTION OF WORK**

This specification covers the removal and disposal of lead-based paint (LBP) and / or lead-containing paint (LCP). Demolition and removal of materials shall be as required to support the work.

This lead removal project will consist of the removal and disposal of LBP / LCP at XXX (Name of facility, building ID(s), address, DASNY project name and number).

The work shall include but not be limited to the removal of the following materials:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Floor/level and work area number** | **Description of LBP Material** | **Substrate Material** | **Approximate Quantity**  **(SF/LF/Unit)** | **Removal Method(s)** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  | **Total Quantity (SF/LF/Units)** |  |  |

* + - * 1. **SPECIAL JOB CONDITIONS**

Any special job conditions are described below.

* + - * 1. **DEFINITIONS**

Action Level: Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter (μg/m3) of air averaged over an eight-hour period in an occupational/industrial environment.

Area Sampling: Sampling of lead concentrations within the lead control area and inside the physical boundaries, which is representative of the airborne lead concentrations but is not collected in the breathing zone of personnel (not OSHA personal sampling). This sampling will be conducted by DASNY’s Third-Party Environmental Consultant, if required.

Certified Contractors/Firms and Renovators: Certified Contractors/Firms under 40 CFR 745.226 and 745.89(d) and Certified Renovators under 40 CFR 745.90(b) to inspect, assess or remove LBP, dust or soil. Certification as required to provide notification to the United States Environmental Protection Agency (EPA) prior to the commencement of LBP abatement activities in residential dwellings and child-occupied facilities.

Conditionally Exempt/Very Small Quantity Generator (CESQ/VSQG): A waste handler who generates no more than 100 kilograms per month of listed and/or characteristic hazardous waste, generates no more than 1 kilogram of acute hazardous waste in any calendar month, and stores no more than 1,000 kilograms of listed and/or characteristic hazardous waste or more than 1 kilogram of acutely hazardous waste.

Contaminated Clothing Storage Room: Room for removal of contaminated personal protective equipment (PPE).

Decontamination Shower Facility: That facility that encompasses a clean clothing storage room, and a contaminated clothing storage and disposal rooms, with a shower facility in between.

Eight-Hour Time Weighted Average (TWA): Airborne concentration of lead to which an employee is exposed, averaged over an eight-hour workday as indicated in 29 CFR 1926.62.

EPA Notification: The certified contractor shall notify the EPA at least five business days prior to conducting LBP abatement in residential or child occupied facilities. The notification requirements for updating and canceling projects shall also be completed as required.

Hazardous waste: any materials to be disposed that possess at least one of four characteristics (ignitability, corrosivity, reactivity or toxicity) as defined and regulated by the Resource Conservation and Recovery Act (RCRA) and applicable state and federal regulations, or a material specifically identified as hazardous waste by applicable Federal or State lists, in 40 CFR 261 or 6 NYCRR 371, respectively.

High Efficiency Particulate Air (HEPA) Filter Equipment: HEPA filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining lead-containing paint (LCP) dust. A high efficiency particulate filter is 99.97 percent efficient against 0.3 micron or larger size particles.

Large Quantity Generator (LQG): a waste handler who generates more than 1,000 kilograms per month of listed and/or characteristic hazardous waste, generates more than 1 kilogram of acute hazardous waste per month, or stores more than 6,000 kilograms of hazardous waste or 1 kilogram of acutely hazardous waste.

Lead: Metallic lead, inorganic lead compounds, and organic lead soaps.

Lead Abatement: Work designed to eliminate LBP hazards. Abatement does not include renovations, remodeling, additions, alterations, repair or other activities done on a building, even if such activities incidentally eliminate LBP hazards.

Lead-Based Paint (LBP): Paint or other surface coating that contains lead in excess of 1.0 milligram per centimeter squared (1.0 mg/cm2) or 0.5 percent by weight.

Lead-Based Paint Hazard (LBP Hazard): Any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, LBP that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects.

Lead-Containing Paint (LCP): LBP or other similar surface coating containing lead or lead compound in any detectable weight of the total nonvolatile content of the paint.

Lead Control Area: An enclosed area or structure, constructed as a temporary containment equipped with HEPA filtered local exhaust, which prevents the spread of lead dust, paint chips, or debris existing as a condition of LBP removal operations. The lead control area is also isolated by physical boundaries to prevent unauthorized entry of personnel.

Lead Permissible Exposure Limit (PEL): 50 μg/m3 of air as an eight-hour TWA as determined by 29 CFR 1926.62. If an employee is exposed for more than eight hours in a workday, the PEL shall be determined by the following formula: PEL (micrograms/cubic meter of air) = 400/number of hours worked per day.

Personal Sampling: Sampling of airborne lead concentrations within the breathing zone of an employee to determine the eight-hour TWA concentration in accordance with 29 CFR 1926.62. Samples shall be representative of the employees' work tasks. The sampling, conducted by the Contractor, shall provide information to complete the required exposure assessment to identify the level of exposure a worker would be subject to without respiratory protection. Whenever there has been a change of equipment, process, control, personnel or a new task has been initiated, the Contractor shall conduct additional personal sampling.

Physical Boundary: Area physically roped or partitioned off around an enclosed lead control area to limit unauthorized entry of personnel. As used in this section, "inside boundary" shall mean the same as "outside lead control area but inside boundary."

Project Supervisor (PS): As used in this section, refers to a person employed by the Contractor who is trained and certified in the recognition and control of lead hazards in accordance with current federal, State, and local regulations. The PS shall be trained and certified to inspect, assess or remove LBP, dust or soil.

Small Quantity Generator (SQG): a waste handler who generates no more than 1,000 kilograms per month of listed and/or characteristic hazardous waste, generates no more than 1 kilogram of acute hazardous waste per month, and stores no more than 6,000 kilograms of listed and/or characteristic hazardous waste or more than 1 kilogram of acutely hazardous waste.

Third-Party Environmental Consultant: DASNY will provide a Third-Party Environmental Consultant to provide pre-work assessments, project monitoring assessments for the work area and surrounding areas, final clearance assessments, waste shipment sampling/inspection and post removal/control area breakdown assessment.

Worker certifications: All workers inspecting, assessing, or removing LBP, dust or soil who are trained and certified to conduct these activities. As per 40 CFR Part 745 and 29 CFR 1926.

* + - * 1. **SUBMITTALS**

Pre-Work Submittals: Within 7 days prior to the pre-construction conference, the Contractor shall submit electronic copies of the documents listed below, with 1 copy going directly to the DASNY Project Management, 1 Copy to the DASNY Code Compliance Unit and 1 copy going directly to the Environmental Consultant for review, comment and approval prior to the commencement of lead removal activities:

Training and Certifications

EPA Certifications of Contractor and Project Supervisor and Workers.

Certificate of on-site supervisor for completion of the OSHA 40-hour Health and Safety course for handling hazardous waste and spills, including most recent refresher training.

OSHA 8-hour supervisor training for hazardous waste.

Testing laboratory qualifications. Laboratory name, address, and Environmental Laboratory Accreditation Program (ELAP) certification number of laboratory to perform analysis of required OSHA personal air samples. Refer to Section 1.06D. of this specification.

List of the employees scheduled to perform this work and certificates of workers, for successful completion of the OSHA 40-Hour Health and Safety Course for Hazardous Waste and spills, including most recent refresher training.

Valid United States Department of Transportation (DOT) training for supervisor and all employees loading waste and maintaining on-site waste storage area. This training shall include: general awareness / familiarization training; function specific training; safety training; security awareness training; and in-depth security training.

