



# AGENCY OF NATURAL RESOURCES

UPDATE ON PCB TESTING  
IN VERMONT SCHOOLS FOR  
HOUSE WAYS & MEANS

---

Julie Moore, P.E., Secretary  
January 17, 2023

# What are PCBs?

- PCBs = polychlorinated biphenyls
- PCBs were manufactured between 1930 – 1979  
During this time an estimated 1.5 billion pounds of these industrial chemicals were produced in the US
- Monsanto Corporation was the sole producer of PCBs in the US  
Production was banned by EPA in 1979

# Why were PCBs Banned?

- Persistent, meaning they do not break down quickly
- Bioaccumulative, meaning PCBs can travel up the food chain
- Hazardous even at very low levels and can affect our health in many ways
  - Known carcinogen
  - May harm the immune, reproductive, nervous and endocrine systems



## Cancer

- Breast
- Liver
- Melanoma

## Noncancer

- Immune
- Reproductive
- Nervous
- Endocrine

# Why test for PCBs in Vermont schools?

- PCBs were used in hundreds of industrial and commercial applications including: caulking, paint, fluorescent light ballasts, window glazing, ceiling tiles, spray-on fireproofing, floor finishes, mastics (glue or resin) and carbonless copy paper
- PCBs were found at high levels when Burlington High School was tested as a part of a renovation
  - Raised concerns that similar conditions might exist in other school buildings, statewide
- Act 74 (2021) requires public schools and recognized independent schools constructed or renovated before 1980 to test indoor air for PCBs by July 1, 2025
  - DEC has hired consultants to complete school testing

# How is testing of Vermont schools being approached?

- Sampling, mitigation, and cleanup follows the existing process used by DEC for investigating and remediating contaminated properties for any hazardous material release. **This process has DEC oversight over all steps in the process.**
- Sampling at each school will be representative
- VDH derived Screening Levels, School Action Levels (SALs) and Immediate Action Levels (IALs) to prioritize the need for action when PCBs are detected
  - PCB levels in the indoor air of schools should be kept as low as possible
  - SALs indicate when schools need to identify and abate potential sources of PCBs inside their buildings
  - IALs indicate the need for immediate, emergency corrective actions to reduce exposure. In order of priority, these actions are:
    - Eliminating the use of rooms where samples exceed the IAL;
    - Limiting the amount of time the space is used; and then
    - Deploying mitigation measures to reduce PCB concentrations in indoor air.

# Current Status: Indoor Air Testing

- Testing began in June 2022
- There are at least 325 school buildings that are required to test
- Test results are available for 19 schools; five of these have had at least one sample that exceeded either the School Action Level (SAL) or the Immediate Action Level (IAL) and therefore require prompt attention
  - Cabot, Danville, Oak Grove (Brattleboro), Poultney, and Newport Elementary
- Samples have been collected and results expected back shortly for 9 additional schools; and 35 schools are in the process of scheduling testing

# Funding – Sampling Indoor Air

- As part of Act 74 (2021), the Vermont legislature committed \$4.5 million for DEC to *"...complete air indoor quality testing for Polychlorinated Biphenyls (PCBs) in public schools and approved and recognized independent schools that were constructed or renovated before 1980."*
- DEC expects that this funding will be sufficient through FY2024 to cover the costs of indoor air testing, however additional funding may be required in FY 2025 to complete the mandated testing

# Funding – Assessment and Mitigation

- Mitigation measures are immediate/interim steps to reduce or offset known negative effects. Common measures for mitigating PCB levels in indoor air include:
  - Increasing ventilation
  - Providing or increasing air filtration
- Mitigation is typically coupled with additional investigation and materials testing to inform permanent corrective actions
  - Important because often source(s) of the PCBs are not immediately evident
  - Access to funding is essential to responding quickly to exceedances of established action levels
  - Additional testing for effected schools anticipated to cost between \$30-75k
- In October, ANR and AOE received Emergency Board authorization to disburse up to \$2.5 million to fund follow-on materials testing and mitigation measures
  - No mitigation funds have been spent at this time



# Funding – Remediation

- Remediation measures are intended to permanently address identified sources of PCB contamination. Common measures for remediating PCB levels in indoor air include:
  - Upgrading air handling/ventilation systems
  - Isolating/encapsulating suspected or known PCB source(s)
  - Removing and properly disposing of PCB-containing building materials
- Act 178 (2022) reserves \$32 million *"...within the Education Fund for purposes of funding the investigation, testing, assessment, remediation, and removal of polychlorinated biphenyls (PCBs) in schools."*

# Funding – Remediation

Recommended approach:

- All activities that are approved by DEC as a part of the Corrective Action Plan (remediation plan) would be eligible for funding
- 80/20 cost-share, with the State will covering 80% of the cost in implement the remediation plan and schools required to fund the remaining 20%
- Cost-share would be capped as follows:
  - Assessment -- \$200,000
  - Mitigation -- \$500,000
  - Remediation -- \$2,000,000
- AOE would administer grants through its existing grant management process
  - Payment would be made on a reimbursement basis after DEC approval of work

# Next Steps

- Continue with testing efforts
  - DEC anticipates testing 30-40 schools per quarter through June 30, 2025
- Bring on-line PCB sample analysis capacity at VAEL (Vermont Agricultural and Environmental Lab)
  - Expect VAEL to have capacity to test ~30 samples per week
  - Will allow for faster results in determining efficacy of mitigation measures
- Work with schools with results above action levels to develop Corrective Action Plans
- Expanded communications support through AOE
  - Formation of Advisory Group with Vermont Superintendents Assoc
  - Development of operations guidance to assist school districts with planning, and to ensure continuity of in-person instruction
  - Implementation of "pre-game" planning sessions for districts undergoing testing in near future

# Thank you.

Secretary Julie Moore

[Julie.Moore@vermont.gov](mailto:Julie.Moore@vermont.gov)

Matt Chapman, Director of Waste Management

[Matt.Chapman@vermont.gov](mailto:Matt.Chapman@vermont.gov)