



Environment
Canada

Environnement
Canada

Canada

Environmental Legislation for Real Property Managers

RPIC

Lisa McClemens

Environmental Protection Operations Division – Ontario

Marie-Michelle Modéry

Waste Reduction and Management Division

November 18, 2015

Legislation that could apply to Federal Facilities

- Canadian Environmental Protection Act, 1999
 - Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations
 - Volatile Organic Compound Concentration Limits for Architectural Coatings Regulations
 - Federal Halocarbon Regulations
 - Gasoline and Gasoline Blend Dispensing Flow Rate Regulations
 - PCB Regulations
 - Environmental Emergencies Regulations
- Fisheries Act



Environment
Canada

Environnement
Canada

Canada

Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (STR)

The screenshot shows the Environment Canada website interface. At the top, there are navigation links for 'Home', 'Pollution and Waste', 'Acts, Regulations and Agreements', 'Canadian Environmental Protection Act, 1999', and 'Identification Registry'. The main heading is 'Federal Identification Registry for Storage Tank Systems (FIRSTS)'. Below this, there is a paragraph explaining that FIRSTS is an online database where storage tank system owners enter information about their storage tank systems and receive an Environment Canada identification number. It also mentions that storage tank systems without a valid identification number may be refused product delivery. A second paragraph states that the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations require owners, not operators or installers, to identify their storage tank systems to Environment Canada. A third paragraph provides instructions on how to obtain an account for the identification registry by sending an email request to reg@registry_strstockage@ec.gc.ca. A list of three numbered points follows, detailing the information required for the request: 1. Confirmation of ownership, 2. Legal name of the entity, and 3. Name of the person coordinating the identification. A final paragraph notes that the identification form can be used to gather required information and that Environment Canada identification numbers are generated upon submission. At the bottom, there is a link to the FIRSTS website and a note to contact for additional information.

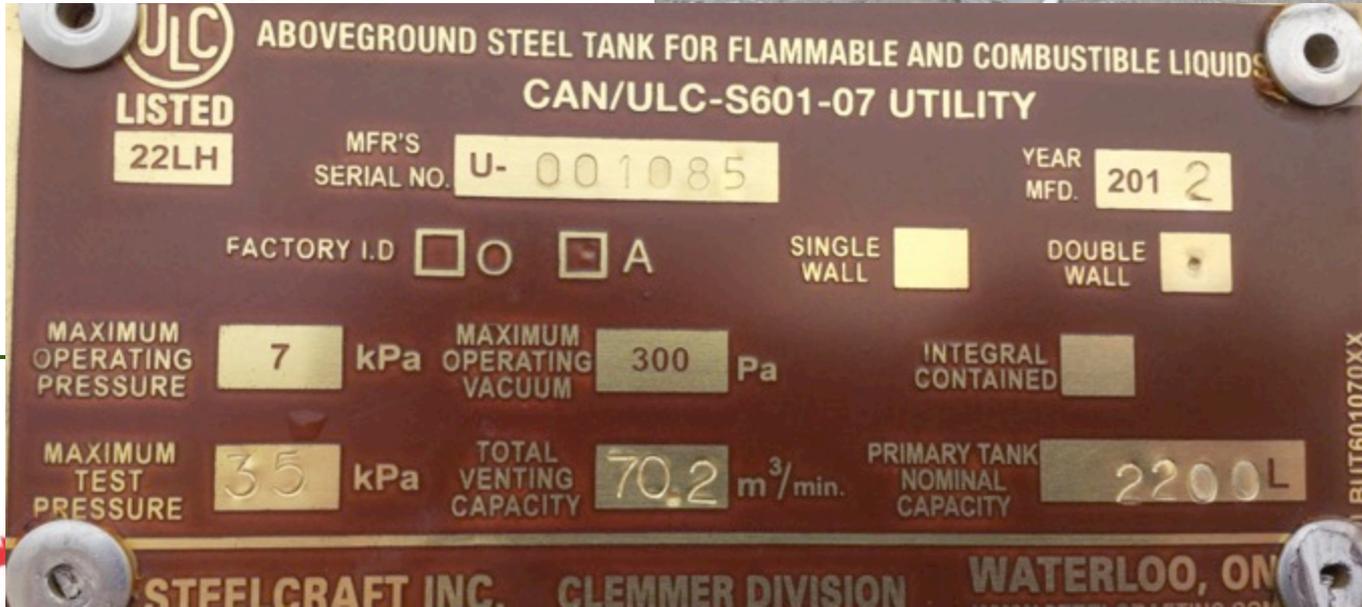
Marie-Michelle Modéry
Environment Canada

Waste Reduction and Management Division

Objective

- Review obligations under the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations*