Annual hazardous waste RCRA training sign in sheets for all employees and supervisors working on the project.  This training may be either 2 hours, 4 hours or 8 hours.

EPA Notification of LBP Abatement Activities (Appendix C) with proof of transmittal (i.e. certified mail return receipt).

1. Transportation and Disposal

Valid Hazardous Waste Transporter NYS Part 364 permit.

Valid Hazardous Waste Transport vehicle permits for each state the waste is being transported through to reach the Treatment, Storage and Disposal Facility (TSDF).

Valid DOT vehicle permit for Transporter.

Transfer Facility Permit (if used) including the name, address and EPA ID No. of the facility, contact person, and acknowledgement letter stating that the facility has the capacity and is permitted to accept the waste from the project site.

Final Disposal Facility permit including the name, address and EPA ID No. of the facility, contact person, and acknowledgement letter stating that the facility has the capacity and is permitted to accept the waste from the project site

The TSDF permit(s) must identify the waste material(s) to be received.

Draft Land Disposal Restriction (LDR) form.

Draft Waste Profile.

1. Site-specific

Safety Data Sheet (SDS) for all materials to be removed.

If the Contractor introduces any chemical into the work environment, a SDS for each chemical must be presented to the Owner's Representative prior to use.

Progress Schedule

1. Show the complete sequencing of removal activities and the sequencing of Work within each building, wing or section of building.
2. Show the dates for the beginning and completion of each major element of Work including substantial completion dates for each Work Area, building or phase.

Lead-Based Paint/Lead-Containing Paint Removal Plan (LBP/LCPRP) including PS approval (signature, date, and certification number):

1. Include a sketch showing the location, size, and details of lead control areas, as well as location and details of the decontamination facilities. All Work Areas/containments shall be numbered sequentially.
2. Location of water and electrical connections to building services.
3. Waste transport routes through the building to the waste storage container and/or container storage area (CSA).
4. Type of abatement activity/technique for each Work Area/containment.
5. The job specific plan for worker protection issues regarding personal protective equipment, the work procedures, and exposure assessment procedures.
6. The job specific plan for protecting the work area, ventilation and drainage systems. Number and location of negative air units and exhausts. Also provide calculations for determining number of negative air pressure filtration units.
7. Collected wastewater disposal.
8. Paint debris disposal plan (hazardous and non-hazardous waste).
9. Include in the plan, eating, drinking, and sanitary procedures outside of the work areas, interface of trades and sequencing of lead related work.
10. Include site preparation and cleanup procedures.
11. Include plan for hazardous waste segregation and minimization.
12. Include occupational and environmental sampling (if any by the Contractor), frequency and duration of sampling.
13. Containment design
14. The containment design proposed for use during surface preparation and cleanup activities as required to perform the work. The Plan for staging, installing, moving and removing the containment. Include all data, calculations and assumptions used for the design of the containment and ventilation system to ensure that airborne lead concentrations of 30 μg/m3 of air and baseline lead dust/soil concentrations are not reached or exceeded outside of the lead control area.
15. Methods to be used to verify adequate air flow characteristics and negative pressure within containment.
16. The plan for staging and storing any waste material, including a hazardous waste management plan.
17. The plan for establishing barriers to control access of personnel within the exposure zones.
18. Health and Safety Plan and Facility Contingency Plan revision information for material handling and emergency procedures.
19. CSA location details.
20. Contractor waste generation details (amount per day, per week or per quarter) in kgs or tons.
21. Waste types being generated.
22. Waste storage details (drums, containers, or dumpsters, types, with cover?).
23. CSA containment details. How is the waste being stored? (indoors or outdoors, is it being contained to prevent impact to adjoining spaces or environment?).
24. Contractor emergency evacuation plan requirements and evacuation route for the project specific areas.
25. Duration of waste generation and contract.
26. Contractor, DASNY and Project team emergency contact numbers.
27. Final Clearance Evaluation – Provide written procedures identifying the methods that will be used to conduct final project cleanup and the final cleanliness inspections and evaluations that will be undertaken in compliance with the project requirements.
28. Do not start work until submittals are returned with the Owner’s Representative stamp indicating that the submittal is approved for unrestricted use

On-Site & During Construction Submittals:

1. The following submittals, documentation, and postings shall be maintained on-site by the Contractor during removal activities at a location approved by the Environmental Consultant:

Copy of “approved” pre-work submittal package, including removal plan and Health and Safety Plan/Contingency Plan.

Updated licenses/permits and acknowledgement letters for any changes in transporter or disposal site.

For each employee, current annual medical respiratory clearance.

For each employee, current satisfactory respiratory fit test results.

Coordinate with facility for a 30-minute training on the facility contingency plan requirements. Submit proof of contingency plan training.

Contractor shall provide weekly update, including initial container storage dates for each container stored, on approximate estimate of amount of waste being generated during each workday, week or month that waste is stored on-site. The actual weight of the waste, excluding the weight of the dumpster / storage container, shall be identified.

Written OSHA Lead Compliance Program.

Toxicity Characteristic Leaching Procedure (TCLP) waste sample results including complete chain of custodies and laboratory certifications. Contractor shall notify DASNY and Environmental Consultant for waste stream sampling prior to any waste being removed from the site.

Completed Waste Profile form(s). Contractor shall utilize analytical test results from the survey report and / or TCLP results provided by Environmental Consultant, as appropriate, to generate waste profile and LDR form.

Completed LDR form.

Waste disposal log.

Copy of Waste manifest for each load of waste that is removed from site.

Copy of completed hazardous waste manifest including legible transporter and disposal facility information, dates and times of waste shipment departures / arrivals, and signatures, for each load of waste, within 35 days of waste being removed from site.

EPA Notification of LBP Abatement Activities (Appendix C).

The following documentation shall be maintained on-site by the Environmental Consultant during lead activities:

Valid Environmental Consultant personnel EPA, OSHA, RCRA, and DOT training certifications.

Proof of current Facility Contingency Plan Training (if, applicable)

All Environmental Consultant daily logs.

Listing of all visual inspections with the date of inspection and the date of signoff on the supervisor’s log.

Any applicable sampling logs, results, chain of custody forms, and sample location plans.

Daily worker rosters

All TCLP waste sample laboratory results including completed chain of custody forms and valid laboratory NYS DOH ELAP certifications.

All air sample results and clearance air sample results along with complete chain of custodies and laboratory certifications.

CSA Inspections – Initial Inspection and Weekly thereafter.

All applicable waste documentation, including but not limited to Universal Hazardous Waste Manifests, waste profiles, LDR forms, and disposal facility letter(s).

Project Close-out Submittals:

1. Within 30 days of the completion of each abatement phase, the **Environmental Consultant** shall submit one electronic copy of the documents listed below to DASNY code compliance for review and approval prior to Environmental Consultant’s final payment. Once DASNY Code Compliance approves the close-out submittal, the Environmental Consultant shall provide three sets of the approved close-out documents (double-sided and bound) to DASNY Project Management, including one set to be distributed to the facility.

Upon completion of the Project, the Environmental Consultant shall certify to the Owner, in writing, that the work is complete and acceptable in an Executive Summary of the work.

The Environmental Consultant shall review and approve or disapprove all necessary guarantees, certificates of compliance, and all other close-out documentation, which the Contractor is required to submit.

The Environmental Consultant shall provide to the Owner the final Project data binder to include:

All daily logs.

