SECTION 028433 - ABATEMENT OF PCB CONTAINING CAULK-SEALANT MATERIALS

USE THIS SECTION FOR PROJECTS WHERE PCB CONTAINING CAULKING/SEALANT MATERIALS HAVE BEEN IDENTIFIED, AND ABATEMENT AND DISPOSAL ARE A REQUIRED PART OF THE PROJECT. INCLUDE DOCUMENT 003126 IN THE PROJECT MANUAL AND INCLUDE THE PCB CAULK SURVEY REPORT IN THE APPENDIX. SHOW THE AREAS THAT REQUIRE ABATEMENT AND APPROXIMATE QUANTITIES ON THE CONTRACT DRAWINGS. COORDINATE WITH THE DESIGNER.

PCB’S IN CAULK HAVE BEEN FOUND IN COMBINATION WITH ASBESTOS IN SAMPLES TAKEN FROM NYS FACILITIES. IN THESE CASES, ASBESTOS ABATEMENT TAKES PRECEDENCE; THEREFORE, SECTION 028213 SHOULD BE USED ALONG WITH THIS SECTION.

THE FACILITY WILL HAVE TO APPLY FOR A FEDERAL ID NUMBER WHICH ESTABLISHES THEM AS A HAZARDOUS MATERIAL WASTE GENERATOR.

1. GENERAL
	* + 1. SUMMARY
				1. This section specifies the procedures for removal of existing polychlorinated biphenyls (PCB) containing caulking materials, and disposal of removed materials.
				2. Disturbance or dislocation of polychlorinated biphenyls (PCB) containing caulking materials may cause a health hazard to work persons and building occupants. Contractor shall appraise all of his workers, supervisory personnel, subcontractors and consultants who will be at job site of the seriousness of the hazard and of proper work procedures which must be followed.
				3. Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of polychlorinated biphenyls (PCB) containing caulking materials, appropriate, continuous measures as necessary to protect all building occupants from the hazard of exposure shall be taken. Such measures shall include the procedures and methods described herein, regulations of the U.S. Occupational Safety & Health Administration (OSHA), U.S. Environmental Protection Agency (EPA), the New York State Department of Labor, and the New York State Department of Environmental Conservation.

EDIT PCB REPORT TITLE TO REFLECT ACTUAL REPORT TITLE.

* + - * 1. The results of the testing for PCB containing caulking/sealants are listed in the PCB Survey Report bound in the Appendix.

DELETE THE FOLLOWING SECTION IF ASBESTOS IS NOT FOUND IN THE CAULK. EDIT ASBESTOS REPORT TITLE TO REFLECT ACTUAL REPORT TITLE.

* + - * 1. Test results reveal that the caulk contains asbestos. Refer to the Asbestos Survey Report bound in the appendix.
			1. RELATED WORK SPECIFIED ELSEWHERE

DELETE SECTIONS THAT ARE NOT APPLICABLE TO THE PROJECT.

* + - * 1. Existing Hazardous Material Information: Document 003126.
				2. Summary of the Work: Section 011000.
				3. Construction Facilities and Temporary Controls: Section 015000.
				4. Removals, Cutting, and Patching: Section 017329.
				5. Asbestos Abatement: Section 028213.
				6. Handling of Lead Containing Materials: Section 028304.
				7. Abatement of Lead Containing Materials: Section 028303.
			1. REFERENCES
				1. TSCA (Toxic Substances Control Act)
				2. CERCLA (Federal “Superfund”)
				3. New York State Department of Environmental Conservation (DEC) 6NYCRR:

Part 360 Solid Waste Management Facilities.

Part 360 Solid Waste Management Facilities.

Part 364 Waste Transporter Permits.

Part 370 Hazardous Waste Management System-General.

art 371 Identification and Listing of Hazardous Wastes.

Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities.

Part 373 Hazardous Waste Management Facilities.

