



RESPONDING TO PCB CONTAMINATION IN VERMONT SCHOOLS

SCHOOL OPERATIONS GUIDANCE

December 16, 2022

Issued by the Vermont Agency of Education in support of the State of Vermont's PCB testing, mitigation and remediation program pursuant to Act 74 of 2021

LEADERSHIP

SUPPORT

OVERSIGHT

Purpose

This guidance is intended to help Vermont Supervisory Unions (SU/SDs) and independent schools work through the operational implications of polychlorinated biphenyl (PCB) testing, mitigation, and remediation. This document is drafted out of the leadership function of Agency of Education (AOE)'s [purpose statement](#) to help Vermont's school systems navigate the State of Vermont's (State's) PCB testing program. A self-selected representative group of Vermont superintendents assisted with the preparation of this guidance.

This guidance does not have the force of law, nor does it replace regulation, technical assistance, or guidance provided by the Vermont Departments of Environmental Conservation (DEC) and Health (Health).

This guidance also does not contain a solution to the problem of funding the permanent removal, or remediation, of PCBs. The Agencies of Education and Natural Resources (parent agency of DEC) will provide a proposal to the Vermont General Assembly in January of 2023, with recommendations for how remediation should be funded. A version of those recommendations, or subsequent action by the legislature may be reflected in a future release of this guidance.

Goals of this Guidance

The State of Vermont is providing School Operations Guidance for PCB contamination with the goal of:

- Supporting SU/SDs and independent schools in adopting a **proactive approach** to PCB testing and potential mitigation and remediation, rather than responding reactively.
- Providing resources for SU/SD leadership to **anticipate and prepare** for potential detections of PCBs.
- Supporting **good and clear** communication between the state and SU/SDs and independent schools with parents and families, staff, and students.

Process

This document will be updated as needed in response to new information, developments, and lessons learned from the experiences of SU/SDs and independent schools responding to PCB contamination. Updates to this document will be marked in [green](#).

Background

Vermont's PCB testing program was created in Act 74 of 2021. This act, as amended by Act 166 of 2022, requires all Vermont schools to test for PCBs before July 1, 2025. The DEC is responsible for administering the testing program, with technical assistance from Health. DEC, Health and the AOE are working collaboratively to structure a testing program that is as straightforward as possible to administer.

In Act 178 of 2022, the General Assembly reserved \$32 million in Education Fund dollars to support the PCB program. As of writing, only \$2.5 million of those funds have been approved for use, to support the purchase and prepositioning of mitigation supplies (such as filters), and to provide cost-sharing to schools to conduct additional investigation, testing and mitigation

strategies. Additional legislative activity on school PCB funding is anticipated; the Agencies of Education and Natural Resources (parent agency of DEC) will provide a proposal to the Vermont General Assembly in January of 2023, with recommendations on how mitigation and remediation should be funded.

Education Recovery Context

Vermont's School PCB testing program cannot be conducted blind to the current educational context. The impacts of the pandemic on student learning, mental health, and wellbeing present significant and lasting challenges, indeed they are the most urgent and critical problem facing Vermont schools. With this context in mind, keeping students in school, engaged, and learning in a supportive environment is the fundamental goal.

Vermont's School PCB testing program is designed with this goal in mind. Health and DEC recommendations, technical assistance documents, decision support matrices, and other resources and guidance are designed to support and allow for students to safely remain in class and learning in person to the greatest extent possible while reducing PCBs in indoor air.

Definitions

Several terms are used throughout this document.

- **School Action Level (SAL)** – If PCB levels in indoor air are at or exceed this value for a particular grade span, the SU/SD will be required to select a Temporary Occupancy option and respond to requirements from DEC. These levels were [developed by Health](#) and [adopted by DEC](#).
- **Immediate Action Level (IAL)** – Three times the SAL for a grade span. If PCB levels in indoor air are at or exceed this value for a particular grade span, the room or space should not be used until mitigation measures are in place to reduce the amount of PCBs in indoor air.
- **Temporary Occupancy Options** – If at least one location in the school is at or above the SAL, the SU/SD may select one of three occupancy options [developed by Health](#) to decrease exposure to PCBs in indoor air. These occupancy options are short-term recommendations while the school conducts additional work to address the source(s) of PCBs.
- **Remediation** – Activities resulting in the *permanent* removal of sources of PCB contamination. This may also include removal of materials that have become impregnated with PCBs (e.g., cement block or wood framing around windows, or ceilings, concrete under tile flooring, or incidental materials).
- **Mitigation** – Activities undertaken to reduce the level of PCBs in the indoor air on a *temporary* basis. These may include, among other measures: wet washing, cleaning of Heating Ventilation and Air Conditioning (HVAC) systems or replacement of filters, increasing clean air flow, and the encapsulation of sources of PCBs with specialized paint or other barriers.

