
	<p>Office of Construction Code Compliance Department</p>	<p>Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021</p>
---	--	---

A. ASBESTOS

Survey

- Follow [DASNY Asbestos Abatement Procedures](#).
- Asbestos survey required for all projects that impact existing buildings or structures. No construction date limitations for asbestos surveys, as many ACMs may still be purchased and installed today. See [Asbestos Bans](#) document.
- Address all interior and exterior suspect materials potentially impacted by the project. Use asbestos inspectors currently certified by NYSDOL/USEPA and asbestos investigators certified by NYC DEP, when applicable.
- AHERA Standards for bulk sampling to be used for renovation/demolition asbestos surveys.
- Inspector may utilize information within existing building surveys/inspections as a starting point for their inspection. If any additional materials, or materials not analyzed using current approved laboratory analysis methodology are observed within the impacted area, the inspector shall take measures necessary to properly assess and identify the materials, performing additional testing where necessary.
- If the scope of work changes during the course of the project, a revised survey is required to address areas not previously included.
- The only way to know for sure that a newly installed material is non-ACM is through appropriate bulk sampling and analyses. Since materials manufactured today may still contain ACM, to document the suspect material is non-ACM, an inspector may utilize acceptable manufacturer information including a safety data sheet (SDS) indicating any asbestos content for the suspect material, along with a letter from the manufacturer, and the letter must document the asbestos content ($\leq 1\%$) in the suspect material. As per the EPA, the manufacturer must also document that asbestos content was determined by bulk sampling and PLM analysis of the material consistent with the requirements of EPA 40 CFR 61 & 40 CFR 763. This specific documentation must be included in the survey report. In lieu of acceptable documentation, only bulk sampling results from a newly installed material will be acceptable to show that a material does not contain detectable asbestos above the regulatory limit.
- Non-friable Organically Bound materials (NOBs) e.g. floor tile, roofing materials, mastics, etc.: All NOB PLM samples from each homogeneous material must be analyzed by NOB TEM analysis to confirm as non-ACM.
- Ceiling Tiles with cellulose – All ceiling tile with cellulose material samples must be analyzed using NOB TEM analyses to confirm as non-ACM .
- Existing materials with Vermiculite (FP, plasters, etc.) – See [Information on Vermiculite and Asbestos](#) regarding current interpretation and DASNY policy.

	<p>Office of Construction Code Compliance Department</p>	<p>Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021</p>
---	--	--


- Testing documentation must contain final lab reports that are reviewed and signed as well as properly completed chain of custody documentation.
- Allow for analysis and report turnaround time. Plan ahead; fast turnaround time will incur premium cost.
- Provide a complete and accurate scope of work to the environmental consultant to get an accurate survey and no change orders. Changes in scope requires additional input from inspection firm regarding impact to potential additional ACMs. Additional bulk sampling/analyses and revised survey report may be necessary. The environmental consultant must be provided with a complete set of the 100% submission plans in order to finalize the survey report.
- Scope of work changes via change orders or bulletins required during the construction phase may require an additional survey if “new” areas/building systems are added to the contract which were not part of the original design.
- Report must provide a discussion of materials that are considered non-suspect in the project areas. Similarly, materials that were not sampled and are assumed as ACM shall be listed along with an explanation for not performing testing (i.e. safety or accessibility factors). All limitations of the survey (i.e. accessibility, live electric, etc.) must be identified and discussed.
- Report shall contain a general discussion of the project areas including, but not limited to: construction date(s), number of floors, area in square footage, occupancy status, and general summary of floor, wall and ceiling finishes / systems.
- Report shall contain break out of trace asbestos materials, providing a discussion of trace asbestos definition, applicable limited OSHA requirements, and list of trace materials with associated quantities (owner may elect to treat as ACM) identified by the analyses.
- Report shall include appendices with photographs (with detail descriptions) of suspect materials, material conditions, observed hazards or specific field conditions encountered

Design

- Use the most recent revision of the [DASNY Standard Asbestos Removal Specification](#) available on the DASNY website under Tools & Forms / Design Resources / DASNY’s Standard Specifications.

Additional environmental consultant concerns

- It is recommended that consideration be given to utilization of DASNY’s Asbestos Term Consultants, who are familiar with DASNY’s procedures and for whom rates and term contracts have been established.
- Only use firms identified as “Design Firms” for design work.