* + - * 1. OHSA (Occupational Safety and Health Administration) CFR Title 29.
				2. EPA (Environmental Protection Agency)
				3. CDC (Center for Disease Control): Air Pollution and Respiratory Health.
			1. DEFINITIONS
				1. Authorized Personnel: Facility or the Director’s Representative, and all other personnel who are authorized officials of any regulating agency, be it State, Local, Federal or Private entity who possess legal authority for enforcement or inspection of the work.
				2. Containment: The enclosure within the building which establishes a contaminated area and surrounds the location where hazardous material remediation is taking place and establishes a Lead Control Work Area.
				3. Clearance Criteria: A Visual Inspection of all removal surfaces, performed by the independent testing lab employed by the Director’s Representative, conforming to all standards set forth by all authorities having jurisdiction, mentioned in the references.
				4. Fixed Object: Mechanical equipment, electrical equipment, fire detection systems, alarms, and all other fixed equipment, fixtures or other items which cannot be removed from the work area.
				5. HEPA: High Efficiency Particulate Absolute filtration efficiency of 99.97 percent down to 0.3 microns. Filtration provided on specialized vacuums and air filtration devices to trap particles.
				6. PCB Solid Hazardous Waste: Materials containing one or more PCB compounds totaling 50 parts per million (ppm) or greater.
				7. PPE: Personal Protective Equipment.
			2. ABBREVIATIONS
				1. ASTM: American Society for Testing and Materials

1916 Race Street

Philadelphia, PA 19103

* + - * 1. CFR: Code of Federal Regulations

Government Printing Office

Washington, DC 20402

* + - * 1. DOT: New York State Department of Transportation

Main Office, 50 Wolf Road

Albany, NY 12232

* + - * 1. NIOSH: National Institute for Occupational Safety and Health

Building J.N.E. Room 3007

Atlanta, GA 30333

* + - * 1. OSHA: Occupational Safety and Health Administration

200 Constitution Avenue

Washington, DC 20210

* + - * 1. USEPA: United States Environmental Protection Agency

401 M Street SW

Washington, DC 20460

* + - 1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: Catalog sheets, specifications, and application instructions for any removal products, if used.
				5. Quality Control Submittals:

Worker’s Qualifications Data:

Name of each person who will be performing the Work and their employer’s name, business address and telephone number.

Worker’s Qualifications Data:

Name of each person who will be performing the Work and their employer’s name, business address and telephone number.

Names and addresses of 3 similar projects that each person has worked on during the past 3 years and documentation of completion of appropriate PCB/Hazardous Waste training program and supervisors with appropriate PCB/Hazardous Waste supervisor training.

Work Plan: Submit one copy of the work plan required under Quality Assurance Article.

Waste Transporter Permit: One copy of transporter’s current waste transporter permit.

* + - * 1. PCB Work Closeout Submittals:

Disposal Site Receipts: Copy of waste shipment record and disposal site receipt showing the PCB-containing materials have been properly disposed of.

* + - 1. QUALITY ASSURANCE
				1. Contractor shall provide and assure that the quality of work practices and procedures are consistent with the below listed agencies. Contractor shall utilize the latest edition, including all addenda, revisions and supplements for all regulatory agencies codes, etc., including but not limited to:

Environmental Protection Agency (EPA).

Occupational Safety and Health Administration.

State of New York codes and laws.

All local codes.

* + - * 1. Worker’s Qualifications: The persons performing PCB Caulk abatement and their supervisor shall be personally experienced in PCB abatement work and shall have been regularly employed by a company performing PCB abatement for a minimum of 3 years.
				2. Regulatory Requirements: Comply with the referenced standards.
				3. Pre-Work Conference: Before the Work of this Section is scheduled to commence, a conference will be held by the Director’s Representative at the Site for the purpose of reviewing the Contract Documents, discussing requirements for the Work, and reviewing the Work procedures.

The conference shall be attended by the Contractor, the PCB Caulk removal subcontractor, and the testing/monitoring laboratory employed by the Director.

* + - * 1. PCB Containing Caulk Removal Work Plan: At the conclusion of the pre-work conference, before the physical PCB containing caulk abatement Work begins, prepare a detailed PCB-containing material removal work plan.

