**SECTION 02 84 00**

**NON-LIQUID PCB MATERIAL REMOVAL**

**PART 1 GENERAL**

**1.01 SCOPE OF WORK**

A. This demolition, renovation or abatement Project will include the removal and disposal of non-liquid PCB materials (herein referred to as PCB materials) at XXX (Name of facility, building ID(s), address, project name and number).

B. The work shall include but not be limited to the removal of the following.

|  |  |  |
| --- | --- | --- |
| Building & Floor | Description of PCB Material | Approximate Quantity (SF/LF/EA) |
|  |  |  |
|  |  |  |
|  |  |  |

C. The Contractor shall be aware of all conditions of the Project and is responsible for verifying quantities and locations of all Work to be performed. Failure to do so shall not relieve the Contractor of its obligation to furnish all labor and materials necessary to perform the Work.

D. All Work shall be performed in strict accordance with the Project Documents and all governing codes, rules, and regulations. Where conflicts occur between the Project Documents and applicable codes, rules, and regulations, the more stringent shall apply.

E. Working hours shall be as required and approved by the Owner. PCB material removal activities including, but not limited to, work area preparation, gross removal activities, cleaning activities, waste removal, etc. may need to be performed during ‘off-hours’ (including nights and weekends). In addition, multiple mobilizations may be required to perform the work identified in this project. The Contractor shall coordinate and schedule all Work with the facility and Owner’s representative.

**1.02 SPECIAL JOB CONDITIONS**

A. Any special job conditions are described below.

**1.03 PERMITS AND COMPLIANCE**

A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local laws, rules, and regulations pertaining to Work practices, protection of Workers, authorized visitors to the site, persons, and property adjacent to the Work.

B. Perform PCB related Work in accordance with DEC Hazardous Waste Regulations (6 NYCRR 370-374, i.e. Hazardous Waste Rules), 40 CFR 761, and 29 CFR 1926, as specified herein. Where more stringent requirements are specified, adhere to the more stringent requirements.

C. The Contractor must maintain current licenses or registrations pursuant to DEC and EPA regulations for all Work related to this Project, including the removal, handling, transport, and disposal of hazardous and industrial waste.

D. The Environmental Consultant shall be prepared to obtain an EPA ID number if so directed by the Owner.

E. Failure to adhere to the Project Documents shall constitute a breach of the Contract and the Owner shall have the right to and may terminate the Contract provided, however, the failure of the Owner to so terminate shall not relieve the Contractor from future compliance.

**1.04 SUBMITTALS**

A. PCB Pre-Work Submittals: Within 7 days prior to the pre-construction conference, the Contractor shall submit an electronic copy of the documents listed below directly to the DASNY Code Compliance Unit for review and approval prior to the commencement of PCB abatement activities:

1. Progress Schedule:

a. Show the complete sequence of abatement activities and the sequencing of Work within each building or building section.

b. 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.

2. PCB Abatement Work Plan: Provide plans that clearly indicate the following:

a. All Work Areas/containments numbered sequentially.

b. Entrances and exits to the Work Areas/containments.

c. Type of abatement activity/technique for each Work Area/containment.

d. Proposed location and construction of storage facilities and field office.

3. Disposal Site/Landfill Permit from applicable regulatory agency.

4. Letter from contractor to disposal facility identifying the presence of PCB bulk product hazardous waste, along with written acknowledgement by the disposal facility that they are authorized to receive the PCB hazardous waste, as well as what the ultimate disposal method for the hazardous waste shall be if transfer facility used, in compliance with 6 NYCRR 372.2 (b)(2). See section 4.01.A

5. NYS Department of Environmental Conservation Waste Transporter Permit.

B. PCB On-Site Submittals: Refer to Part 3.01.B for all submittals, documentation, and postings required to be maintained on-site during abatement activities.

C. PCB Project Close-out Submittals: Within 30 days after project completion, the **Contractor** shall submit an electronic copy of the closeout-out submittal (requirements listed below) to DASNY Code Compliance and the Environmental Consultant for review and approval prior to the Contractors final payment. Once DASNY Code Compliance approves the close-out submittal, the contractor shall provide three (3) approved hardcopy sets of the documents (double-sided and bound) to DASNY Project Management. DASNY Project Management shall provide the Facility with one copy of the approved closeout submittals.

