

Testing for Polychlorinated Biphenyls (PCBs) in Vermont Schools

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Services / Expertise

Polychlorinated Biphenyl Air and Building Material Sampling
Vermont DEC Work Plan
TSCA

Markets

State Government

Project Location

Statewide, Vermont

Date Completed

2022-Present

Project Owner

Vermont Department of Environmental Conservation

Project ID#

Various

Project Manager

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Project Team

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Subcontractors

EurofinsTestamerica
Alpha Analytical
Phoenix Environmental Laboratories
Pace Analytical
O'Reilly, Talbot, & Okun
Clay Point Associates, Inc.



Suspected PCB-containing building materials in schools: Left – window caulk, Upper Right – covebase adhesive and green paint, Lower Right – Fluorescent light ballast and cover.

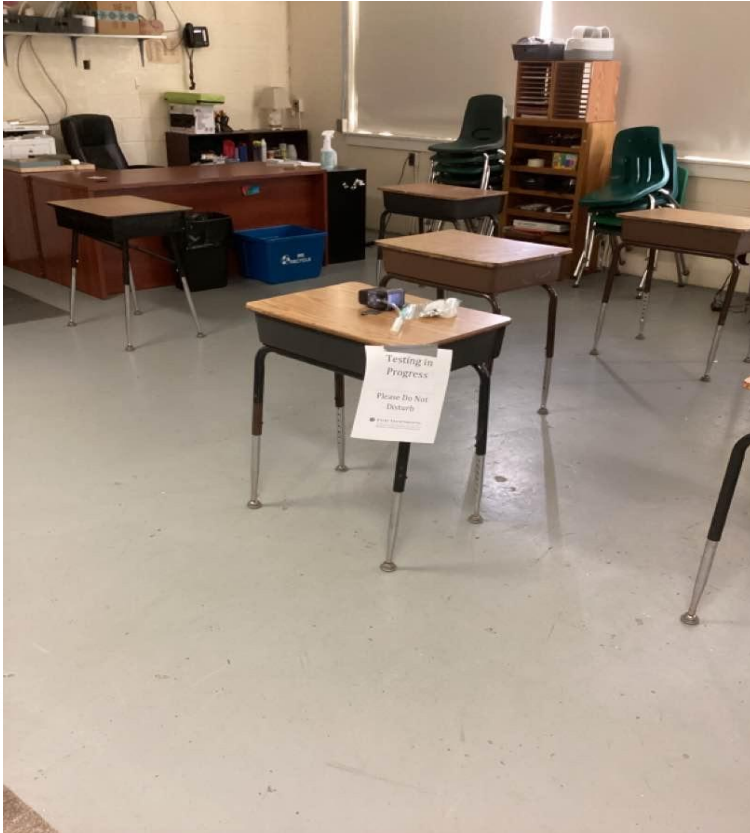
WIDESPREAD POLYCHLORINATED BIPHENYL (PCB) contamination was discovered in Burlington High School in 2018 – 2020 prompting the school to close and relocate into a vacant department store. PCBs were commonly used in building materials, such as paint, adhesives, caulking, and fluorescent light ballasts, in school buildings constructed between 1950 and 1979, when the manufacture and use of PCBs was banned in the United States. This unfortunate situation for the Burlington, Vermont community prompted the Vermont Departments of Environmental Conservation (VT DEC) and Health (DOH) to establish School Action Limits (SALs) for concentrations of PCBs in school air based on pre-kindergarten, kindergarten through sixth grade, and seventh grade to adult age cohorts. In 2021, the Vermont legislature passed a law (Act 74), requiring all Vermont schools constructed or renovated before 1980 to test indoor air for PCBs before July 2024, which has since been extended to July 2025.

Stone Environmental, Inc. (Stone) has been retained by the Vermont Department of Environmental Conservation as one of six environmental consultants tasked with coordinating PCB air sampling in Vermont schools. We have been assigned sixty-three schools and began this work in the summer of 2022. PCB air testing in schools requires preparing work plans and conducting building inventories for potential PCB-containing building materials. The inventory results are used to develop and implement an indoor air sampling work plan. Air samples are collected over a 24-hour period using calibrated sample pumps and polyurethane foam (PUF) cartridges and analyzed by one of our four contract laboratories for PCBs as Aroclors by EPA

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Method TO-10. We report results to the VT DEC and write sampling reports that summarize sampling methods, discussion and interpretation of data, and recommendations for additional air and/or building material sampling, if warranted. Assessments of PCBs in school buildings requires coordination and clear communication with school administrations and State agencies (VT DEC and DOH). We are scheduled to complete air sampling at two more schools by the end of 2022 and fifteen schools in 2023.



Typical air sample pump and cartridge for PCB air testing in schools.