Polychlorinated Biphenyls (PCBs) in Canada: *Are you ready for the PCB End-of-use Deadline?*

1. Introduction

Polychlorinated biphenyls (PCBs) are a group of synthetic organic chemicals known for their stability, insulating properties, and resistance to heat and chemicals. These characteristics made PCBs widely used in electrical equipment, hydraulic systems, and industrial applications throughout the mid-20th century. However, due to their environmental persistence and toxicity, the manufacture, sale and import of PCBs was banned in Canada in 1977 and their use and disposal are strictly regulated. This white paper provides an overview of PCB regulations, compliance requirements, and the end-of-use deadlines for PCB-containing equipment in Canada.

2. PCB Regulations in Canada

2.1 Overview

PCBs are regulated under the **Canadian Environmental Protection Act, 1999 (CEPA 1999)** and its associated **PCB Regulations (SOR/2008-273)**. These regulations are designed to phase out the use of PCBs, ensure proper handling and disposal, and minimize risks to human health and the environment.

2.2 Key Provisions of the PCB Regulations

The PCB Regulations establish:

- **Prohibition of Release to Environment**: Liquids containing **≥2 mg/kg PCBs** or solids containing **≥50 mg/kg PCBs** are considered high-risk and release to the environment is prohibited.
- **End-of-Use Dates**: Mandated end of use deadlines for PCB equipment.
- **Storage and disposal requirements**: Owners of PCB-containing equipment must ensure proper storage and disposal at federally approved facilities.
- **Reporting obligations**: Facilities with PCB-containing equipment must submit annual reports to Environment and Climate Change Canada (ECCC) detailing inventory, handling, and disposal actions.

3. End-of-Use Dates for PCB Equipment

3.1 Phase-Out Deadlines

While the majority of high concentration PCBs in Canada have since been removed from service, lower concentration PCBs are still in use.

The PCB Regulations mandate specific end-of-use deadlines for PCB-containing equipment, categorized by PCB concentration levels:

Equipment Type	**PCB Concentration (mg/kg)**	**End-of-Use Deadline**
Electrical equipment (e.g., transformers, capacitors) in sensitive locations (e.g., schools, hospitals)	≥50 mg/kg	December 31, 2009

Electrical equipment in other locations	≥500 mg/kg	December 31, 2009
Equipment in use in other locations	**50-500 mg/kg**	**December 31, 2025**
Light ballasts, pole-top transformers and other small PCB equipment (capacitors, electromagnets, heat transfer and hydraulic equipment)	**≥50 mg/kg**	**December 31, 2025**
Current transformers, potential transformers, circuit breakers, reclosers and bushings that are located at an electrical generation, transmission or distribution facility	**≥500 mg/kg**	**December 31, 2025**

Non-liquid forms of PCBs (caulking and paints) are not included in the deadlines, however these still need to be considered during hazardous building material assessments (HBMA) for renovation or demolition purposes, e.g. sampling and waste characterization.

3.2 Implications for Owners of PCB Equipment

Owners of PCB-containing equipment must ensure:

- **Identification and labeling**: All PCB-containing equipment must be clearly labeled and documented.
- **Timely replacement or decommissioning**: Equipment reaching its end-of-use deadline must be decommissioned and disposed of in accordance with federal and provincial regulations.
- **Proper disposal**: PCB waste must be transported to authorized disposal facilities, ensuring compliance with the Transportation of Dangerous Goods (TDG) Regulation and provincial environmental regulations.

4. Compliance Strategies for Organizations

To ensure compliance with PCB regulations, owners and organizations should adopt the following strategies:

1. **Conduct PCB inventories**: Document all equipment potentially containing PCBs.
2. **Report:** Prepare and submit reports to Environment and Climate Change Canada (ECCC).
3. **Develop a PCB phase-out plan**: Establish a structured timeline for replacement and disposal of PCB-containing equipment.
4. **Engage with certified disposal contractors**: Partner with licensed hazardous waste management firms to handle PCB disposal.

5. Conclusion

PCBs pose significant environmental and health risks, necessitating stringent regulatory oversight in Canada. With the upcoming **December 31, 2025** deadline for PCB equipment phase-out, owners and organizations must act promptly to ensure compliance. By adhering to regulatory requirements and implementing effective phase-out strategies, businesses and facility owners can contribute to a safer and more sustainable environment.