Summary of all visual inspections with the date of inspection and the date of signoff on the supervisor’s log.

Any applicable sampling logs, results, chain of custody forms, and sample location plans.

Daily worker rosters.

All TCLP waste sample laboratory results including completed chain of custody forms and valid laboratory NYS DOH ELAP certifications.

All applicable waste documentation, including but not limited to Universal Hazardous Waste Manifests, waste profiles, LDR forms, and disposal facility letter(s).

EPA Notification of LBP Abatement Activities with proof of transmittal (i.e. certified mail return receipt).

All pertinent correspondence related to the Project including but not limited to clearance letters, supplemental inspection findings performed during construction, copies of all weekly hazardous waste storage location inspections, etc.

1. Within 30 days of the completion of each abatement phase, the **Contractor** shall submit one electronic copy of the documents listed below to DASNY Code Compliance and one copy to the Environmental Consultant for review and approval prior to Contractor’s final payment. Once DASNY Code Compliance approves the close-out submittal, the Contractor shall provide three sets of the approved close-out documents (double-sided and bound) to DASNY Project Management, including one set to be distributed to the facility. This submission shall be separate from all other required closeout documents (Asbestos, PCB, etc.).

a. All completed waste disposal shipment records/manifests and disposal logs (Appendix A). Original waste shipment records shall be sent to DASNY Code Compliance. When DASNY is not the owner, send the original to the owner and a fully executed “copy” to DASNY Code Compliance.

b. Daily progress log, including the entry/exit log.

c. Provide the Contractor’s Acknowledgement Statement (Appendix B) that lists all Workers used in the performance of the Project, including name and EPA certification number. The Statement shall be notarized (Original notarized statement shall be sent to DASNY Code Compliance).

d. TSDF Disposal Site/Landfill Permit from applicable regulatory agency.

e. EPA Notification of LBP Abatement Activities with proof of transmittal (i.e. certified mail return receipt).

* + - * 1. **PRE-CONSTRUCTION CONFERENCE**

1. Prior to start of preparatory Work under this Contract, the Contractor shall attend a pre-construction conference attended by Owner, Facility Personnel, and Environmental Consultant.
2. Agenda for this conference shall include, but not necessarily limited to:
3. Contractor's scope of Work, Work Plan, and schedule to include number of workers and shift day and times.
4. Contractor's safety and health precautions including protective clothing and equipment and decontamination procedures.
5. Environmental Consultant's duties, functions, and authority.
6. Contractor's Work procedures including:
7. Methods of job site preparation and removal methods.
8. Respiratory protection.
9. Disposal procedures.
10. Cleanup procedures.
11. Fire exits and emergency procedures.
12. Contractor’s required pre-work and on-site submittals, documentation, and postings.
13. Contractor's plan for 24 hour Project security both for prevention of theft and for barring entry of unauthorized personnel into Work Areas.
14. Temporary utilities.
15. Handling of furniture and other movable objects.
16. Storage of removed lead containing materials in CSA.
17. Waste disposal requirements and procedures, including Contractor notification to DASNY project management and Environmental Consultant for TCLP waste stream sampling, once waste stream generation has commenced, and prior to any waste being removed from site.
18. In conjunction with the conference, the Contractor shall accompany the Owner and Environmental Consultant on a pre-construction walk-through documenting existing conditions of finishes and furnishings, review overall Work Procedures, location of CSA, location of fire exits, fire protection equipment, water supply, and temporary electric tie-in.
19. If applicable, contingency plan training information.
    * + - 1. **QUALIFICATIONS**

Qualifications of PS: Submit name, address, telephone number and the EPA certification number of the PS selected to perform responsibilities specified in paragraph entitled "Project Supervisor (PS) Responsibilities." Provide at least two years of previous experience with LBP abatement projects. Submit proper documentation that the PS is trained and certified in accordance with federal, State, and local laws. The Project Supervisor shall be trained in LBP removal and hazardous waste management in NYS, via a 40-hour HAZWOPER and 8-hour Supervisor training course. The Project Supervisor shall have a minimum of one year experience as a supervisor. The Project Supervisor must be able to read and write English fluently, as well as communicate in the primary language of the Workers.

Certified Firm/Contractor Qualifications: Firms/Contractors that perform renovations for compensation must apply to EPA for certification to perform renovations or dust sampling. A firm must submit to EPA a completed “Application for Firms,” signed by an authorized agent of the firm, and pay at least the correct amount of fees. Firms performing renovations must ensure that:

* + 1. All individuals performing renovation activities on behalf of the firm are either certified renovators or have been trained by a certified renovator in accordance with 40 CFR 745.90.
    2. A certified renovator is assigned to each renovation performed by the firm and discharges all of the certified renovator responsibilities identified in 40 CFR 745.90.
    3. All renovations performed by the firm are performed in accordance with the work practice standards in 40 CFR 745.85.
    4. The pre-renovation education requirements of 40 CFR 745.84 have been performed.
    5. The recordkeeping requirements of 40 CFR 745.86 are met.

Certified Renovator and Dust Sampling Technician Qualifications: Renovators and dust sampling technicians must be certified by EPA. Certification requires that individuals must successfully complete the appropriate course accredited by EPA under 40 CFR 745.225 or by a State or Tribal program that is authorized by EPA. EPA renovator certification allows the certified individual to perform renovations. Certified renovators must ensure compliance with EPA 40 CFR 745 and perform or direct those that perform all renovation tasks. Certified renovators must also:

1. Provide training to workers on the work practices required by 40 CFR 745.85(a) that they will be using in performing their assigned tasks.
2. Be physically present at the work site when required signs are posted, while the work area containment is being established, and while the work area cleaning is performed.
3. Regularly direct work being performed by other individuals to ensure that the work practices required are being followed, including maintaining the integrity of the containment barriers and ensuring that dust or debris does not spread beyond the work area.
4. Be available, either on-site or by telephone, at all times that renovations are being conducted.
5. Use an acceptable test kit to determine whether components to be affected by the renovation contain LBP when requested by the party contracting for renovation services.
6. Have with them at the work site copies of their initial course completion certificate and their most recent refresher course completion certificate.
7. Prepare records required by 40 CFR 745.86(b)(1)(ii) and (6).

Testing Laboratory: Submit the name, address, and telephone number of the testing laboratory selected to perform the OSHA personal air sample analysis. The air sampling results shall be utilized for reporting of airborne concentrations of lead for Contractor worker protection issues. This sampling will be separate from any Third-Party Environmental Consultant sampling that will be conducted for DASNY. Use a laboratory accredited under the EPA National Lead Laboratory Accreditation Program (NLLAP) by either the American Association for Laboratory Accreditation (A2LA) or the American Industrial Hygiene Association (AIHA) and that is successfully participating in the Environmental Lead Proficiency Analytical Testing (ELPAT) program to perform sample analysis.

* + - * 1. **CONTRACTOR SAMPLE RESULTS/DATA REPORTS**

Occupational and Environmental Sampling Results: Submit occupational and environmental sampling results to DASNY within three (3) working days of collection, signed by the testing laboratory responsible official, the employee that performed the sampling, and the PS.

1. The sampling results shall represent each job classification, or if working conditions are similar to previous jobs by the same employer, provide previously collected exposure data that can be used to estimate worker exposures in accordance with 29 CFR 1926.62. The data shall represent the worker's regular daily exposure to lead.
2. Submit worker exposure data conducted during the task based trigger operations of 29 CFR 1926.62.
3. The initial monitoring shall determine the requirements for further monitoring and the need to fully implement the control and protective requirements including the compliance program (LBP/LCP) in accordance with 29 CFR 1926.62.