Process

Vermont schools that were built or renovated before 1980 are required to test indoor air for PCBs. This section outlines both the process for testing, and for identifying temporary occupancy, mitigation and remediation options should PCB contamination be found. If PCB

results are below but close to the SAL, DEC may require the SU/SD to complete additional monitoring.

Please Note: This is an iterative, not a linear, process. Depending on the specific situation in a school, multiple rounds of indoor air quality or materials testing may be required, and DEC may recommend more than one mitigation measure to reduce the level of PCBs in indoor air. DEC and Health will make the final determination of when indoor air quality levels no longer require action on the part of the school and whether removal of sources of PCB contamination has been successfully completed. SU/SDs and schools can expect to receive a letter from DEC and Health to that effect to share with their community.

The following broad steps apply for testing, response, mitigation, and remediation processes, if PCB contamination is found at or above the SAL:

- Pre-sampling Inventory
- Indoor Air Quality (IAQ) Testing
- Indoor Air Results
- Determination of Temporary Occupancy Options by school and reported to DEC
- Results posted on DEC website (10 days after SU/SD receives initial results letter)
- DEC direct next mitigation and source investigation steps
- Contract with consultant
- Development and Approval of characterization Workplan
- SU/SD may submit application for PCB Investigation and Mitigation Grant (applicant may be amended if eligible costs increase)
- Consultant conducts testing of materials to determine source of PCB contamination
- Material Result
- Environmental Corrective Action Alternatives developed by consultant and submitted to DEC and Environmental Protection Agency (EPA)
- Corrective Action Plan developed by consultant and approved by DEC and EPA
- Implement Corrective Action Plan to remediate PCBs
- Retesting
- Corrective Action Construction Completion Report developed by consultant
- Final Approval by DEC/EPA

Initial Indoor Air Quality and Community Notification Process

The testing and notification process can take up to 16 weeks and consists of the following steps:

1. The state contracted with environmental consultants to conduct a pre-sampling inventory of the school building for potential PCB sources. Consultants assign rooms to groups based on the presence of similar building materials, construction, and/or renovation dates.
2. The school notifies their community when the testing will occur. Pre-testing notification [template letters](#) are available online.
3. The consultant conducts the indoor air sampling and sends the samples to a laboratory for analysis.
4. Staff from Health and DEC review the results and provide the school with a letter that lists the results and next steps. The letter will be sent approximately two to four weeks after laboratory results have been received allowing for Health and DEC to review the data.

5. Staff from Health, DEC, and AOE will meet with the school to review the results letter, discuss necessary actions, and to answer any questions.
6. If additional actions are necessary, the SU/SD should contract with a consultant (which may be the same one that completed the Indoor Air Quality testing) to create a workplan for materials investigation, mitigation activities and a Corrective Action Plan. This work must be approved by DEC. SU/SDs are able to [leverage state contracts with consulting firms](#).
7. If the test results are at or above the School Action Levels the school will choose a temporary occupancy solution until permanent remediation can occur. The school will notify the community of the results and their chosen action, as needed. Result [template letters](#) are available online.
8. The DEC will post the results of IAQ sampling on its [PCBs in Schools website](#), along with the results letter 10 days after the school receives its IAQ results.

Selecting a Temporary Occupancy Option

If PCB contamination is found in a school at or above the **SAL**, the SU/SD will receive a letter from DEC and Health explaining the results and next steps of selecting a temporary occupancy option. This letter will outline three **temporary occupancy options** for schools to consider when deciding how best to respond. A table provided with the letter will outline these options for each space.

Please Note: All occupancy options are supported by the state.

All occupancy options exclude the use of spaces (or groups of rooms/spaces if one is over the IAL) where PCB levels are at or above the **IAL**.

For reference and planning purposes, these [options](#) are:

- Under **Option 1**, SU/SDs and independent schools can use a limited set of spaces for a specific number of hours per week and need to address the PCB sources within one year.
- Under **Option 2** and **Option 3**, SU/SDs and independent schools can use a larger set of spaces for a larger number of hours, but, due to that heightened health risk, SU/SDs and independent schools will need to begin mitigation of PCB sources within six weeks. The first step to begin mitigation is to hire a consultant, so SU/SDs and independent schools will need to hire a consultant within six weeks of choosing an occupancy option.