The work plan shall include, but not be limited to, a drawing indicating the location, size, and details of PCB Caulk Collection Areas (dropcloths etc.,) staging areas for PCB caulk removal from identified area, location and details of containment, decontamination facilities, sequencing of window/caulk removal, work procedures, types of equipment, crew size, and emergency procedures for fire and medical emergencies.

* + - 1. PROJECT CONDITIONS
				1. Install 2 layers of 6 mil fire retardant polyethylene sheeting over the inside of all openings within 25 feet of the removal area to prevent contamination of the interior of the affected spaces.
				2. Provide 6 mil fire retardant polyethylene drop cloths to collect debris from removal operation. Remove caulk to the exterior and place into drum/container.

Using wet methods, scrape all residual PCB containing caulking from rough building opening down to a bare, clean surface.

Contractor shall collect all removed caulking and contaminated poly sheeting and properly drum/containerize for disposal or incineration in accordance with applicable State and Federal regulations.

* + - * 1. Remove polyethylene sheeting from openings after the Director’s testing/ monitoring laboratory has confirmed complete removal of PCB containing caulking. Include removed poly sheeting in disposal drum/container for disposal as PCB contaminated material.
			1. PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT
				1. Workers must wear protective suits, protective gloves, eye protection and a minimum of half-face respirator with HEPA filter cartridge for all projects. Respiratory protection shall be in accordance with OSHA regulation 1910.134 and ANSI Z88.2.
				2. Workers must be trained as per OSHA and EPA requirements, have medical clearance and must have recently received pulmonary function test (PFT) and respirator fit tested by a trained professional.

A personal air sampling program shall be in place as required by OSHA.

The use of respirators must also follow a complete respiratory protection program as specified by OSHA.

* + - 1. JOB CONDITIONS
				1. Posting of regulations: Display the following documents in the clean changing area, in public view, for the full duration of the work:

Instructions for removing injured persons from work area.

Post emergency action plan at the work site. This plan shall also include telephone numbers for hospital, doctor and Fire Company.

1. PRODUCTS
	* + 1. ABATEMENT PRODUCTS
				1. Disposal Drums: Metal or fiberboard with locking ring tops, with warning labels as required by OSHA, NYSDEC and/or EPA.
				2. Respirators:

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

* + - * 1. Vacuum Cleaners:

Type: Vacuums equipped with HEPA filters.

* + - * 1. Plastic Sheets:

Type: Minimum 6 mil., opaque, fire retardant polyethylene sheets.

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

* + - 1. GENERAL EQUIPMENT
				1. A sufficient supply of disposable mops, rags, and sponges for work area decontamination shall be available.
				2. A sufficient supply of scaffolding, ladders, lifts, and hand tools, (e.g., scrapers, wire cutters, brushes, utility knives, wire saws, etc.) shall be provided as needed.
			2. PERSONNEL PROTECTION
				1. Safety equipment (e.g., hard hats meeting the requirements of ANSI Standard Z89.1‑1981, eye protection meeting the requirements of ANSI Standard Z87.1‑1979, safety shoes meeting the requirements of ANSI Standard Z41.1‑ 1967, disposable PVC gloves or other work gloves), shall be provided to all workers and authorized visitors.
				2. Nonskid footwear shall be provided to all abatement workers. Disposable clothing shall be adequately sealed to the footwear to prevent body contamination.
1. EXECUTION
	* + 1. EMERGENCY PLANNING
				1. Description: The Contractor shall prepare an emergency preparedness plan detailing at least the information required in this section and in any applicable federal, state or local regulations.
				2. Details of Plan:

Emergency planning shall be developed prior to abatement initiation and submitted to the Director for review.

Emergency procedures shall be in written form and prominently posted in the clean change area of the worker decontamination area.

Emergency planning shall include written notification of police, fire and emergency medical personnel of planned abatement activities, work schedule and layout of work area, particularly barriers that may affect response capabilities.