1. **Fully Executed Copy** of all waste disposal manifests and disposal logs shall be sent to DASNY Code Compliance. Original waste manifests shall be sent to the Owner.
2. Daily progress log
3. Entry/Exit Logs. Decontamination unit entry/exit log for PCB removals (must be separate from any documentation associated with Asbestos removals, unless the material is both PCB and ACM).
4. Contractor’s Acknowledgment Statement Forms. **Original** notarized statement shall be sent to DASNY Code Compliance with the closeout submittals.
5. Disposal Site/Landfill Permit from applicable regulatory agency.
6. Copy of PCB waste notification letter with written acknowledgement from the disposal facility. If transfer facility is utilized, completed hazardous waste manifest from final destination must also be provided. Final destination of waste must be within this country.

D. PCB Project Submittals shall be submitted as separate packages, not included with any other environmental or hazardous materials submittals.

**1.05 PRE‑CONSTRUCTION CONFERENCE**

A. 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.

B. Agenda for this conference shall include but not necessarily be limited to:

1. Contractor's scope of Work, Work plan, and schedule to include number of workers and shifts.

2. Contractor's safety and health precautions including protective clothing and equipment and decontamination procedures.

3. Environmental Consultant's duties, functions, and authority.

4. Contractor's Work procedures including:

a. Methods of job site preparation and removal methods.

b. Disposal procedures.

c. Cleanup procedures.

d. Fire exits and emergency procedures.

5. Contractor’s required pre-work and on-site submittals, documentation, and postings.

6. Contractor's plan for twenty-four (24) hour Project security both for prevention of theft and for barring entry of unauthorized personnel into Work Areas.

7. Temporary utilities.

8. Handling of furniture and other moveable objects.

9. Storage of removed PCB materials.

10. Waste disposal requirements and procedures.

C. In conjunction with the conference the Contractor shall accompany the Owner and Environmental Consultant on a pre-construction walk-through documenting existing condition of finishes and furnishings, reviewing overall Work plan, location of fire exits, fire protection equipment, water supply and temporary electric tie-in.

**1.06 APPLICABLE STANDARDS AND REGULATIONS**

A. The Contractor shall comply with the following codes and standards, except where more stringent requirements are shown or specified:

B. Federal Regulations:

1. 29 CFR 1910.1200, "Hazard Communication" (OSHA)

2. 29 CFR 1910.134, "Respiratory Protection" (OSHA)

3. 29 CFR 1910.145, "Specification for Accident Prevention Signs and Tags" (OSHA)

4. 29 CFR 1926, "Construction Industry" (OSHA)

5. 29 CFR 1926.500 "Guardrails, Handrails and Covers" (OSHA)

6. 40 CFR 761, “PART 761—POLYCHLORINATED BIPHENYLS (PCBs)” (EPA)

7. 49 CFR 171-173, Transportation Standards (DOT)

C. New York State Regulations:

1. 6 NYCRR, Parts 360, 364, Disposal and Transportation (DEC)

2. 6 NYCRR, Parts 370-373, “Hazardous Waste Management System”

D. Standards and Guidance Documents:

1. American National Standards Institute (ANSI) Z88.2, Practices for Respiratory Protection

**1.07 PROJECT MONITORING**

A. The Owner shall engage the services of an Environmental Consultant who shall serve as the Owner's Representative in regard to the performance of the PCB abatement Project and provide direction as required throughout the entire abatement Project period.

B. The Contractor is required to ensure cooperation of its personnel with the Environmental Consultant for the sampling and project monitoring functions described in this section. The Contractor shall comply with all direction given by the Environmental Consultant during the Project.

C. The Environmental Consultant shall provide the following administrative services:

1. Review and approve or disapprove all submittals, shop drawings, schedules, and samples.

2. Assure that all notifications to governmental agencies or landfills by the Contractor are submitted in a timely manner and are correct in content.

3. Review and approve the Contractor's compliance testing laboratory.

D. The Environmental Consultant shall staff the Project with a trained and certified person(s) to act on the Owner's behalf at the job site. This individual shall be designated as the Abatement Project Monitor (APM).

1. The APM shall be on-site at all times the Contractor is on-site. The Contractor shall not be permitted to conduct any Work unless the APM is on-site (except for inspection and planning purposes during non-working days).