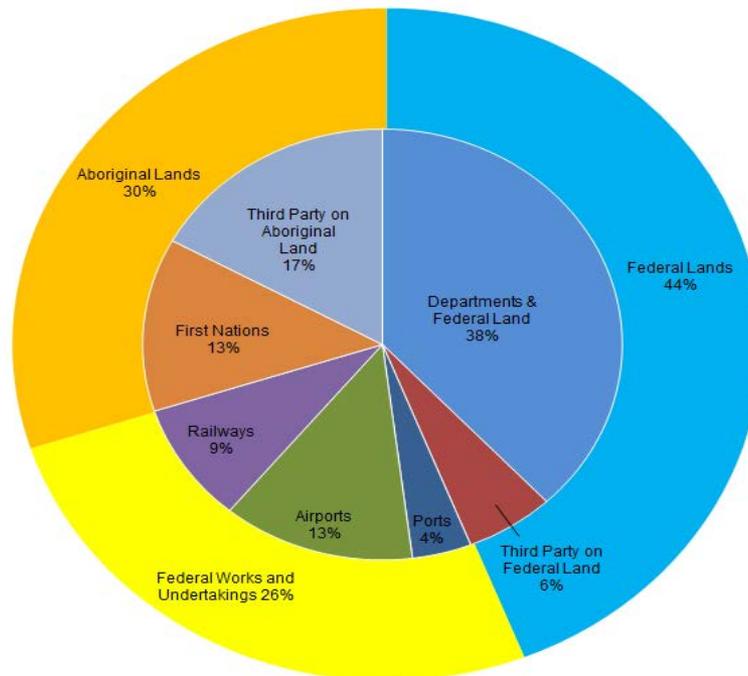
Overview of the Regulations



Let's talk statistics...

- ~ 15,000 active storage tank systems
- ~ 1,000 new identifications per year

Type of regulatees



Briefly, what are the obligations of the Regulations?

Overview of Obligations

(See the [Regulations](#) – This table is not exhaustive and does not replace the Regulations)

Withdrawals from service for leaking systems / Release reports for all systems

At the time of the leak, since June 12, 2008 [section 3] [sections 44 and 45] [section 41]

Identification with EC:

Before the first transfer for **new** systems, or since June 12, 2009, for **existing** systems
[sections 28 and 29]

Record keeping:

Immediately for **new** systems, or since June 12, 2010, for **existing** systems [section 46]

Overview of Obligations

New System Installation

New systems (since June 12, 2008): At the time of design/installation

(See the [Regulations](#) – This table is not exhaustive and does not replace the Regulations)

Compliance with technical requirements for new systems [sections 33 and 34] [section 14]

Requirements relating to transfer areas [section 15].

Requirement to create an emergency plan for all new systems [sections 30 and 31]

Other operational and maintenance requirements [sections 35 to 40]

Overview of Obligations

Existing Systems

Existing systems (before June 12, 2008)

(See the [Regulations](#) – This table is not exhaustive and does not replace the Regulations)

Leak detection for components without secondary containment and for sumps since June 12, 2010, for **existing** systems [sections 16 to 27]

Other operational and maintenance requirements [sections 35 to 40]

Emergency plan: Since June 12, 2010, for **existing** systems [sections 30 and 31]

Withdrawal from service for high-risk systems: From June 12, 2012, for **existing** systems [sections 5, 6, 7, 9 and 10]

Requirements relating to transfer areas: Since June 12, 2012, for **existing** systems [section 15]

New systems

- **What are the design criteria for new systems?**
 - Aboveground tanks that comply with CCME's Code, Part 3
 - Underground tanks that comply with CCME's Code, Part 4
 - Piping that complies with CCME's Code, Part 5
 - Separators that comply with CCME's Code, Part 8
 - Storage system designs stamped by an engineer
- **Installation requirements**
 - Section 14
 - Incorporation by reference
 - Certain provisions of the CCME Environmental Code of Practice are part of the Regulations

What are the most frequently observed challenges?

Requirements relating to

- Identification [s. 28]
- Emergency plan(s) [s. 30]
- Leak detection [s. 9-10]
- Product transfer areas [s. 15]

STR – References

Website: <http://ec.gc.ca/rs-st/>

- **Contains:**

- Regulations text
- CCME *Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products*
- Tank Tips
- Registration and contact information

National Contact:

Marie-Michelle Modéry

tankregistry@ec.gc.ca

1-844-672-8038



Environment
Canada

Environnement
Canada

Canada



Volatile Organic Compound (VOC) Concentration Limits for Architectural Coatings Regulations (ACR)

ACR – What are Architectural Coatings?

- Products such as paints, stains, varnishes, lacquers and other coatings applied to traffic surfaces or to a wide variety of stationary structures in residential, commercial, institutional and industrial settings
 1. General architectural coatings
 2. Industrial maintenance coatings
 3. Traffic marking coatings

ACR – Application

- Manufactures, importers and sellers of architectural coatings, as well as users of traffic marking coatings
- Traffic marking coatings used for marking traffic surfaces such as streets and highways, **parking lots**, airport runways

ACR – Overview

- Set mandatory VOC concentration limits for 53 categories of architectural coatings
- Concentration limits vary between 100 g/L - 800 g/L depending on the category.
- Annual use prohibition for traffic marking coatings came into effect on September 10, 2012
 - During the period **beginning May 1 and ending October 15**, when VOC concentration exceeds 150 g/L



ACR – References

Website: www.ec.gc.ca/cov-voc

Generic email: vocinfo@ec.gc.ca

Ontario Contact:

