



| | | |
|---|--|---|
|  | Office of Construction Quality Assurance Code Compliance Unit | Caulk/Sealant and Glazing Compound Sampling & Analysis Guide for PCBs 03/17/2020 |
|---|--|---|

Polychlorinated biphenyls (PCBs) are synthetic organic chemical compounds (aromatic hydrocarbons) produced by substituting chlorine atoms for the hydrogen atoms on a biphenyl molecule. PCBs have no known taste or smell, and range in consistency from an oil to a waxy solid.

- A. Consultant shall review the site history, including building age, asbestos project files and discussions with the facility, DASNY Project Management and Code Compliance, for renovations including removal and repair of caulks/sealants and glazing compounds. Sampling of caulk/sealant and glazing compound is not required for buildings/structures built after 1980.
- B. Consultant shall inspect the project area to determine the location, quantity, condition and accessibility of caulks/sealants and glazing compounds. At a minimum, individuals performing the inspection shall be certified NYS DOL Asbestos Inspectors.
- C. Consultant shall note the floor of the building, room number, location (e.g., interior, exterior, window frame, joint, etc.), color and use (e.g., caulk or glazing compound) of each caulk/sealant and glazing compound homogeneous material.
- D. Exterior caulk/sealant and glazing compounds to be tested include but are not limited to: door and window caulk, window pane glazing compound or sealant, building construction / expansion joint, roof parapet and coping caulk, soffit caulk, building penetration caulks, louver caulk, and concrete sidewalk caulk or other miscellaneous application.
- E. Interior caulk/sealant and glazing compounds to be tested include but are not limited to: caulks at masonry openings, doors, windows, louvers, air handler / ducting seams, fire stop caulking, and metal ducting penetrations to the exterior or other miscellaneous application.
- F. Consultant shall provide DASNY with representative PCB analytic results for each caulk, sealant and glazing compound. Representative samples shall be collected and analyzed as follows:
 1. Identity of each homogeneous material based upon:
 - a. Floor and section of the building (e.g. west wing, 6th floor)
 - b. Color of the caulk/sealant or glazing compound
 - c. Location (e.g., interior, exterior, window frame, etc.)
 - d. Age of building (i.e., sections of buildings constructed at different times must be treated as separate homogeneous materials).

| | | |
|---|--|---|
|  | Office of Construction Quality Assurance Code Compliance Unit | Caulk/Sealant and Glazing Compound Sampling & Analysis Guide for PCBs 03/17/2020 |
|---|--|---|

- e. Use (caulk, sealant or glazing compound)
 - f. If an area has been repaired or renovated, it must be treated as a separate homogeneous material.
- G. The Consultant shall collect three (3) sub-samples of each homogeneous material in order to form a composite sample of approximately 10 grams. Each sub-sample shall be placed in a separate container to submit to the laboratory. For renovation projects that impact multiple floors and/or wings of a building, the inspector shall collect enough bulk samples of enough homogeneous areas to have an accurate representation of the building materials.
- H. The Laboratory shall create one (1) composite sample of each homogeneous material from equal mass portions ($\pm 5\%$) of the three (3) sub-samples for extraction via an EPA method such as methods 3540, 3541 or 3550, and analysis via EPA Method 8082A. Results for Arochlors listed below will be reported based on a PCB detection limit of 1 part per million (ppm).
- | | | |
|-------------------|-------------------|-------------------|
| (1) Arochlor 1016 | (4) Arochlor 1242 | (7) Arochlor 1260 |
| (2) Arochlor 1221 | (5) Arochlor 1248 | (8) Arochlor 1262 |
| (3) Arochlor 1232 | (6) Arochlor 1254 | (9) Arochlor 1268 |
- I. The Consultant shall report the analytic results and characterization of each homogenous material based upon the analytical results and EPA’s regulatory threshold (50 ppm). Reports must contain:
- a. Cover Sheet with all project specific information
 - b. Detailed written summary
 - c. Complete Summary table describing each material sampled, sample number, floor and location, total PCB concentration in ppm, comments)
 - d. Laboratory analytical reports
 - e. Chain of custody documents
 - f. Laboratory ELAP certifications and NVLAP certification if necessary.
 - g. Bulk Sample location sketches
 - h. Photographs with written descriptions and ID numbers.
- J. If the laboratory report indicates an elevated dilution factor at or above 50 ppm, Consultant shall contact lab and confirm the dilution cause was not due to PCBs. Elevated dilution factors and discussion with lab shall be discussed in the report.