2. The APM shall have the authority to direct the actions of the Contractor verbally and in writing to ensure compliance with the Project documents and all regulations. The APM shall have the authority to Stop Work when gross Work practice deficiencies or unsafe practices are observed.

a. Such Stop Work order shall be effective immediately and remain in effect until corrective measures have been taken and the situation has been corrected.

b. Standby time required to resolve the situation shall be at the Contractor's expense.

3. The APM shall provide the following services:

a. Inspection of the Contractor's Work, practices, and procedures, including temporary protection requirements, for compliance with all regulations and Project specifications.

b. Monitor the progress of the Contractor's Work, and report any deviations from the schedule to the Owner.

c. Monitor, verify, and document all waste load-out operations.

d. The APM shall maintain a log on site that documents all project related and Environmental Consultant and Contractor actions, activities, and occurrences.

e. The APM shall take air, swipe, wipe, or bulk samples upon the Owner’s request.

4. The following inspections shall be conducted by the APM. Additional inspections shall be conducted as required by Project conditions. Progression from one phase of Work to the next by the Contractor is only permitted with the written approval of the APM.

a. Pre-Construction Inspection: The purpose of this inspection is to verify the existing conditions of the Work Areas and to document these conditions.

b. Pre-Commencement Inspection: This inspection shall take place only after the Work Area is fully prepped for removal.

c. Work Inspections: The purpose of this inspection is to monitor the Work practices and procedures employed on the Project and to monitor the continued integrity of the containment system. Inspections within the removal areas shall be conducted by the APM during all preparation, removal, and cleaning activities at least twice every Work shift. Additional inspections shall be conducted as warranted.

d. Visual Clearance Inspection: The purpose of this inspection is to verify that: all materials in the scope of work have been properly removed; no visible PCB material debris/residue remains.

e. Punch List Inspection: The purpose of this inspection is to verify the Contractor's certification that all Work has been completed as contracted and the existing condition of the area prior to its release to the Owner.

5. The Owner may, at his discretion, choose to conduct air sampling. If air samples collected during abatement indicate any airborne PCB concentration(s) above the OSHA PEL of 0.5 mg/m3 or EPA recommended thresholds, work shall be stopped immediately and Work methods shall be altered to reduce the airborne PCB concentration(s).

**1.08 PROJECT SUPERVISOR**

A. The Contractor shall designate a full-time Project Supervisor who shall meet the following qualifications:

1. The Project Supervisor shall be trained in PCB removal and hazardous waste management in NYS, via a 40-hour HAZWOPER/Supervisor training course.

2. The Project Supervisor shall have a minimum of one year experience as a supervisor.

3. The Project Supervisor must be able to read and write English fluently, as well as communicate in the primary language of the Workers.

B. If the Project Supervisor is not on-site at any time whatsoever, all Work shall be stopped. The Project Supervisor shall remain on-site until the Project is complete. The Project Supervisor cannot be removed from the Project without the written consent of the Owner and the Environmental Consultant. The Project Supervisor shall be removed from the Project if so requested by the Owner.

C. The Project Supervisor shall maintain a bound Daily Project Log that includes the Waste Disposal Log required by section 4.03 of the specifications.

D. The Project Supervisor shall be responsible for the performance of the Work and shall represent the Contractor in all respects at the Project site. The Supervisor shall be the primary point of contact for the APM.

**1.09 TRAINING**

A. As required by applicable regulations, prior to assignment to PCB Work instruct each employee with regard to the hazards of PCB, safety and health precautions, and the use and requirements of protective clothing and equipment.

B. Employees managing Hazardous Waste as described in Section 3.03 must also meet the Personnel training requirements in section 6 NYCRR 373-3.2.

**1.10 RESPIRATORY PROTECTION**

1. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134. Provide respirator training.

B. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. High Efficiency Particulate Air (HEPA) respirator filters shall be approved by NIOSH and shall conform to the OSHA requirements in 29 CFR 1910.134.

C. 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.

D. 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.

E. 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 not be permitted to return.

**1.11 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.

2. Protect materials from unintended contamination and theft.

3. Storage areas shall be kept clean and organized.

C. Remove damaged or deteriorated materials from the job site. Materials contaminated with PCB shall be disposed of as PCB material as specified herein.