Communications

Communications with school communities are a critical part of the testing and response process. DEC, in coordination with AOE and Health, has developed pre- and post-testing notification letters for dissemination to families, as well as a range of technical documents that are available for consultation as you prepare communications to your families. State staff are available at any time to talk to families, school staff and community members to explain and support the SU/SD's decisions regarding temporary occupancy options and to discuss any concerns.

Risk communication is challenging under any circumstances, and the complexities of school PCB contamination mean that family and community expectations may differ from what is strictly allowable under Health and DEC guidance. The State is aware that these dynamics will drive local decision-making.

Due to the complexity of both PCBs and their health impacts, as well as the scale and scope of the school testing program, many of the State's communications with SU/SDs and independent schools on the testing program will necessarily be of a technical nature. DEC, AOE and Health will do their best to ensure that these documents are as clear and easy to understand as possible, both to aid SU/SDs and independent schools in their decision-making, and to support good communication with parents and families. The State will also do its best to provide additional parent-focused resources to help families navigate and understand the programs. Feedback on what kinds of resources would be most helpful for families and school communities is particularly welcomed.

Just as the structure, scale and scope of SU/SDs and independent schools vary throughout the state, communication needs will differ on a district-by-district basis. AOE, DEC and Health communications staff are available to assist and strategize with SU/SDs and independent schools. SU/SDs and independent schools will be afforded this option when PCB contamination is identified in one or more schools, in addition to technical and decision support conversations with AOE, DEC and Health staff.

Considerations for Communications

When planning for potential communications about PCB testing, particularly for potential PCB contamination scenarios, the following considerations may be helpful:

- **Managing Parent and Family, Staff, and Student Expectations:** An important part of risk communications is ensuring families understand the basic problem; why is testing occurring, why (and how) PCBs are harmful, both to children and adults, and what the overall process for communications will be. These communications can be prepared in advance as a matter of best practice. SU/SDs and independent schools can also prepare students, staff and families for a potential result of PCB contamination by sharing information about possible approaches to **temporary occupancy, alternative spaces, mitigation** and **remediation** in advance. This will help communities understand the potential approaches, and the risks involved, and be prepared for a situation that might impact their child.
- **Proactive Communication:** It is recommended that SU/SDs and independent schools provide adequate communication about PCB testing in advance of the testing taking place. This communication should include, if possible, information about potential steps the district will take to respond to positive results. DEC has created [template letters](#) as well as a range of technical resources to assist SU/SDs and independent schools in crafting these communications. For example, SU/SDs and independent schools should plan to communicate their occupancy options and plan to address PCBs prior to the posting of indoor air quality testing results on the DEC website. This will generally take place 10 days after the SU/SD receives their results letter.
- **Results Communications:** DEC has developed (and translated) several [template letters](#) for sharing school PCB testing results with school communities.
- **Occupancy & Remediation Communications:** It is recommended that SU/SDs and independent schools provide communication about temporary occupancy, mitigation and remediation decisions as soon as possible, so that families understand what to expect, and what approaches the district will take to preserve student learning and keep students and staff safe and healthy. These communications will be greatly aided by foreshadowing of potential approaches (if practicable), as noted above. It is also recommended that SU/SDs and independent schools share information about tentative

timelines, to the extent known, so that families can plan. **PLEASE NOTE:** As timelines for mitigation and remediation in particular are dependent on the availability of consultants/contractors in a still-challenging marketplace for labor and skilled construction / contracting, it is strongly recommended that any timelines be appropriately marked as tentative as they will likely be extended.

Operational Considerations

Decisions made by SU/SDs and independent schools about how to respond to an incidence of PCB contamination in one or more schools must be aligned with DEC and Health Department guidance intended to keep students and staff safe, and learning, to the greatest extent possible, in the classroom. Within the scope of that imperative, SU/SDs and independent schools have options for decision-making that best supports the school and district's needs.

This section summarizes several considerations that should be front of mind for SU/SDs and independent schools when making these common but important decisions.

Please note that, per Health Department and DEC guidance, students and staff should not occupy spaces above the **Immediate Action Level (IAL)**. If testing indicates a result above this level, you must take immediate steps to take those space(s) out of service until subsequent activities result in indoor air quality testing that demonstrates a level below the IAL.