	<p>Office of Construction Code Compliance Department</p>	<p>Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021</p>
---	--	--

- Obtaining an environmental consultant to do design who did not perform the inspection / survey will require additional effort and associated costs, including site visit, review of previous testing, and potential contamination assessment for ACM debris. Additional testing with associated costs to comply with current regulatory analytical methods (i.e. New York State Department of Health Environmental Laboratory Approval Program [NYSDOH ELAP], US Environmental Protection Agency [US EPA]) may also be necessary.
- Design Resources. Specifications include but are not limited to: CUNY, Upstate (NYSDOL), Minor, Office for People With Development Disabilities’ (OPWDD’s) Community Minor Maintenance (CMM) Program, and New York City asbestos abatement projects.


B. PCB CAULK/SEALANT & GLAZING COMPOUND

Survey

- Interior/exterior caulk/sealant and glazing compounds impacted by the project must be sampled for PCBs in buildings/structures constructed before 1980.
- Follow the [Caulk Sampling & Analysis Guide for PCBs](#).
- Perform concurrent survey/inspection for PCB caulk/sealant and glazing compounds with asbestos to minimize cost. Include section in asbestos survey report to address the suspect PCB materials and testing performed along with sample results. Include listing of all areas via drawings that identify the hazardous pcb caulk/sealant and glazing compounds, as well as PCB bulk sample locations. Also, include all laboratory results, chain of custodies and valid certifications for the inspector and laboratory performing the analyses.
- Laboratory analysis time is longer than ACM, and is typically 2 weeks.
- Cost is typically \$60-100 per sample, but lab can composite the 3 samples (many labs charge a nominal additional compositing fee).

Design

- If caulks/sealant or glazing compounds contain hazardous levels of PCBs, use the most recent version of the [DASNY Standard Specification Non-Liquid PCB Material Removal](#) available on the DASNY website under Tools & Forms / Design Resources / DASNY’s Standard Specifications.
- Handling and disposal of PCBs (≥50 ppm) in New York State is as Hazardous Waste.
- PCB caulk/sealant or glazing compound can be removed from building materials before their non-regulated disposal thereby reducing disposal cost. However, EPA requires use of NACE #2 visual standard for inspection of cleanliness of non-porous (metal) surfaces, which requires bare metal results similar to sandblasting.

 DASNY	Office of Construction Code Compliance Department	Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021
--	--	--

- If project impacts to soil adjacent to structure with PCB caulk/sealant or glazing compound, in-situ soil sampling shall be necessary to determine waste disposal and PPE requirements. Such sampling shall be performed by the Environmental Consultant.
- Contractor and environmental consultant compliance with the generator’s hazardous waste compliance program.
- Contractor and environmental consultant Hazardous Waste management training and certification consistent with generator and statutory requirements.
- On-site waste storage shall be to be compliant with generator and statutory requirements.
- If both ACM and PCBs are present in a material, the DASNY asbestos spec must be used for removal, and the DASNY non-liquid PCB spec for disposal. Waste disposal documentation accompanying the shipment shall consist of a complete waste profile, WSR, Idr form **and** a New York State Uniform Hazardous Waste Manifest (NYS UHWM). A fully completed **copy** of the NYS UHWM shall be provided to Code Compliance and the Generator (original required to be sent to appropriate state).


C. UNIVERSAL & HAZARDOUS WASTES

Survey/Inventory

- Obtain inventory of Universal Wastes to be generated by project (i.e. Fluorescent Lamps, Mercury Switches/thermostats, etc.). Note: New DEC recycling law in effect requires removed mercury thermostats and mercury containing equipment to be recycled.
- Obtain inventory of Hazardous Materials/Wastes to be generated by project (i.e. PCB Light Ballasts, contaminated soil that exceeds hazardous waste criteria).
- Perform universal and hazardous waste inventory concurrent with asbestos inspection to minimize cost. Include section in asbestos survey report to address the inventory results. Include listing of all areas that identify the universal and hazardous wastes that will be generated by the project.

Design

- Use the most recent versions of the [DASNY Standard Specification Identification and Disposal of Hazardous Waste](#) and / or [Removal and Disposal of Universal Waste and Fluorescent Lamps](#) available on the DASNY website under Tools & Forms / Design Resources/DASNY’s Standard Specifications.
- Universal and Hazardous Wastes must be labeled and handled per DASNY Universal and Hazardous Waste Specs and DEC Regs.
- Tanks and spills from tanks can become hazardous waste based on soil or liquid waste analyses. See Petroleum Contamination below.