**1.12 TEMPORARY UTILITIES**

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

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

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

B. Provide temporary lighting for all Work Areas.

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.

C. Utilize domestic water service, if available, from Owner's existing system.

**PART 2 PRODUCTS**

**2.01 PROTECTIVE CLOTHING**

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

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

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

D. Authorized visitors shall be provided with suitable protective clothing, headgear, eye protection, and footwear whenever they enter the Work Area.

**2.02 SIGNS AND LABELS, CONTAINERS**

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

B. Provide the appropriate “Large PCB Marking” or “Small PCB Marking” (ML or MS per 40 CFR 761) as shown below, of sufficient size to be clearly legible, for display on waste containers (bags, boxes, rolloffs or drums) which will be used to contain or transport PCB contaminated material, in accordance with 40 CFR 761. In addition, U.S. Department of Transportation (DOT) 49 CFR Parts 171 and 172 requires the name and UN number of the material to be on the bags or drums, and, if shipped in bulk (rolloffs, Gaylord boxes, etc) the bulk container must also be labeled: Polychlorinated Biphenyl, solid mixture UN 3432.

 ML  MS 

C. The PCB materials are also NYS Hazardous Waste, and 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.**

**Generator's Name and Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Generator's EPA Identification Number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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

D. Provide 6 mil plastic disposal bags with PCB caution labels.

 1. The “Small PCB Label” (MS per 40 CFR 761) may be used as shown above. Bags shall also be labeled with U.S. DOT required markings per 49 CFR 172, Polychlorinated Biphenyl, solid mixture UN 3432.

 2. Labeled PCB waste containers or bags shall not be used for non-PCB waste or trash. Any material placed in labeled containers or bags, whether turned inside out or not shall be handled and disposed of as PCB waste.

**2.03 DAILY PROJECT LOG**

A. Provide a Daily Project Log. The log shall contain on title page the Project name, name, address and phone number of Owner; name, address and phone number of Environmental Consultant; name, address and phone number of Abatement 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 PCB waste has the potential to damage or puncture disposal bags. Affix PCB 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**

A. 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.

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

C. 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.

**PART 3 EXECUTION**

**3.01 GENERAL REQUIREMENTS**

A. Should visible PCB debris be observed outside the Work Area, immediately stop work and notify the Owner; institute emergency procedures as directed. All costs incurred in decontaminating such non-Work Areas and the contents thereof shall be borne by the Contractor, at no additional cost to the Owner.

B. The following submittals, documentation, and postings shall be maintained on-site by the Contractor during abatement activities at a location approved by the Abatement Project Monitor:

1. NYS Department of Environmental Conservation Waste Transporter Permit.

2. Project documents (specifications and drawings.)

3. Applicable regulations.

4. Safety Data Sheets of supplies/chemicals used on the Project.

5. Approved Abatement Work Plan.

6. List of emergency telephone numbers.

7. Waste Disposal Log.

8. Daily Project Log.

C. The following documentation shall be maintained on-site by the Abatement Project Monitor during abatement activities:

1. Project Monitor Daily Log.

2. PCB Survey Report.

**3.02 WORK AREA PREPARATION**

A. PCB caution signs shall be posted at all approaches to the PCB Work Area. Post all emergency exits as emergency exits only on the Work Area side, post with PCB caution signs on the non-Work Area side. Provide all non-Work Area stairs and corridors accessible to the PCB Work Area with warning tapes at the base of stairs and beginning of corridors. Warning tapes shall be in addition to caution signs.

1. Access to areas of work shall be regulated to prevent unauthorized visitors.
2. Personal/Equipment Decontamination Room or Area. An existing room or area that is adjacent to the work area shall be used for the decontamination of personnel and equipment. The room or area shall be covered by an impermeable dropcloth on the floor or horizontal working surface. The room or area must be of sufficient size to accommodate cleaning of equipment and removing personal protective equipment. Work clothing must be cleaned with a HEPA vacuum before it is removed. All equipment and surfaces of waste containers must be cleaned prior to removing them from the decontamination room or area. All personnel must enter and exit the PCB work area through the decontamination room or area.

