

## **Title: 2023 Report on PCBs in Building Materials in NonSchool Buildings**

**Year: 2023**

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**Date Reported: 1/15/2023**

**Committee: House and Senate Committees on Appropriations, Natural Resources and Energy and Natural Resources, Fish, and Wildlife**

**Authorizing Law #: 2022 Act 166**

**Section #: codified at Sec. 8**

### **Executive Summary**

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Polychlorinated biphenyls (PCBs) are human-made chemicals used in building materials and electrical equipment before 1980 when the U.S. Environmental Protection Agency (EPA) banned manufacturing and certain uses of PCBs. PCBs are categorized as known human carcinogens. Exposure to PCBs have been associated with neurological impairments, including autism and attention deficit and anxiety disorders as well as affects to the nervous, immune, reproductive and endocrine (hormone) systems. Children and adolescents are particularly vulnerable. PCB levels in the indoor air of buildings should be kept as low as possible.

Buildings renovated or built before 1980 are more likely to have PCBs present in their building materials. Caulk, paint, glues, plastics, fluorescent lighting ballasts, transformers and capacitors are examples of products that may contain PCBs.

In 2021, Vermont law [Act 74](#) changed the definition of release to include “PCBs from building materials” in 2022 the definition was revised to limit releases to only public and independent schools.

Overall, the Agency of Natural Resources (Agency) is requesting an additional year to fully consider the options summarily outlined in this report. The Agency’s work on managing PCBs in schools has been the focus over the past year and we would like additional time to focus staff resources and effort on prioritizing the assessment and remediation of PCBs in schools.

### **Key Takeaways**

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**(1) a proposal for the best method for regulating releases of PCBs from PCB-containing building materials in non-school buildings (best regulatory program);**

The following are options with respect to a regulatory program to regulate releases of PCBs from PCB-containing building materials:

A. Vermont Department of Health Lead and Asbestos Program

This program is similar to the EPA TSCA program (notifications and method for cleanup/verification), this program regulates lead and asbestos in building materials in a manner similar to how building materials that contain PCBs (paint, caulking, glues, mastics, etc) could be managed, and methods for PCB mitigation/cleanup and disposal are similar to how lead paint and asbestos are regulated. The Lead and Asbestos program also have specific requirements for daycares and schools that are not carried to other buildings, this specific type of regulatory framework works better to require for specific types of building use or scenario. This approach would avoid issues that have arisen around how to apply liability protection persons get through the state brownfields program (BRELLA). While this program has regulated building materials, it has never regulated indoor air and the regulation of PCBs in indoor air would be a major deviation from how the program is currently designed. In addition, this program is not adequately resourced to implement a such a program – whether it is focused on building materials or indoor air. Such a program would require additional staffing and an increased budget.

B. Agency of Natural Resources, Department of Environmental Conservation, Sites Management Section

This program regulates the releases of hazardous materials to the environment. This program is adept at identifying sources of releases and addressing the requirements for cleanup. This program has never regulated building materials or releases from building materials. This program, and the different ways to regulate specific types of building uses does not fit neatly into the current regulatory framework or how any of the other hazardous waste sites are regulated. In addition, this program is not adequately resourced to implement a PCB program. Such a program would require additional staffing and budget.

**(2) a proposal of who will be required to test for a release or potential release of PCBs from building materials, including whether and how testing will be required under the Brownfields Reuse and Environmental Liability Limitation Program or as part of an environmental assessment for a property transaction.**

The response to this inquiry will depend on whether the PCB program is placed within the Department of Health or the Agency. In the interim, we recommend that all developers participating in BRELLA with a building built or renovated before 1980 test for PCBs and manage them as a part of the redevelopment.

**(3) a summary of when during a corrective action or property transaction testing would be required and why it would be required.**

The Agency will provide a more complete recommendation with the final recommendations.

**(4) the standard or standards that would be utilized to determine if a release occurred; the indoor air quality testing of buildings for releases of polychlorinated biphenyls (PCBs) from building materials.**

The Agency evaluated multiple published documents on indoor air concentrations of PCBs in buildings that were built after 1980, as well as data published related to ambient air background concentrations located in close proximity to Vermont. These documents were used to develop a value that indicates when detections of PCBs indicate a release are not indicative of ubiquitous background conditions. This value, 22.5 ng/m<sup>3</sup>, is

also representative of concentration that can reliably and consistently be detected by commercial laboratories.

**(5) the action or remediation that would be required if PCBs are identified in excess of the proposed standard;**

There are multiple ways that PCBs, when detected above the proposed standard, can be remediated and will be site specific based on where and what building material and associated substrate is contaminated and at what concentration of PCB. Remediation of PCBs in building materials range from removal to isolation (capping/sealing) to a combination of both. A document that provides some of the most common options are attached (this still hasn't been finalized).

**(6) how responsive action or remediation would be funded, including potential federal or State sources of funding; and**

The Agency will provide recommendations on this as a part of its final report.

**(7) how the requirement to test may affect investment in the redevelopment of historic downtowns or similar areas.**

There is not documented evidence that testing for PCBs would affect investment or redevelopment in historic downtowns. PCBs, like any other hazardous material that impacts human health, should be considered when a redevelopment takes place. The Agency's experience with other hazardous material cleanups as a part of the BRELLA program is that these have facilitated the development of historic downtowns and expect that the cleanup of PCBs would have a similar outcome.

## Discussion

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The Agency supports adoption of a regulatory program to address PCBs in any indoor air space where people are living or working to ensure that space is not contaminated with PCBs, however, the Agency is not prepared to identify a new regulatory program to address how PCBs in indoor spaces will be addressed.

As a result we are recommending a delay to the reporting requirement of one year (to January 15, 2024). This delay will have the added benefit of allowing the Agency and the Department of Health to focus on testing for PCBs in schools and will allow us to gather additional data that will inform the program design in a non-school setting.