	<p>Office of Construction Code Compliance Department</p>	<p>Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021</p>
---	--	---

- Obtain site-specific information from SEQR Report. This may need additional data for disposal facilities. OBTAIN IT WELL AHEAD OF TIME- to avoid BIG change orders.
- Consult with QA/Code Compliance Unit to assess handling and disposal options early in design.
- Contractor and environmental consultant compliance with the generator’s hazardous waste compliance program.
- Contractor and environmental consultant Hazardous Waste management training and certification consistent with generator and statutory requirements.
- On-site waste storage shall be to be compliant with generator and statutory requirements.
- Waste disposal documentation accompanying the hazardous waste shipment shall consist of a complete waste profile, ldr form **and** a New York State Uniform Hazardous Waste Manifest (NYS UHWM). A fully completed **copy** of the NYS UHWM shall be provided to Code Compliance and the Generator (original required to be sent to appropriate state).

D. LEAD IN PAINTS/COATINGS

Survey


- Any renovation or demolition activity for an existing building or structure shall have a survey performed to identify lead in paints/coatings in the project areas. Include a section in the hazardous materials report to address lead in paint/coating survey of areas/surfaces impacted by the project. The lead section in the report shall contain a general discussion of the buildings/structures and areas impacted by the project, including approximate construction dates, general floor (i.e. wood, concrete, ceramic, resilient flooring or mix as appropriate), wall and ceiling finishes. Include statement indicating a suspended ceiling tile system if present and a description of exterior painted/coated components. Since the construction activities change during the design progression, all painted/coated surfaces in the room/area shall be addressed. Such surfaces include but are not limited to: floors, walls, ceilings, doors, radiators, windows, and structural steel. Descriptions of each surface shall identify:
 - Component (i.e. floor, wall, ceiling, door)
 - Substrate (i.e. brick, concrete, drywall, metal, plaster, wood)
 - Condition of the paint/coating (i.e. intact/good, delaminating, etc. and extent of damage)
 - Quantity of LCP including LBP
 - Location of surfaces (i.e. interior, exterior, in wall, in chase, etc.)
- Perform lead survey concurrent with asbestos inspection to minimize cost.

	Office of Construction Code Compliance Department	Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021
---	--	--

- Paint chip samples collected shall be transmitted to the laboratory under proper chain of custody procedures. Such chain of custody documentation shall include the paint color, component, substrate, and sample location. The chain of custody shall be signed and dated by the sampler.
- Testing of paint chip samples shall be performed by a NYS DOH ELAP certified and US EPA National Lead Laboratory Accredited laboratory.
- If XRF testing is method utilized, identify name of device and manufacturer in report as well as precautions taken to avoid inadvertent exposure of building occupants in rooms adjoining XRF testing areas (i.e. floor vacated, survey performed after hours, etc.). Provide summary of testing in report as well as documentation of XRF measurements in appendix including the pre- and post-calibration measurements in accordance with the Performance Characteristic Sheets (PCS) for the device. Include valid US EPA lead certification documentation for the inspector and company in the appendix as well as documentation of inspector training specific to the XRF device utilized.
- Obtain a lead inspection to meet HUD Standards, if required (i.e. child-occupied facility). If an inspection is performed, the inspector shall be a certified lead inspector or risk assessor (risk assessor includes inspector prerequisites) by US EPA.

Design

- If lead abatement is required per HUD, or RRP regulations apply to child occupied facility, use the most recent version of the [DASNY Standard Lead Abatement Specification](#) available on the DASNY website under Tools & Forms / Design Resources / DASNY's Standard Specifications. If lead based coating impact as per OSHA regulations, include pertinent notes on drawings and use most recent version of the [DASNY Standard OSHA Lead Disturbance Specification](#) and [DASNY Standard Specification Identification and Disposal of Hazardous Waste](#) for handling, waste containerization, on-site storage, transport and disposal of all generated hazardous waste.
- Lead contaminated waste or soil must be tested for disposal using the TCLP test.
- If non-hazardous, material can be disposed as any C&D Debris, at permitted/ approved facility.
- If hazardous waste, see the Hazardous Waste Spec and handle materials as required.
- Contractor and environmental consultant compliance with the generator's hazardous waste compliance program.
- Contractor and environmental consultant Hazardous Waste management training and certification consistent with generator and statutory requirements.
- On-site waste storage shall be to be compliant with generator and statutory requirements.