D. Work Area Preparation For Exterior Removal:

* 1. All ground surfaces exterior to the work area shall have a layer of 6 mil fire retardant plastic sheeting, attached to the building face and laid down on the surface below the exterior abatement work area, at least 10 feet wide or to the furthest point of gravity fall for dislodged debris by methods used, whichever is further. For work at the second story and above, extend 6 mil fire retardant plastic sheeting as necessary. For work above third story, by sidewalk, street, or property boundary, scaffolding sides shall be covered in 6-mil fire retardant plastic sheeting.
	2. All operable windows within the work area and 25 feet from all sides of the work area shall be closed and cordoned off with caution tape.
	3. In the work area, isolate all HVAC equipment intakes by temporarily shutting down units during removals and installing plastic sheeting over the opening.

E. Work Area Preparation For Interior Removal:

* 1. Isolate all HVAC equipment, including installing plastic sheeting on all air returns and exhausts. Turn off all HVAC systems serving work area when feasible.
	2. All floor areas adjacent to the work area shall have a layer of 6 mil fire retardant plastic sheeting, attached to the interior wall and laid down on the surfaces below the abatement work area, at least five (5) feet wide or to the furthest point of gravity fall for dislodged debris by methods used, whichever is further.
	3. All movable objects shall be removed from the immediate work area. All non-movable objects shall be covered with one layer of 6 mil fire retardant plastic sheeting and sealed at the edges.
	4. All operable windows within the work area shall be closed.
	5. Temporary dust barriers consisting of a minimum of 6-mil fire-retardant plastic sheeting shall be installed at hallways, corridors, doorways, and other openings to the work area not used for passage during removals) to establish work area containment enclosure.
	6. A 6-mil fire retardant plastic sheeting overlapping curtained doorway shall be installed at the entrance to the work area.
	7. For all work areas with use of electromechanical tools for PCB removals, HEPA filtered negative air ventilation units must be installed in work area and operate continuously during removal operations to establish negative pressure. A minimum of 4 air changes per hour must be maintained within work area during removals and cleanings until work area clearance is obtained from the Project Monitor.

**3.03 REMOVAL OF PCB MATERIALS - GENERAL**

1. PCB-containing materials shall be removed in accordance with the Contract Documents and the approved PCB Work Plan.
2. Non-PCB items remaining such as windows, doors, masonry, and all other building construction and components from which PCB materials are removed shall be decontaminated by physical or chemical means (such as stripper) such that no visible residue remains. The removal of the PCB materials may require the use of scrapers, solvents, mastic removal chemicals, or other methods/procedures to ensure complete removal.
3. Use tools that generate the least amount of dust and that will still complete the PCB caulk removal. See current EPA regulations and recommendations regarding tools and protective measures to be used for PCB caulk removals.
4. Grinding electromechanical tools (e.g. angle grinders, masonry groove cutters, circular saws, and slot mills, etc.) are not allowed to be used for exterior open-air PCB caulk removals.
5. For exterior removals, take appropriate precautions (e.g. install windscreens) to prevent dust and debris from migrating due to windy conditions.
6. Remove accessible caulk that could be disturbed before cutting building components, such as window frames.
7. All removed PCB material shall be placed into 6 mil plastic disposal bags or other suitable container upon detachment from the substrate. Large components with PCB material or PCB residue shall be wrapped in one layer of 6 mil plastic sheeting. Sharp components likely to tear disposal bags shall be placed in fiber drums or boxes and then wrapped with sheeting.
8. Power or pressure washers are not permitted for PCB removal or clean-up procedures
9. All construction and demolition debris determined by the Environmental Consultant to be contaminated with PCB shall be handled and disposed of as PCB waste. If non-porous (e.g. metal) removed components previously in contact with non-liquid PCBs are to be cleaned and decontaminated prior to disposal as non-PCB waste, the requirements of 40 CFR 761 Subpart D shall be met, including cleaning to Visual Standard No. 2, Near-White Blast Cleaned Surface Finish of the National Association of Corrosion Engineers (NACE). The project monitor shall verify compliance with Standard No. 2, by visually inspecting all cleaned removed components. The Contractor shall note that a near-white metal blast cleaned surface, when viewed without magnification, shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter.
10. All PCB waste must be located at or near the point of generation, under the control of the Project Supervisor. Up to 55 gallons may be stored at the point of generation for an indefinite period, but any greater than 55 gallons must be moved within 3 days to a Container Storage Area (CSA) as specified in 6 NYCRR Section 372.2 “Standards Applicable to Generators of Hazardous Waste”, or off site. Waste may be stored at the CSA for 90 days(large quantity generator) or 180 days(small quantity generator), during which labeling, inspections, and other requirements must be met as described in 6 NYCRR Section 372.2, Section 373-3.1(d) and Subpart 373-3.
11. The CSA and personnel managing it must also meet the following requirements of 6 NYCRR 373:
	1. Preparedness and Prevention provisions of Section 373-3.3
	2. Secondary containment requirements of 373-2.9(f)(1)
	3. Personnel training in section 373-3.2
	4. Contingency plans and emergency procedures in section 373-3.4 subparagraph 376.1(g)(1)(v)
	5. The containers must be dated when placed in storage, and accumulation times must be observed
	6. The total amount of hazardous waste stored in the storage area at one time must not exceed 13,200 lbs.
	7. A label or sign stating "Hazardous Waste" must identify all areas and containers used to accumulate hazardous waste
12. Closure of the CSA. If an EPA ID number and CSA were created specifically for the PCB removal work, once the removal work is complete the Contractor shall immediately close out the CSA, notify the DEC/EPA that the hazardous waste activity has concluded, and that the storage area is to be closed per 373-3.7(b) and (e).
13. The Contractor is required to provide temporary protection of the building (i.e. roof, window openings, construction joints, etc.) at the end of each Work shift so as to maintain the building in a watertight condition.
14. Personal protective equipment, including respirators, shall be utilized and worn during all removal operations until the Work Area is cleared by the APM.
15. Following completion of gross abatement and after all accumulations of PCB waste materials have been containerized, the decontamination procedures in Section 3.04 shall be followed.
16. Finishes damaged by PCB abatement activities shall be restored prior to final payment. Finishes unable to be restored shall be replaced under this Contract.
17. Dry sweeping and any other methods that raise dust shall be prohibited.

