

Section:	Environmental Management	Date of Issue:	2009 10 01
		Issued By:	Environment, Health & Safety
Part:		Revision #:	
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SCOPE

Polychlorinated biphenyls (PCB's) have been known for many years to have an adverse effect on the environment. They are not readily degraded in the environment and bio-accumulate in the food chain. They require very large amounts of energy to undergo thermal destruction. Several PCB's are toxic or carcinogenic and incomplete destruction results in the formation of dioxins and other harmful compounds.

The Government of Canada, through Environment Canada regulates the production, sale, use, and disposal of polychlorinated biphenyls to fulfil Canada's obligations as established by international agreement. All provincial governments impose regulation within their respective jurisdictions, and transportation is also regulated both federally and provincially.

PURPOSE

This document outlines the appropriate steps to ensure the University of Calgary is in compliance with the federal legislation known as 'PCB Regulations' enacted under the authority of the Canadian Environmental Protection Act. A brief synopsis of the requirements for the purchase, use, storage, and disposal of polychlorinated biphenyls is also included. In addition, the responsibilities of select groups are outlined to ensure the University of Calgary is able to fulfil its obligations as mandated by these regulations.

RESPONSIBILITIES

Environment, Health & Safety

- Develop, implement, and review this document.
- Provide advice to stakeholders pertaining to the regulations and this document.
- Generate and submit annual reports to Environment Canada as required by the regulations.

Facilities Management

- Maintain accurate inventory and identify all equipment containing PCB's, including the concentration thereof. PCB concentrations must be determined by an accredited laboratory and be expressed in mg/Kg.
- This report shall be submitted on the [ANNUAL PCB USAGE REPORT – IN USE EQUIPMENT](#) form.
- Submit a copy of this inventory to the Environmental Consultant, Environment Health & Safety. This report must be accurate to December 31 in each year and shall be submitted by January 31 for the preceding calendar year. This reporting requirement specifically excludes light ballasts.
- Ensure that all labelling requirements in Part 4 of the regulation are adhered to in facilities under Facilities Management control.

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Principal Investigators

- Review this document prior to working with PCB's.
- Comply with internationally recognized laboratory best practices as dictated in Section 8(1)(b) of the PCB Regulations.
- Engage in and/or permit only research which complies with current regulations.
- Maintain accurate record of PCB usage, inventory, and storage on the [ANNUAL PCB USAGE REPORT - RESEARCH LABORATORIES](#) form.
- Submit a copy of this inventory to the Environmental Consultant, Environment Health & Safety, accurate as of December 31 in each year. This report shall be submitted by January 31 for the preceding calendar year.

Laboratory Workers

- Review this document prior to working with PCB's.
- Follow the requirements set out in this standard and any additional requirements determined by the Principal Investigator to facilitate compliance with legislation.

Hazardous Materials Services

- Transport and store all PCB's in accordance with applicable legislation and current best practices.
- Ensure that all facility markings at the Materials Handling Building as required by Part 3 and all labelling requirements mandated in Part 4 of the PCB Regulation are adhered to.
- Maintain accurate record of PCB disposal and prepare an annual report of this activity on the [ANNUAL PCB USAGE REPORT – STORAGE FACILITY](#) form. Note that this is a two page document.
- Submit a copy to the Environmental Consultant, Environment Health & Safety, accurate as of December 31 in each year. This report shall be submitted by January 31 for the preceding year.
- This reporting requirement specifically includes all fluorescent light ballasts shipped in the reporting period.

PURCHASE

The purchase of PCB's or products containing PCB's in a concentration higher than 2 mg/Kg is generally prohibited in Canada. The purchase of PCB's is permitted when this purchase is by an analytical or a research laboratory that conforms to internationally recognized guidelines on laboratory best practices and research is confined to determining the effects of PCB's on human health or on the environment.

USEAGE

PCB's having a concentration higher than 2 mg/Kg used in the servicing of equipment is permitted under certain circumstances, subject to specified end-of-use dates. Refer to current legislation for details. Uses not specifically authorized in the regulation are prohibited.

- Laboratory research is permitted on an on-going basis provided the conditions outlined in the Responsibilities and Purchase sections of this document are met.

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- Electrical cables and transformers containing PCB's that were in use on September 8, 2008 and are currently in use may continue to be used. When these items are removed from active use they must be sent for disposal.
- Fluorescent light ballasts containing 50 mg/Kg of PCB's or more may remain in service until they are removed from the fixture or December 31, 2025, whichever comes first.
- Fluids containing more than 2 mg/Kg of PCB's that are removed from equipment must be disposed of. This includes removal for the purpose of servicing of the equipment.

STORAGE

Areas having equipment or solids containing PCB's in storage should contact the Environmental Consultant in Environment, Health & Safety for guidance. Liquids containing PCB's should be transferred to Hazardous Materials Services for disposal at the earliest opportunity.

DEFINITIONS

Polychlorinated Biphenyl (PCB): any substance having the chemical formula $C_{12}H_{10-n}Cl_n$, where n= 2 to 10 that is regulated by the referenced regulation.

REFERENCES

[PCB Regulations Canadian Environmental Protection Act, 1999](#)

Accreditation Programs for Laboratories – Standards Council of Canada
<http://www.scc.ca/en/programs/lab/index.shtml>

ANNUAL PCB USAGE REPORT - IN USE EQUIPMENT

Responsible Person/Department:
Nature of PCB Research: <small>(If Applicable)</small>
This report is for January 1 to December 31, 20 ____

Summary	Liquid (L – mg/Kg)
Opening Inventory:	
PCB's Disposed:	
Closing Inventory:	

All equipment in service on January 1st has remained in service for the entire report period (to December 31st).

DISPOSED

Equipment Serial Number	Location	Disposal Date	Quantity (L)	Concentration (mg/Kg)

By submission of this report I certify that the information provided above is complete and accurate.

Name: _____ Signature: _____
(Please Print)

Date: _____ Telephone: _____

ANNUAL PCB USAGE REPORT – RESEARCH LABORATORIES

Principal Investigator:
PCB Storage Location:
Nature of PCB Research:
This report is for January 1 to December 31, 20 _____

Summary		Solid (Kg – mg/Kg)	Liquid (L – mg/Kg)
Opening Inventory:			
PCB's Received:			
PCB's Disposed:			
Closing Inventory:			

RECEIVED			DISPOSED		
Date	Quantity (kg, L)	Concentration (mg/Kg)	Date	Quantity (kg, L)	Concentration (mg/Kg)

By submission of this report I certify that the information provided above is complete and accurate.

Name: _____ Signature: _____
(Please Print)

Date: _____ Telephone: _____

ANNUAL PCB USAGE REPORT – STORAGE FACILITY

PCB Storage Location: _____				
This report is for January 1 to December 31, 20_____				
Summary		Solid (Kg – mg/Kg)	Fluorescent Light Ballasts (Kg)	Liquid (L – mg/Kg)
	Opening Inventory:			
	PCB's Received:			
	PCB's Disposed:			
	Closing Inventory:			

By submission of this report I certify that the information provided within is complete and accurate.

Name: _____
(Please Print)

Signature: _____

Date: _____

Telephone: _____