Emergency planning shall include considerations of fire, electrical hazards, slips, trips, and falls, spills or releases of hazardous materials and heat related injury. Written procedures shall be developed and employee training in procedures shall be provided.

Employees shall be trained in evacuation procedures in the event of workplace emergencies.

For Non-Life-Threatening Situations: Employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers, if necessary, before exiting the workplace to obtain proper medical treatment.

For Life-Threatening Injury or Illness: Worker decontamination shall take least priority. After measures to stabilize the injured worker, the injured worker shall be removed from the workplace and secure proper medical treatment.

* + - * 1. Telephone numbers of all emergency response personnel shall be prominently posted in the clean area and equipment room, along with the location of the nearest telephone.
			1. NOTIFICATION
				1. Notify the Director’s Representative a minimum of 5 working days prior to the start of PCB Caulk removal work.
			2. EMPLOYEE PROTECTION
				1. Comply with all applicable Occupational Safety and Health Administration (OSHA) Requirements.
			3. WORK AREA PROTECTION
				1. Protection of Existing Construction: Perform PCB caulk removal work without damage or contamination of adjacent areas and existing construction.
			4. PCB-CONTAINING MATERIAL REMOVAL
				1. Perform removal of PCB-containing materials in accordance with approved PCB-containing material removal work plan.
				2. Use procedures and equipment as required to limit occupational and environmental exposure to PCB’s when PCB-containing caulk is removed in accordance with referenced standards.

Limit the production and dissemination of caulk debris as much as possible.

Perform manual wet scraping to the maximum extent feasible.

* + - 1. CERTIFICATION OF ABATEMENT
				1. Schedule visual clearance inspection with the Director’s Representative at the site, when work area is ready for clearance testing.
				2. Director’s Representative will employ the services of an independent testing/monitoring lab to perform visual clearance inspection. Clearance Criteria requirements are specified in PART 1 of this Section.

Prior to removal of any isolation barrier, the Director’s Representative will obtain a written affidavit and a final assessment report from the monitoring lab stating that the visual clearance assessment conforms to all standards set forth by all authorities having jurisdiction, mentioned in the references.

Schedule a walk-through inspection with the Director’s Representative and obtain the Director’s Representative’s written approval.

* + - * 1. The Director’s Representative shall have final determination of an acceptable clearance level.
			1. DISPOSAL OF PCB CONTAINING CAULKING MATERIALS
				1. Properly containerized waste must be transported by a licensed hauler and shipped to an EPA approved PCB Recycling or incineration facility. Waste manifests must show chain of custody. Provide one copy of the waste manifests to the OwnerDirector’s Representative.
				2. All contaminated waste shall be carefully loaded on trucks or other appropriate vehicles for transport. Before and during transport, care shall be exercised to insureensure that no unauthorized persons have access to the material.
				3. Transporters of the waste are prohibited from “back hauling” any freight after the disposition of the Owner’s Director’s Representative’s waste stream until decontamination of the vehicle and/or trailer is assured.
			2. WASTE MANAGEMENT AND DISPOSAL
				1. The Contractor shall be responsible for all packaging, labeling, transport, disposal and record-keeping associated with PCB waste in accordance with all federal, state and local regulations.
				2. The Contractor shall ensure that the person transporting the waste holds a valid permit issued in accordance with appropriate federal, state, and local regulations.
				3. The Contractor shall provide to the transporter at the time of transfer appropriate shipping records as required by the federal, state and local regulations with a copy to the project engineerDirector’s Representative.
				4. Contractor shall maintain proper follow up procedures to assure that waste materials have been received by the designated waste site in a timely manner and in accordance with all federal, state and local regulations.
				5. The Contractor shall assure that disposal of polychlorinated biphenyls (PCB) containing caulking material is at a facility approved to accept such waste and shall provide a tracking/manifest form signed by the landfill’s authorized representative.
			3. RESTORATION
				1. Remove temporary decontamination facilities and restore area designated for these facilities to its original condition or better.
				2. Where existing construction is damaged or contaminated, restore work to its original condition or better.

END OF SECTION 028433