**3.04 EQUIPMENT AND AREA DECONTAMINATION**

1. When removal of PCB materials is completed, the decontamination process shall consist of vacuuming (with a HEPA filter), wet wiping/mopping and a repeated vacuuming (with a HEPA filter) of the entire work area. All surfaces in and around the work area must be free of dust generated during the work.
2. Decontaminate all tools and equipment before removal from the work area.
3. If dust or debris has migrated to areas of the building other than the immediate work area, those areas shall be incorporated into the work area and thoroughly decontaminated to ensure all visible dust generated by the activity is eliminated.
4. Uncontaminated dust barriers and other protective sheeting shall be placed in disposable construction bags and disposed of as normal trash.
5. Visually inspect the area for any remaining dust or debris. Vacuum (with HEPA filter) and wet wipe until space is clean. Dispose of vacuum contents as PCB waste.
6. Upon completion of decontamination and removal of temporary dust barriers, a final inspection shall be performed by the Contractor accompanied by the Project Monitor. As a result of any visual inspection by the Project Monitor, the Contractor will clean or reclean the affected areas at no additional expense to the Owner.

**PART 4 DISPOSAL OF PCB WASTE**

**4.01 TRANSPORTATION AND DISPOSAL SITE**

A. The Contractor's Hauler and Disposal Facility shall be approved by the Owner. Prior to the hazardous waste being removed from the site, written notice must be provided and confirmation received from the intended disposal facility, indicating proper authority to receive the PCB bulk product hazardous waste, as well as the ultimate disposal method for the waste. The notice shall be acknowledged in writing via a disposal facility representative’s signature, printed name and title, in compliance with 6 NYCRR 372.2(b)(2). Note: For disposal within New York State, facilities must be specifically permitted to accept PCB waste.

B. The Contractor shall give twenty-four (24) hour notification prior to removing any waste from the site. Waste shall be removed from the site only during normal working hours unless otherwise specified. No waste may be taken from the site unless the Contractor and Environmental Consultant are present and the Environmental Consultant authorizes the release of the waste as described herein.

C. All waste generated as part of the PCB project shall be removed from the site within ten (10) calendar days after successful completion of all PCB abatement work. However, all disposal facility permits/licenses, waste profiles, LDR forms, hauler permit(s), and all other necessary paperwork must be submitted and approved before the waste is removed from the site.