	<p>Office of Construction Code Compliance Department</p>	<p>Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021</p>
---	--	---

- Waste disposal documentation accompanying the hazardous waste shipment shall consist of a complete waste profile, ldr form **and** a New York State Uniform Hazardous Waste Manifest (NYS UHWM). A fully completed **copy** of the NYS UHWM shall be provided to Code Compliance and the Generator (original required to be sent to appropriate state).

E. MOLD

Assessment/Survey


- Perform a visual assessment for apparent mold growth (AMG) and suspected mold contaminated surfaces and materials concurrent with asbestos inspection to minimize cost. Visual assessment shall be performed by a NYSDOL certified Mold Assessor at all interior project impacted areas.
- Identify areas of water intrusion and identify corrective measures to be undertaken to address water intrusion issues.
- Air samples are generally not used as part of a survey, since mold spores are commonly present in all air samples, indoor or outdoor, and are generally not conclusive. A visual assessment along with moisture content determination is sufficient, unless client requests laboratory analyses.
- Tape press, swabs, and other samples can be used if necessary to rule out molds or determine if materials are contaminated, if visual evidence is not conclusive.
- Determine if a full mold remediation project is required, or if mold impacted building materials will be removed during an asbestos abatement project.
- Include section in asbestos survey report to address the mold assessment results. Include listing of all areas via drawings that identify the areas of mold, quantities, type of porous building material, associated building material water content, damage conditions and areas of water intrusion. Also, include any laboratory results, chain of custodies and valid certifications for the assessor and laboratory performing the analyses.

Design/Remediation Plan

- Certified Mold Assessor shall use the [DASNY Standard Mold Remediation Specification](#).

F. PETROLEUM CONTAMINATION

- Determine if there are known petroleum tanks or spills that will be impacted by the scope of work.
- If tanks and/or spills are known to be present, review the SEQR reports or investigations performed to characterize the site.
- Use DEC Petroleum-Contaminated Soil Guidance.
- Consult with QA/Code compliance if there is an unexpected discovery of tanks or suspected contamination. DEC requires a 2-hour notification to the

 DASNY	Office of Construction Code Compliance Department	Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021
--	--	--

Spills Unit in the event of any evidence of releases, spills, impacted soil and / or groundwater, etc. DEC databases can be reviewed to determine if contamination is from a prior, known spill.

- Incidentally discovered petroleum contamination in many cases can be returned to the excavation, or re-used on-site. Call QA/Code Compliance to assess options.
- Remedial and/or disposal options are affected by current DEC knowledge of a spill and its location. Different DEC Regions have different sensitivities and policies.
- Follow the [Guidance for Contaminated or Impacted Soils](#).

G. MERCURY CONTAINING POURED FLOORS


Survey

- Determine if there are interior poured floors at assembly areas of the building that are suspect for mercury contamination.
- Coordinate with facility / owner representatives prior to any destructive testing of flooring. Discussion shall include but not be limited to: removal of non-certified building occupants throughout the vicinity of the assessment activities; planned number of core samples to be collected; location of core samples; and repair of core locations.
- Consultant shall ensure that no uncertified personnel are present for the duration of the assessment activities. Environmental consultant shall utilize a mercury vapor analyzer / detector with continuous read capability throughout the assessment / sampling activities. Environmental consultant shall utilize appropriate personal protective equipment, including proper respiratory protection.
- The report summary shall contain a discussion and documentation of the mercury vapor readings during the assessment / sampling activities as well as a summary of the assessment activities, sampling performed, sample location plans, analytical method and results with chain of custody documentation for samples collected as well as conclusions.

POTENTIAL ISSUES TO BE AWARE OF DURING CONSTRUCTION

H. SMOKE DETECTORS

1. Can be disposed of as part of normal municipal solid waste stream. Do not accumulate units on worksite, puncture or dismantle units prior to disposal.

 DASNY	Office of Construction Code Compliance Department	Hazardous Substances/Materials Encountered During Construction/Demolition 03/01/2021
--	--	---

I. HIGH PRESSURE SPRAY POLYURETHANE FOAM (SPF)

1. Negative pressurized containment required. Negative pressure HEPA ventilation required if exhaust location accessible. PPE required for workers including use of supplied air respirators during application. Installer responsible for securing components and equipment on-site. Installer responsible for disposal of waste generated as part of application.