Reminder: Once a school has a space(s) close to, at, or above the SAL or IAL the SU/SD must operate within the regulatory framework of the DEC and EPA. You should undertake mitigation and remediation strategies that are in DEC-approved workplans and work closely with DEC and your contracted consultant to ensure that you are complying with state and federal processes and regulations.

Availability of Alternative Spaces

In cases where PCB contamination is found in a school above the **School Action Level (SAL)**, the ability to keep students learning in school will be predominantly driven by two factors: 1) the scope and severity of the PCB contamination in school spaces, and 2) the availability of alternative spaces, either within the school or SU/SD, or in the community. These two factors will influence decisions about which **temporary occupancy option** to utilize.

For example, if a school was not able to maintain in-person learning using Options 1, 2 or 3, because they faced extensive PCB contamination and/or were not able to begin mitigation strategies immediately, they may need to move students into an alternative learning space outside of the school.

It is recommended that SU/SDs and independent schools proactively take an inventory of available spaces owned by the district or available in the community and undertake appropriate contingency planning in case use of alternative space is necessary.

Age of Students

Decisions about whether to use or not use a space during the period of **temporary occupancy** should be made based on the grade of students. The **SAL** (see above) is higher for older grades. The DEC and the Health Department will provide a table listing the results for each

group of rooms and identify whether SU/SDs and independent schools may or may not use the room for the SAL at each grade band, and under each temporary occupancy option.

Schools may decide to adjust operational patterns to make best use of available space during the period of temporary occupancy. For example, a room typically housing a PreK classroom might be used by grade 3 students on a temporary basis, if the PCB levels for that room are below the Kindergarten - grade 6 **SAL** but above the PreK **SAL**.

Keep in mind that any PCB levels above the **IAL** preclude the use of that space for a given grade span until subsequent mitigation and/or remediation activities result in indoor air quality testing that demonstrates a level below the IAL.

Alternative Scheduling

One of the important factors related to continued occupancy during remediation is cumulative time of exposure in the school *as a whole*. For example, Health Guidance may indicate that under a particular **Occupancy Option** students of a certain grade band should only be in the school a *total* of 30 hours per week. For example, under **Option 1** the Health recommendation may be to limit PreK hours in the whole school building to 30 hours per week and K-6 students to 40 hours per week.

SU/SDs and independent schools may need to, or proactively choose to, build alternative schedules and should include time spent in the school building for afterschool and extra-curricular activities in their calculations. Use of alternative schedules, in concert with other actions, may provide SU/SDs and independent schools with viable temporary occupancy options and provide extra time for mitigation and/or remediation within the framework of the DEC-approved Corrective Action Plan.

Decision Points

SU/SDs and independent schools should take note of the following considerations that apply to various decisions that they may be faced with:

- **Construction and/or facilities improvements:** If an SU/SD is about to engage in a construction project, improvement to Heating Ventilation and Air Conditioning (HVAC) improvement, or remodel (including replacing floors, windows, etc.), it is **strongly recommended that SU/SDs and independent schools contact DEC first to determine if PCB testing should take place before or after the improvement.**
- **Mitigation and Remediation:** Ultimately, sources of PCBs must be properly remediated per the DEC-approved Corrective Action plan. Short term mitigation measures may however be implemented to improve the indoor air quality below the SAL.

All activities (whether mitigation or remediation) must be in a DEC-approved workplan developed with your contracted consultant. This is critical to ensure that any costs incurred will remain eligible for potential funding and is required by the [Investigation and Remediation of Contaminated Properties Rule](#).

- Factors to consider (in order of priority), include:
 1. Impact (disruption to) on student learning, including length of disruption
 2. Cost

3. Time (if not covered in 1, above) and availability of contractors to complete work
 4. Health or Safety factors (as advised by Health)
 5. Other operational considerations (e.g., planned facilities improvements, community response, etc.)
- **Temporary occupancy options:** When choosing whether or not to pursue relocation to a temporary facility, and when choosing a facility, SU/SDs and independent schools should consider the following, in addition to factors like facility availability, suitability, and cost:
 - Prioritization of in-person learning
 - Usage of impacted school spaces by different(ly) aged students
 - Community Concerns
 - **Community Concerns:** Throughout the testing and response phases, the state, as well as state- and district-hired contractors will provide recommendations for possible courses of action, based on the dual goals of keeping students and staff safe, and keeping students learning in person. Those recommendations may or may not be in harmony with expectations and concerns about PCB testing and remediation held by the school community. While communication resources and consultation is available, it is understood (by the State) that these factors may influence what course of action is available to the district. While an SU/SD may choose to take a more conservative or health protective approach, SU/SDs and independent schools must ensure that any mitigation or remediation actions at a minimum **conform with or exceed** Health and DEC recommendations for acceptable use of the school.