D. Upon arrival at the Project Site, the Hauler must possess and present to the Environmental Consultant a valid New York State Department of Environmental Conservation Part 364 Waste Hauler's Permit. The Environmental Consultant may verify the authenticity of the hauler's permit with the proper authority.

E. The Hauler, with the Contractor and the Environmental Consultant, shall inspect all material in the transport container prior to taking possession and signing the Hazardous Waste Manifests.

**4.02 WASTE STORAGE CONTAINERS**

A. All waste containers shall be fully enclosed and lockable (i.e. enclosed dumpster, trailer, etc.).

B. The Environmental Consultant shall verify that the waste storage container and/or truck tags (license plates) match that listed on the New York State Department of Environmental Conservation Part 364 permit. Any container not listed on the permit shall be removed from the site immediately.

C. The container shall be plasticized and sealed with one layer of 6 mil plastic. Once on site, it shall be kept locked at all times, except during load out. The waste container shall not be used for storage of equipment or contractor supplies.

D. While on-site, the container shall be labeled with PCB Warning Labels and DEC Hazardous Waste Labels as specified in Section 2.02.

E. The New York State Department of Environmental Conservation Waste Hauler's Permit number shall be stenciled on both sides and back of the container.

F. The container is not permitted to be loaded unless it is properly plasticized, has the appropriate danger signage affixed, and has the permit number appropriately stenciled on the container.

1. The Owner may initiate random checks at the Disposal Site to ensure that the procedures outlined herein are complied with.

**4.03 Hazardous WASTE MANIFESTS**

A. A New York State Uniform Hazardous Waste Manifest shall be utilized solely as the waste Manifest for transportation. A hauler billing form or bill of lading may be used if the hauler needs an independent record, but shall not be used as a shipping document.

B. The Manifest shall be completed by the Contractor and verified by the Environmental Consultant that all the information and amounts are accurate and the proper signatures are in place.

C. The Manifest shall have the appropriate signatures of the Owner’s Representative (the Generator) and the Hauler representative prior to any waste being removed from the site.

D. Copies of the completed Manifest shall be retained by the Environmental Consultant and shall remain on site for inspection.

E. Upon arrival at the Disposal Site, the Manifest shall be signed by the Disposal Facility operator to certify receipt of PCB materials covered by the manifest.

F. The Disposal Facility operator shall return the original Manifest to the Owner’s Representative (the Generator) as required by the DEC in 6 NYCRR 372 within 45 days. The Environmental Consultant must call the facility to investigate if not returned within 35 days, and call the DEC and file an Exception report if not returned within 45 days.

G. 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.)

H. Originals of all waste disposal manifests disposal logs shall be submitted by the Contractor to the Owner with the final close-out documentation.

J. The Contractor must also submit reports and records per the requirements of 6 NYCRR 372.2

APPENDIX A

WASTE MANIFEST LOG

|  |  |
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| **DORMITORY AUTHORITY STATE OF NEW YORK** |  |
| **WASTE MANIFEST LOG** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  | **Project Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
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| **PCB Contractor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  | **Environmental Consultant: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
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|  |  |  |  |  |  |  |  |  |  |  |  | **DATES (Chain of Events)** |  |
| **Load No.** |  | **Hauler** |  | **NYSDEC #** |  | **License Plate No.** |  | **Size of Container** |  | **Disposal Facity** |  | **Departure from Site** |  | **Received at Disposal Facility** |  | **Manifest Returned to Contractor** |  |
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| **COMMENTS:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

APPENDIX B

CONTRACTOR’S ACKNOWLEDGEMENT STATEMENT

**CONTRACTOR’S ACKNOWLEDGEMENT STATEMENT**

**Re: Abatement of Non-Liquid PCB Materials**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (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 Non-Liquid PCB Materials at the referenced project, I hereby certify that the employees: a) have received the medical examinations required by OSHA 29 CFR 1926.134; b) have been fit tested specifically for respirators used on the Project; and c) have received training in the proper handling of Non-Liquid PCB materials, including the health implications and risks involved, as well as the use and limitations of the personal protective equipment to be used.**

Employee Name

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Supervisor Signature

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(Notary block here)

Social Security Number (last four digits)

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