Occupational and Environmental Assessment Data Report:

1. Some LBP/LCP removal work may not require full implementation of the requirements of 29 CFR 1926.62. Based on the experience of the Contractor and/or the use of a specific process or method for performing the work, the Contractor may be able to provide historic data (previous 12 months) to demonstrate that airborne exposures are controlled below the action level. Such methods or controls shall be fully presented in the LBP/LCPRP. To reduce the full implementation of 29 CFR 1926.62, the Contractor shall provide documentation in an Assessment Data Report.
2. Submit occupational and environmental assessment report to DASNY prior to start of work, signed by the testing laboratory responsible official, and the PS.

Submit a report that supports the determination regarding the reduction of the need to fully implement the requirements of 29 CFR 1926.62 and supporting the LBP/LCP. The exposure assessment shall represent each job classification, or if working conditions are similar to previous jobs by the same employer, provide previously collected exposure data that can be used to estimate worker exposures in accordance with 29 CFR 1926.62. The data shall represent the worker's regular daily exposure to lead for stated work.

Submit worker exposure data conducted during the task based trigger operations of 29 CFR 1926.62 with a complete process description in supporting a negative assessment.

The initial assessment shall determine the requirement for further monitoring and the need to fully implement the control and protective requirements including the compliance program (LBP/LCPRP) in accordance with 29 CFR 1926.62.

* + - * 1. **QUALITY ASSURANCE**

Medical Examinations: Initial medical surveillance as required by 29 CFR 1926.62 shall be made available to all employees exposed to lead at any time (one day) above the action level. Full medical surveillance shall be made available to all employees on an annual basis who are or may be exposed to lead in excess of the action level for more than 30 days a year or as required by 29 CFR 1926.62. Adequate records shall show that employees meet the medical surveillance requirements of 29 CFR 1926.33, 29 CFR 1926.62, and 29 CFR 1926.103.

1. Medical Records: Maintain complete and accurate medical records of employees for a period of at least 30 years or for the duration of employment plus 30 years, whichever is longer.
2. Medical Surveillance: Provide medical surveillance to all personnel exposed to lead as indicated in 29 CFR 1926.62.

Project Supervisor (PS) Responsibilities

1. Certify training as meeting all federal, State, and local requirements.
2. Review and approve LBP/LCPRP for conformance to the applicable referenced standards.
3. Continuously inspect LBP removal work for conformance with the approved plan.
4. Perform air sampling, if required by Contractor.
5. Ensure work is performed in strict accordance with specifications at all times.
6. Control work to prevent hazardous exposure to human beings and to the environment at all times.
7. Certify the conditions of the work as called for elsewhere in this specification.

Training: Train each employee performing inspection, assessing, paint removal, disposal, and air sampling operations prior to the time of initial job assignment and annually thereafter, in accordance with 40 CFR 745.225, 29 CFR 1926.21, 29 CFR 1926.62, State and local regulations and RCRA hazardous waste management procedures.

1. Training Certification: Submit a certificate for each employee, signed and dated by the approved training source, stating that the employee has received the required lead training.

Respiratory Protection Program

1. Furnish each employee required to wear a negative pressure respirator or other appropriate type with a respirator fit test at the time of initial fitting and at least annually thereafter as required by 29 CFR 1926.62.
2. Establish and implement a respiratory protection program as required by ANSI Z88.2, 29 CFR 1926.103, 29 CFR 1926.62, and 29 CFR 1926.55.

Hazard Communication Program: Establish and implement a Hazard Communication Program as required by 29 CFR 1926.59.

Hazardous Waste Management: The Hazardous Waste Management Plan shall comply with applicable requirements of federal, State, and local hazardous waste regulations and address:

1. Identification and classification of hazardous wastes associated with the work.
2. Estimated quantities of wastes to be generated and disposed of.
3. Names and qualifications of each Contractor that will be transporting, storing, treating and/or disposing of the wastes. Include the facility location and operator and a 24-hour point of contact. Furnish two copies of EPA, or State and local hazardous waste permit applications or permits or manifests, as required, and coordinate with DASNY regarding the use of an existing EPA Identification number or developing separate EPA Identification numbers.
4. Names, qualifications and training (experience and training) of personnel who will be working on-site with hazardous wastes.
5. List of waste handling equipment to be used in performing the work, to include cleaning, segregation, volume reduction, and transport equipment.
6. Spill prevention, containment, and cleanup contingency measures including a health and safety plan to be implemented in accordance with 29 CFR 1926.65.
7. Work plan and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily.

On-site Storage Requirements:

1. Each waste dumpster\container shall have completed hazardous waste label with facility name, correct EPA ID number, full address, waste codes and waste information.
2. Appropriate hazardous waste storage and content labels shall also be posted on the containers.
3. Since this is considered a main storage area for the project, third-party DASNY Environmental Consultant shall be completing an initial and thence weekly hazardous waste storage area inspection logs. These records should be provided to DASNY and the facility each week. Weekly inspection records shall be maintained for three years.
4. Each dumpster\container shall also post all relevant DOT labels to indicate proper waste types.
5. Each dumpster\container shall identify the accumulation start date. Maximum storage limit is 90 days from the date of accumulation.
6. All dumpsters and containers being stored outside shall meet EPA RCRA container requirements and shall not leak. All dumpsters and containers must be fully covered and protected from the elements.
7. Spill kit shall be maintained in the container storage area (CSA).
8. Regarding the posting of emergency numbers, Contractor shall coordinate with facility and DASNY and post all required emergency numbers including facility contact(s), DASNY field office, Contractor emergency numbers and local fire, police and medical facility numbers. Sign shall be posted in the lockable container storage area, which must be protected from the elements.
9. The CSA and personnel managing it must also meet the following requirements of 6 NYCRR 373:
10. Preparedness and Prevention provisions of Section 373-3.3.
11. Secondary containment requirements of 373-2.9(f)(1).
12. Personnel training in section 373-3.2.
13. Contingency plans and emergency procedures in section 373-3.4 subparagraph 376.1(g)(1)(v).
14. The containers must be dated when placed in storage, and accumulation times must be observed.
15. The total amount of hazardous waste stored in the CSA at any given time must not exceed the maximum for the current generator status (6,000kg-SQG, no limit-LQG).
16. A label or sign stating "Hazardous Waste" must identify all areas and containers used to accumulate hazardous waste.
17. Closure of the CSA. If a CSA was created specifically for the Lead removal work, once the removal work is complete, the Contractor shall immediately close out the CSA, as per 373-3.7(b) and (e).

Environmental, Safety and Health Compliance: In addition to the detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of Federal, State, and local authorities regarding removing, handling, storing, transporting, and disposing of lead waste materials. Comply with the applicable requirements of the current issue of 40 CFR Part 745 and 29 CFR 1926.62. Submit matters regarding interpretation of standards to DASNY for resolution before starting work. Where specification requirements and the referenced documents vary, the most stringent requirement shall apply.

Title to Materials: Materials resulting from demolition work, except as specified otherwise, shall become the property of the Contractor and shall be disposed of in accordance with all federal, State and local regulations.

**1.09 RESPIRATORY PROTECTION**

A. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH).

B. Respirators shall be individually fit-tested to personnel under the direction of an Industrial Hygienist on a yearly basis. Fit-tested respirators shall be permanently marked to identify the individual fitted, and use shall be limited to that individual. Fit-test records shall be maintained on site for each employee.