Funding

The following section outlines cost responsibilities for PCB sampling, mitigation and remediation, preliminary funding for source investigation and remediation.

Overview of Cost Responsibilities

Costs for various phases of the school PCB testing program will be borne as follows:

- **Pre-sampling and Indoor Air Quality testing** – DEC
- **Sampling to identify building material sources (workplan, sampling, final report)** - 80/20 cost share for DEC-approved activities between AOE (80%) and SU/SD (20%)
- **Environmental Corrective Action Alternatives (ECAA) report and any pilot testing** - 80/20 cost share for DEC-approved activities between AOE (80%) and SU/SD (20%)
- **Corrective Action Plan** development 80/20 cost share for DEC-approved activities between AOE (80%) and SU/SD (20%)
- **Mitigation** activities (excluding supplies provided by the state) - 80/20 cost share for DEC-approved activities between AOE (80%) and SU/SD (20%)
- **Quarterly Indoor Air sampling** -- 80/20 cost share for DEC-approved activities between AOE (80%) and SU/SD (20%)
- **Mitigation** supplies provided by the state – AOE/DEC
- **Remediation** of PCBs, final reporting – SU/SD (until further legislative action in 2023)
- **Additional IAQ testing following remediation** – SU/SD (until further legislative action in 2023)

Source Investigation and Mitigation Funding

On October 24, 2022, the Emergency Board unanimously approved the use of \$2.5 million in funds proposed in the joint memo submitted by the Agency of Education and Agency of Natural Resources.

The Emergency Board approved the following use of funds:

- Allow the State to purchase and preposition mitigation supplies such as granular activated carbon (GAC) filters which can filter PCBs from air. When necessary and appropriate, these supplies will be made immediately available to schools with PCB concentrations that exceed the action levels which therefore, by definition, represent a significant health threat. The State will procure these supplies per the DEC-approved workplan at no cost to the school.
- Provide an 80/20 cost-share to SU/SDs and independent schools and independent schools to support costs associated with the work of their contracted consultant to conduct additional investigation and required materials testing, to develop a DEC-approved corrective action workplan and to undertake DEC-approved mitigation strategies to lower PCB levels in indoor air. The AOE will be responsible for administering these reimbursement grants and will only reimburse costs for activities in the DEC-approved workplan. Information regarding this reimbursement grant will be provided by the AOE in a separate document.

Please note, that, per statute, the Agency of Natural Resources and AOE must present a funding proposal for up to \$32 million identified in Act 178 during the 2023 Legislative session. The AOE does not have funding available at this time for any permanent remediation activities and SU/SDs and independent schools should expect a new grant application or funding process once this appropriation becomes available.

Technical Assistance and Points of Contact

- DEC is the lead state entity for School PCB testing
 - DEC PCB Coordinator – Eben Pendleton
 - DEC Program Lead - Patricia (Trish) Coppolino
 - DEC contact: SOV.PCBSampling@vermont.gov
 - DEC Site Managers will be assigned to each school and will serve as the main point of contact for the duration of the testing, mitigation and remediation process. Typically, one site manager is assigned to all schools in a SU/SD. Current site manager contact info is available through DEC's [website](#). Contact SOV.PCBSampling@vermont.gov to find out your site manager if not known.
- Health is the lead state entity for evaluation and determination of health risks related to PCBs
 - Health PCB Coordinator – Danielle Allen
 - Health Program Lead – Dr. Sarah Vose
 - Health contact: SOV.PCBSampling@vermont.gov
- AOE is the state lead entity for educational, operational, communications and funding considerations
 - AOE contact for funding and operational questions - Jill Briggs Campbell
 - AOE contact for communications – Ted Fisher
- Consultant

- If PCBs are detected close to, at, or above the SAL, the SU/SD is required to hire a consultant.
- The Department of Buildings and General Services has [a list of pre-approved vendors](#) who provide environmental investigation and remediation planning services. School districts may contract with these vendors without having to go through a procurement process.
- Web Resources
 - DEC - [PCBs in Schools](#) (includes schedules, contact, testing information and technical documents regarding PCBs in schools)
 - Health – [PCB information page](#) (includes specific information and technical documents regarding PCBs in schools)