C. No respirators shall be issued to personnel without such personnel participating in a respirator training program.

E. High Efficiency Particulate Air (HEPA) respirator filters shall be approved by NIOSH and shall conform to the OSHA requirements in 29 CFR 1910.134.

F. A storage area for respirators shall be provided by the Contractor in the clean portion of the decontamination enclosure where they will be kept in a clean environment.

G. The Contractor shall provide and make available a sufficient quantity of respirator filters so that filter changes can be made as necessary during the work day. Filters will be removed and discarded during the decontamination process. Filters cannot be reused. Filters must be changed if breathing becomes difficult.

H. Filters used with negative pressure air purifying respirators shall not be used any longer than one eight (8) hour work day.

I. Any authorized visitor, Worker, or supervisor found in the Work Area not wearing the required respiratory protection shall be removed from the Project site and shall not be permitted to return.

J. The Contractor shall have at least two (2) Powered Air Purifying Respirators stored on site designated for authorized visitors use. Appropriate respirator filters for authorized visitors shall be made available by the Contractor.

**1.10 DELIVERY AND STORAGE**

A. Deliver all materials to the job site in original packages with containers bearing manufacturer's name and label.

B. Store all materials at the job site in a suitable and designated area.

1. Store materials subject to deterioration or damage away from wet or damp surfaces and under cover.

1. Protect materials from unintended contamination and theft.
2. Storage areas shall be kept clean and organized.

C. Remove damaged or deteriorated materials from the job site.

**1.11 TEMPORARY UTILITIES**

A. Shut down and lock out all electrical power to the Work Areas, including lighting circuits. Any electrical power passing through the Work Areas that can’t be shut down due to health and safety reasons, shall be protected as per the requirements of applicable regulations and shall not be utilized within the work area and identified “live”.

B. Provide temporary 120-240 volt, single phase, three (3) wire, 100 amp electric service with Ground Fault Circuit Interrupters (GFCI) for all electric requirements within the Work Area.

1. Where available, obtain from Owner's existing system. Otherwise provide power from other sources (i.e. generator).

2. Provide temporary wiring and "weatherproof" receptacles in sufficient quantity and location to serve all HEPA equipment and tools.

3. Provide wiring and receptacles as required by the Environmental Consultant for air sampling equipment.

4. All power to the Work Area shall be brought in from outside the area through GFCI's at the source.

C. Provide temporary lighting with "weatherproof" fixtures for all Work Areas including decontamination chambers.

1. The entire Work Area shall be kept illuminated at all times.

2. Provide lighting as required by the Environmental Consultant for the purposes of performing required inspections.

D. All temporary devices and wiring used in the Work Area shall be capable of decontamination procedures including HEPA vacuuming and wet-wiping.

E. Utilize domestic water service, if available, from Owner's existing system. Provide hot water heaters with sufficient capacity to meet Project demands.

**PART 2 PRODUCTS**

1. **PERSONAL PROTECTIVE EQUIPMENT**

Provide personnel utilized during the Project with disposable protective whole body clothing, head coverings, and foot coverings. Provide disposable gloves, suitable to prevent skin contact, to protect hands.

Respirators: Furnish appropriate respirators approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services, for use in atmospheres containing lead dust. Respirators shall comply with the requirements of 29 CFR 1926.62.

Provide sufficient quantities of protective clothing to assure a minimum of four (4) complete disposable outfits per day for each individual performing abatement Work.

Eye protection and hard hats shall be provided and made available for all personnel entering any Work Area.

Owner’s representative shall be provided with suitable protective clothing, headgear, eye protection, and footwear whenever they enter the Work Area.

**2.02 SIGNS AND LABELS, CONTAINERS**

1. Provide warning signs and barrier tapes at all approaches to the Work Areas. Locate signs at such distance that personnel may read the sign and take the necessary protective steps required before entering the area.

Hazardous Waste containers must have a label stating the following on each container:

**HAZARDOUS WASTE--Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority, or the U.S. Environmental Protection Agency.**

**Proper DOT Shipping Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Generator's Name, Address, City, State, ZIP and phone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Generator's EPA Identification Number, Waste code\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Accumulation Start Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Manifest Tracking Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Drums: Recovery or salvage drums acceptable for disposal of hazardous waste. Prior approval of drums is required. Drums or containers must meet the required OSHA, EPA (40 CFR Parts 260-264 and 300), and DOT Regulations (49 CFR Parts 171-178). Use of damaged containers shall not be allowed.

Labels: As required by the EPA and OSHA for handling, transportation, and disposal of hazardous waste.

**2.03 DAILY PROJECT LOG**

A. Provide a Daily Project Log. The log shall contain on title page the DASNY Project name and number; name, address and phone number of Owner; name, address and phone number of Environmental Consultant; name, address and phone number of Contractor; emergency numbers including, but not limited to local Fire/Rescue department.

B. All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted.

C. The Project Supervisor shall document all Work performed daily and note all inspections.

**2.04 SCAFFOLDING AND LADDERS**

A. Provide all scaffolding and/or staging as necessary to accomplish the Work of this Contract. Scaffolding may be of suspension type or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. The type, erection and use of all scaffolding and ladders shall comply with all applicable OSHA construction industry standards.

B. Provide scaffolding and ladders as required by the Environmental Consultant for the purposes of performing required inspections.

**2.05 SHIPPING CONTAINERS AND PACKAGING**

A. Provide packaging in accordance with 49 CFR 173 Packaging Group 9, such as 30 or 55 gallon capacity fiber, plastic, or metal drums, Gaylord Boxes or other Intermediate Bulk Containers (IBCs), or non-siftable bulk containers, capable of being sealed air and water tight if LBP / LCP waste has the potential to damage or puncture disposal bags. Affix hazardous caution labels on lids of drums, and opposite sides of drums or bulk containers, as well as the ends of bulk containers.

**2.06 EQUIPMENT AND MATERIALS**

All dry vacuuming performed under this contract shall be performed with High Efficiency Particulate Air (HEPA) filter equipped industrial vacuums conforming to ANSI Z9.2.

Vacuum Filters: UL 586 labeled HEPA filters.

Any power tools used to drill, cut into, or otherwise disturb lead material shall be manufacturer equipped with HEPA filtered local exhaust ventilation.

All polyethylene (plastic) sheeting used on the Project (including but not limited to sheeting used for critical and isolation barriers, fixed objects, walls, floors, ceilings, waste container) shall be at least 6 mil fire retardant sheeting.

Absorbent Material: Clay, soil or any commercially available absorbent used for the purpose of absorbing hazardous or potentially hazardous materials.

**PART 3 EXECUTION**

1. **GENERAL REQUIREMENTS**

Notification: Notify DASNY 20 days prior to the start of any LBP removal work.

Notification: Notify the EPA at least five (5) days prior to conducting LBP abatement activities in a residential dwelling or child occupied facility.

Notification: Distribute notification to owner(s) and resident(s) according to EPA RRP rule 40 CFR 745, Subpart E Section 745.84 Information distribution requirements.

Occupant protection: Firms must post signs clearly defining the work area and warning occupants and other persons not involved in renovation activities to remain outside of the work area. To the extent practicable, these signs must be in the primary language of the occupants. These signs must be posted before beginning the renovation and must remain in place and readable until the renovation and the post-renovation cleaning verification have been completed. If warning signs have been posted in accordance with 24 CFR 35.1345(b)(2) or 29 CFR 1926.62(m), additional signs are not required by this section.

Third-Party Oversight

1. Full-time Third-Party oversight is required for all LBP removals, waste storage area/container inspections and waste container removals from site.

Lead Control Area Requirements– Interior Renovations

1. Before beginning the renovation, the firm must isolate the work area so that no dust or debris leaves the work area while the renovation is being performed. In addition, the firm must maintain the integrity of the containment by ensuring that any plastic or other impermeable materials are not torn or displaced, and taking any other steps necessary to ensure that no dust or debris leaves the work area while the renovation is being performed. The firm must also ensure that containment is installed in such a manner that it does not interfere with occupant and worker egress in an emergency.
2. Before beginning the renovation, the firm must:
3. Remove all objects from the work area, including furniture, rugs, and window coverings, or cover them with plastic sheeting or other impermeable material with all seams and edges taped or otherwise sealed airtight.
4. Close and cover all ducts opening in the work area with taped-down plastic sheeting or other impermeable material.
5. Close windows and doors in the work area. Doors must be covered with plastic sheeting or other impermeable material. Doors used as an entrance to the work area must be covered with plastic sheeting or other impermeable material in a manner that allows workers to pass through while confining dust and debris to the work area.
6. Cover the floor surface, including installed carpet, with taped-down plastic sheeting or other impermeable material in the work area six (6) feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to contain the dust, whichever is greater. Floor containment measures may stop at the edge of the vertical barrier when using a vertical containment system consisting of impermeable barriers that extend from the floor to the ceiling and are tightly sealed at joints with the floor, ceiling and walls.
7. Use precautions to ensure that all personnel, tools, and other items, including the exteriors of containers of waste, are free of dust and debris before leaving the work area.

Lead Control Area Requirements – Exterior Renovations

1. Before beginning the renovation, the firm must

Close all doors and windows within 20 feet of the renovation. On multi-story buildings, close all doors and windows within 20 feet of the renovation on the same floor as the renovation, and close all doors and windows on all floors below that are the same horizontal distance from the renovation.

Ensure that doors within the work area that will be used while the job is being performed are covered with plastic sheeting or other impermeable material in a manner that allows workers to pass through while confining dust and debris to the work area.

Cover the ground with plastic sheeting or other disposable impermeable material extending 10 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to collect falling paint debris, whichever is greater, unless the property line prevents 10 feet of such ground covering. Ground containment measures may stop at the edge of the vertical barrier when using a vertical containment system. Seal all openings (i.e. drain/grates) within 25 ft. of work area.

If the renovation will affect surfaces within 10 feet of the property line, the renovation firm must erect vertical containment or equivalent extra precautions in containing the work area to ensure that dust and debris from the renovation does not contaminate adjacent buildings or migrate to adjacent properties. Vertical containment or equivalent extra precautions in containing the work area may also be necessary in other situations in order to prevent contamination of other buildings, other areas of the property, or adjacent buildings or properties.

Protection of Existing Work to Remain: Perform paint removal work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, restore work to its original condition or better.

Boundary Requirements: Provide physical boundaries around the lead control area by roping off the area designated in the work plan or providing curtains, portable partitions or other enclosures to ensure that airborne concentrations of lead will not reach 30 μg/m3 of air outside of the lead control area.

1. Physical Boundary: Provide physical boundaries around the lead control area by roping off the area designated in the work plan or providing curtains, portable partitions or other enclosures to ensure that airborne concentrations of lead will not reach 30 μg/m3 of air outside of the lead control area.
2. Warning Signs: Provide warning signs at approaches to lead control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Signs shall comply with the requirements of 29 CFR 1926.62.

Furnishings:

1. The Owner will remove furniture and equipment from the building before LBP removal work begins.

or

Furniture and equipment will remain in the building. Protect and cover furnishings or remove furnishings from the work area and store in a location approved by DASNY.

or

Existing furniture and equipment is lead-contaminated. Decontaminate non-porous lead-contaminated material for subsequent re-use or non-hazardous disposal / recycling. Dispose of lead-contaminated porous materials as lead-contaminated waste.

Heating, Ventilating and Air Conditioning (HVAC) Systems: Shut down, lock out, and isolate HVAC systems that supply, exhaust, or pass through the lead control areas. Seal intake and exhaust vents in the lead control area with 6 mil plastic sheeting and tape. Seal seams in HVAC components that pass through the lead control area. Provide temporary HVAC system for areas in which HVAC has been shut down outside the lead control area.

Decontamination Shower Facility: Provide clean and contaminated change rooms and shower facilities in accordance with this specification and 29 CFR 1926.62.

Eye Wash Station: Where eyes may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes shall be provided within the work area.

Mechanical Ventilation System

1. Use adequate ventilation to control personnel exposure to lead in accordance with 29 CFR 1926.62.
2. To the extent feasible, use fixed local exhaust ventilation connected to HEPA filters or other collection systems, approved by the PS. Local exhaust ventilation systems shall be designed, constructed, installed, and maintained in accordance with ANSI Z9.2.
3. Vent local exhaust outside the building only and away from building ventilation intakes.
4. Use locally exhausted, power actuated, paint removal tools.

Personnel Protection: Personnel shall wear and use protective clothing and equipment as specified herein. Eating, smoking, or drinking or application of cosmetics is not permitted in the lead control area. No one will be permitted in the lead control area unless they have been appropriately trained and provided with protective equipment.

1. **WORK PROCEDURES**

A. Perform removal and disposal of LBP in accordance with approved LBP/LCPRP. Use procedures and equipment required to limit occupational and environmental exposure to lead when LBP is removed in accordance with 29 CFR 1926.62, except as specified herein.

B. Personnel Exiting Procedures: Whenever personnel exit the lead control area, they shall perform the following procedures and shall not leave the work place wearing any clothing or equipment worn during the work day:

1. Vacuum themselves off.
2. Remove protective clothing in the contaminated change room, and place them in an approved impermeable disposal bag.
3. Shower or Wash hands and face at the site, as directed, don appropriate disposable or uncontaminated reusable clothing; move to an appropriate facility; shower.
4. Change to clean clothes prior to leaving the physical boundary designated around the lead control area.

Personal Air Sampling

1. Air sample for lead in accordance with 29 CFR 1926.62 and as specified herein. Air sampling shall be directed or performed by the PS.

The PS shall be on the job site directing the air sampling and inspecting the LBP removal work to ensure that the requirements of the contract have been satisfied during the entire LBP removal operation.

Collect personal air samples on employees who are anticipated to have the greatest risk of exposure as determined by the PS. In addition, collect air samples on at least 25 percent of the work crew or a minimum of two employees; whichever is greater, during each work shift.

Submit results of personal air samples, signed by the PS, within 24 hours after the air samples are taken. Notify DASNY immediately of exposure to lead at or in excess of the action level of 30 μg/m3.

Surface and/or soil sampling

Surface and/or soil sampling shall be conducted as required for residential dwellings and child occupied facilities or as may be required for high profile, sensitive work areas, such as administrative buildings, kitchens, barracks, etc., to determine clearance (i.e., that the work has not contaminated surfaces within and adjacent to the control area) will be performed by a Third-Party Environmental Consultant provided by DASNY. Notification to DASNY will also outline any sampling requirements to be provided for the work.

Before any work begins, DASNY’s Third-Party Environmental Consultant may collect and analyze baseline soil or wipe samples in accordance with methods defined in federal, State, and local standards inside and outside of the physical boundary to assess the degree of soil and/or dust contamination prior to when LBP removal activities are initiated.

After all work is completed, DASNY’s Third-Party Environmental Consultant will collect and analyze soil or wipe samples in accordance with methods defined in federal, State, and local standards inside and outside of the physical boundary to assess the degree of soil and/or dust contamination after the LBP removal activities are completed.

Area Air Sampling During Paint Removal Work: DASNY’s Third-Party Environmental Consultant will conduct area air sampling while LBP removal operations are performed, in areas immediately adjacent to the lead control area. Area monitoring shall be conducted to ensure unprotected personnel adjacent to the lead control area are not exposed at or above 30 μg/m3 of air. If a lead concentration of 30 μg/m3 of air is reached or exceeded, the Contractor will be advised to stop work, and correct the condition(s) causing the increased levels. DASNY’s Third-Party Environmental Consultant will determine if condition(s) require any further change in work methods. Removal work shall resume only after approval is given by DASNY’s Third-Party Environmental Consultant. For outdoor operations, at least one sample on each shift shall be taken on the downwind side of the lead control area.

LBP Removal

1. Provide methodology for removing LBP/LCP in the work plan. Remove paint within the areas designated on the drawings to completely expose the substrate. Take whatever precautions necessary to minimize damage to the underlying substrate.
2. Avoid flash rusting or deterioration of the substrate. Coordinate surface preparations as required by DASNY.
3. Provide methodology for LBP/LCP removal processes to minimize contamination of work areas outside the control area with lead-contaminated dust or other lead-contaminated debris/waste and to ensure that unprotected personnel are not exposed to hazardous concentrations of lead. Describe this LBP/LCP removal process in the LBP/LCPRP.
4. Indoor Lead Paint Removal: Perform manual, mechanical, thermal or chemical, as allowed by owner’s representative, LBP/LCP removal in lead control areas using enclosures, barriers, or containments and powered locally exhausted paint removal tools. Collect residue, abrasives and/or debris for disposal in accordance with federal, State, and local requirements.
5. Outdoor Lead Paint Removal: Perform outdoor removal as indicated in federal, State, and local regulations and in the LBP/LCPRP. The worksite preparation (barriers or containments) shall be job dependent and presented in the LBP/LCPRP.
6. Component Removal (i.e. windows, doors): Cover the ground surface beneath components with polyethylene sheeting. The ground cover, paint chips that have fallen onto it, and personal protective equipment shall leave the site as hazardous waste and shall not be co-mingled with components. Segregate paint chips, abrasives and associated residues from larger LBP/LCP component waste streams.
7. Soil Sampling After Paint Removal: After the visual inspection, DASNY’s Third-Party Environmental Consultant will conduct soil sampling if bare soil is present during external removal operations and collect area air samples inside and outside the lead control area to determine the airborne levels of lead inside and outside the work area.
8. DASNY’s Third-Party Environmental Consultant will collect wipe samples according to the HUD protocol contained in HUD Guidelines to determine the lead content of settled dust and dirt in micrograms per square foot (μg/ft2) of surface area and parts per million (ppm) or micrograms per gram (μg/g) for soil.
9. The Contractor shall notify DASNY project management and Environmental Consultant for TCLP wastestream sampling, once wastestream generation has commenced, and prior to any waste being removed from the site.
10. The Third-Party Environmental Consultant shall sample all LBP/LCP waste streams for toxicity characteristic leaching procedure (TCLP) analyses prior to disposal, in accordance with 40 CFR 261 for hazardous waste.

Cleanup and Clearance

1. Cleanup: Maintain surfaces of the lead control area free of accumulations of paint chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use compressed air to clean up the area. At the end of each shift and when the paint removal operation has been completed, clean the area of visible lead paint contamination and within two (2) feet of the work area by vacuuming with a HEPA filtered vacuum cleaner, wet mopping the area and wet wiping the area as indicated by the PS. Re-clean areas showing dust or residual paint chips or debris. After visible dust, chips and debris are removed, wet wipe and HEPA vacuum all surfaces in the work area. Collect all paint chips and debris and, without dispersing any of it, seal this material in a heavy-duty bag. Remove protective sheeting. Mist the sheeting before folding it, fold the dirty side inward, and either tape shut to seal or seal in heavy-duty bags. Sheeting used to isolate contaminated rooms from non-contaminated rooms must remain in place until after the cleaning and removal of other sheeting. Dispose of the sheeting as waste. If adjacent areas become contaminated at any time during the work, clean, visually inspect, and then wipe sample all contaminated areas. The PS shall then certify in writing that the area has been cleaned of lead contamination before re-starting work.
2. Clearance Certification

The Contractor shall document in writing and provide analytical documentation to certify that: the employee exposure to an airborne concentration of lead were below the required action level; respiratory protection used for the employees was adequate; the work procedures were performed in accordance with 29 CFR 1926.62 and 40 CFR 745; and that there were no visible accumulations of material and dust containing lead left in the work site. Do not remove the lead control area or roped-off boundary and warning signs prior to DASNY’s acknowledgement of the third-party sampling results, if required, and upon receipt of the Contractor certification.

A certified renovator must perform a visual inspection to determine whether dust, debris or residue is still present. If dust, debris or residue is present, these conditions must be rectified by re-cleaning and another visual inspection must be performed.

After a successful visual inspection, the certified renovator must verify that each windowsill in the work area has been adequately cleaned. The windowsill shall be wiped with a wet disposable cleaning cloth that is damp to the touch. If the cloth matches or is lighter than the cleaning verification card, the windowsill has been adequately cleaned. If the cloth does not match and is darker than the cleaning verification card, re-clean the windowsill, then either use a new cloth or fold the used cloth in such a way that an unused surface is exposed, and wipe the surface again. If the cloth matches or is lighter than the cleaning verification card, that windowsill has been adequately cleaned. If the cloth does not match and is darker than the cleaning verification card, wait for one (1) hour or until the surface has dried completely, whichever is longer. After waiting for the windowsill to dry, wipe the windowsill with a dry disposable cleaning cloth. After this wipe, the windowsill has been adequately cleaned.

Wipe uncarpeted floors and countertops within the work area with a wet disposable cleaning cloth. Floors must be wiped using an application device with a long handle and a head to which the cloth is attached. The cloth must remain damp at all times while it is being used to wipe the surface for post-renovation cleaning verification. If the surface within the work area is greater than 40 square feet, the surface within the work area must be divided into roughly equal sections that are each less than 40 square feet. Wipe each such section separately with a new wet disposable cleaning cloth. If the cloth used to wipe each section of the surface within the work area matches the cleaning verification card, the surface has been adequately cleaned. If the cloth used to wipe a particular surface section does not match the cleaning verification card, re-clean that section of the surface, then use a new wet disposable cleaning cloth to wipe that section again. If the cloth matches the cleaning verification card, that section of the surface has been adequately cleaned. If the cloth used to wipe a particular surface section does not match the cleaning verification card after the surface has been re-cleaned, wait for one (1) hour or until the entire surface within the work area has dried completely, whichever is longer. After waiting for the entire surface within the work area to dry, wipe each section of the surface that has not yet achieved post-renovation cleaning verification with a dry disposable cleaning cloth. After this wipe, that section of the surface has been adequately cleaned.

The DASNY Third-Party Environmental Consultant shall certify surface wipe sample results collected inside and outside the work area are less than 10 μg/ft2 on uncarpeted floors, less than 100 μg/ft2 (50 ug/ft2 – New York City) on interior window sills, less than 100 μg/ft2 on window troughs and less than 40 ug/ft2 on porch floors, or not significantly greater than the initial surface loading determined prior to work, as directed.

When the work area passes the post-renovation cleaning verification and satisfactory third-party clearance wipe sample results, remove the warning signs.

For exterior paint removal work, a certified renovator must perform a visual inspection to determine whether dust, debris or residue is still present on surfaces in and below the work area, including windowsills and the ground. If dust, debris or residue is present, these conditions must be rectified and another visual inspection must be performed. When the area passes the visual inspection, remove the warning signs. The DASNY Third-Party Environmental Consultant will provide soil samples taken at the exterior of the work site to be used to determine if soil lead levels have increased at a statistically significant level (significant at the 95 percent confidence limit) from the soil lead levels prior to the work. If soil lead levels do show a statistically significant increase above any applicable Federal or State standard for lead in soil, the soil shall be remediated back to the pre-work level.

1. **RESTORATION OF UTILITIES, FIRESTOPPING, AND FINISHES**
2. After final clearance, remove locks and restore electrical and HVAC systems. All temporary power shall be disconnected, power lockouts removed and power restored. All temporary plumbing shall be removed.
3. Finishes damaged by lead removal activities including, but not limited to, plaster/paint damage due to duct tape and spray adhesives, and floor tile lifted due to wet or humid conditions, shall be restored prior to final payment.
4. Finishes unable to be restored shall be replaced under this Contract.
5. All foam and expandable foam products and materials used to seal Work Area openings shall be completely removed upon completion of abatement activities.
6. All penetrations (including, but not limited to, pipes, ducts, etc.) through fire rated construction shall be firestopped using materials and systems tested in accordance with ASTM E814 on Projects where reinsulation is part of the required work.

**PART 4 DISPOSAL**

* + - 1. **CONTAINERIZATION AND TRANSPORTATION**

1. Waste from renovation activities must be contained to prevent releases of dust and debris before the waste is removed from the work area for storage or disposal. If a chute is used to remove waste from the work area, it must be covered. At the conclusion of each work day and at the conclusion of the renovation, waste that has been collected from renovation activities must be stored under containment, in an enclosure, or behind a barrier that prevents release of dust and debris out of the work area and prevents access to dust and debris. The waste must be contained to prevent release of dust and debris during transport.
2. Collect lead-contaminated waste, scrap, debris, bags, containers, equipment, and lead-contaminated clothing, which may produce airborne concentrations of lead particles. Label the containers in accordance with 29 CFR 1926.62 and 40 CFR 261. Dispose of lead-contaminated waste material at an EPA or State approved hazardous waste treatment, storage, or disposal facility off Owner’s property.
3. Store waste materials in US Department of Transportation (DOT) (49 CFR 178) approved 55-gallon drums. Properly label each drum to identify the type of waste (49 CFR 172) and the date the drum was filled. DASNY or an authorized representative will assign an area for interim storage of waste-containing drums. Do not store hazardous waste drums in interim storage longer than 90 calendar days from the date affixed to each drum.
4. Handle, store, transport, and dispose lead or lead-contaminated waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. The Contractor shall provide documentation the transporter is authorized to transport the waste, authorized to deliver the waste to the TSDF and the TSDF is authorized to accept the waste. Comply with land disposal restriction notification requirements as required by 40 CFR 268.
5. The Contractor is responsible for securing appropriate treatment or disposal for the waste streams at a permitted TSDF, in compliance with all requirements, and for obtaining a copy of the waste manifest and waste profile of the treated waste as executed by the TSDF. If the manifest is not returned within 35 calendar days from removal from the site, the Contractor shall notify the Owner and the NYS DEC, and initiate an investigation as required. The Contractor shall contact the EPA and file an Exception report if the manifest is not returned within 45 days.
6. All waste containers shall be lined with two layers of polyethylene sheeting prior to disposal of materials.
7. The Contractor shall supply all required placard and labeling, and shall have an appropriately DOT-trained individual to prepare the waste container and inspect the packaging of the hazardous waste
8. All material, whether hazardous or non-hazardous, shall be disposed of in accordance with laws and provisions and federal, State, or local regulations. Ensure waste is properly characterized. The result of each waste characterization (TCLP for RCRA materials) will dictate disposal requirements.
9. The waste profile, LDR form, and waste transporter permit must be reviewed and approved by the Third-Party Environmental Consultant prior to any hazardous waste leaving the site.
10. The DOT-trained Third-Party Environmental Consultant must be on-site for all hazardous waste shipment removals and will be responsible for inspection of the waste shipment and signoff on the hazardous waste manifest on behalf of the owner and DASNY to allow the hazardous waste shipment to leave the site.
    * + 1. **DISPOSAL DOCUMENTATION**
11. The Disposal Facility operator shall return the original Manifest to the Owner’s Representative or the disposal facility state as required by the DEC in 6 NYCRR 372 within 35 days. The Environmental Consultant must call the facility to investigate if the Manifest is not returned within 35 days and contact the EPA/DEC and file an Exception report if not returned within 45 days.
12. The Contractor shall utilize the Waste Disposal Log provided by the Owner. This log shall be maintained by the Project Supervisor and shall be kept on-site at all times. (See Appendix A.).
13. Copies of all waste disposal manifests and disposal logs (copies are acceptable for electronic closeout submittal review) shall be submitted by the Contractor to the Owner with the final close-out documentation.
14. The Contractor must also submit reports and records per the requirements of 6 NYCRR 372.2.
    * + 1. **PAYMENT FOR HAZARDOUS WASTE**
15. Payment for disposal of hazardous waste will not be made until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials delivered is returned for each load of waste removed from the site, the originals are furnished to the Owner, and copies provided to DASNY code compliance.

END OF SECTION 02 83 00

APPENDIX A

WASTE DISPOSAL LOG

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| **DORMITORY AUTHORITY STATE OF NEW YORK** | | | | | | | | | | | | | | | | |  |
| **WASTE DISPOSAL LOG** | | | | | | | | | | | | | | | | |  |
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| **Project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |  |  |  | **DASNY Project Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |  |
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|  |  |  |  |  |  |  |  |  |  |  |  | **DATES (Chain of Events)** | | | | |  |
| **Load /Manifest No.** |  | **Hauler** |  | **NYSDEC #** |  | **License Plate No.** |  | **Size of Container** |  | **Disposal Facility** |  | **Departed from Site** |  | **Received at Disposal Site** |  | **Record Returned** |  |
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| **COMMENTS:** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

APPENDIX B

CONTRACTOR’S ACKNOWLEGEMENT STATEMENT

**CONTRACTOR’S ACKNOWLEDGEMENT STATEMENT**

**Re: Removal of Lead Containing Paint**

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(Project Title)

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(Project Location)

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(DASNY Project Number)

**In consideration of the following individuals’ employment in connection with the abatement, handling, and disposal of lead containing waste at the referenced project, I hereby certify that the employees: a) have received the medical examinations required by OSHA 29 CFR 1926.62; b) have been fit tested specifically for respirators used on the Project; and c) have received training as required by OSHA 29 CFR 1926.62 in the proper handling of lead containing materials~~,~~ including the health implications and risks involved, as well as the use and limitations of the respiratory equipment to be used.**

Employee Name US EPA Certificate Number

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Supervisor Signature Printed Name

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APPENDIX C

EPA NOTIFICATION OF LEAD-BASED PAINT ABATEMENT ACTIVITIES