Marisa Maiorano-Gillis

(Marisa.Maiorano-Gillis@ec.gc.ca; 416-739-5867)



Environment
Canada

Environnement
Canada

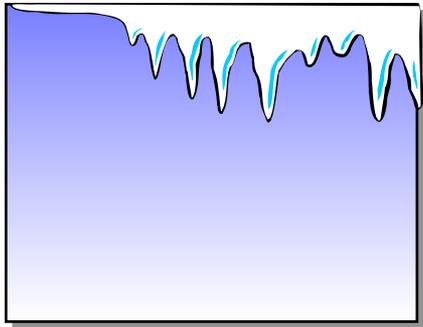
Canada



Federal Halocarbon Regulations, 2003 (FHR)

FHR – Purpose and Application

- Protection of the Ozone Layer and management of ozone-depleting substances and their halocarbon alternatives
- Under federal jurisdiction
 - located on federal lands or Aboriginal lands; or
 - owned by federal departments, boards and agencies, Crown corporations, or federal works and undertakings



**Refrigeration systems
and air-conditioning
systems**



**Fire-extinguishing
systems**



Solvent systems

FHR - Types of Ozone-Depleting Substances

Substances	Typical use
CFCs (chlorofluorocarbon)	<ul style="list-style-type: none">• refrigerant• solvent
HCFCs (hydrochlorofluorocarbon)	<ul style="list-style-type: none">• refrigerant• solvent• fire-extinguishing agent
HBFCs (hydrobromofluorocarbon)	<ul style="list-style-type: none">• refrigerant• fire-extinguishing agent
Halons (1211 – bromochlorodifluoromethane) (1301 – bromotrifluoromethane)	<ul style="list-style-type: none">• fire-extinguishing agent

FHR – Similar Legislation

	Federal Halocarbon Regulations, 2003 and Provincial and Territorial regulations	Ozone-Depleting Substances Regulations, 1998
WHY?	Control <u>use</u> of halocarbons (<i>including HFCs and PFCs</i>) by: <ul style="list-style-type: none"> . Setting use or release prohibitions and restrictions . Phasing-out use of some substances . Improving practices and preventive maintenance to reduce emissions 	Eliminate <u>consumption</u> of ozone depleting substances, e.g. CFCs, HCFCs, halons (<i>not HFCs and PFCs</i>) by phasing-out: <ul style="list-style-type: none"> . Manufacture . Sale . Import . Export
WHO?	FHR 2003: Federal Departments, boards and agencies, Crown corporations, and Federal works and undertakings that own a system located in Canada. Provincial-Territorial: Persons, organizations, facilities under provincial or territorial jurisdiction.	<ul style="list-style-type: none"> . Canadian manufacturers, importers and exporters . Users of select substances (e.g. fumigants, solvents)
WHAT?	Systems that use or contain halocarbons, such as <ul style="list-style-type: none"> . Refrigeration systems . Air-conditioning systems . Fire-extinguishing systems . Solvent systems . Associated container 	Ozone depleting substances, e.g. CFCs, HCFCs, halons

FHR – Table of contents

❑ **General requirements**

- Interpretation (definitions) and application.....sections 1-2
- Prohibitions and restrictions.....sections 3-6

❑ **Technical requirements**

- Recoverysections 7-8
- Installation, servicing, leak testing and charging
 - Refrigeration systems and air-conditioning systemssections 9-21
 - Fire-extinguishing systems.....sections 22-30

❑ **Administrative requirements**

- Noticessections 8, 10
- Owner notificationssections 12, 14, 25, 28
- Service logs – reports.....sections 31, 32, 33
- Permitssections 34-35
- Record keeping.....sections 36

❑ **Schedules**

- List of halocarbons and information to be contained in document

FHR – References

Website: <http://www.ec.gc.ca/ozone>

Ontario Contact:

Lisa McClemens (lisa.mcclemens@ec.gc.ca; 613-949-8278)



Environment
Canada

Environnement
Canada

Canada



Gasoline & Gasoline-Blend Dispensing Flowrate Regulations (GDR)

GDR – Application

- Retailers (e.g., gas stations) and wholesale purchaser-consumers' of gasoline and gasoline blends who use, or offer for use, any nozzle to dispense those fuels into on-road vehicles
 - Wholesale purchaser-consumers' means any person that is not a retailer and that stores gasoline or a gasoline blend in a storage tank of at least 2,100 litres for use in an on-road vehicle
- Does not apply to nozzles used exclusively to refuelling heavy-duty vehicles

GDR – Background

- Regulations released in 2001
 - Enforcement officers are authorized to inspect fuel-dispensing nozzles through scheduled or unscheduled visits to verify compliance
- Flow rates are regulated to protect health
 - Reducing emissions of benzene (a cancer-causing substance)
 - Reducing emissions of volatile organic compounds (VOCs)
 - Minimizing risk of spills

GDR – Requirement

Flow rate from the nozzle can not exceed



38 litres per minute



GDR – Method to Measure Flow Rate



Step 1: Start pump at maximum flow rate. Start a stopwatch when the volume reads 2.0 litres.

Step 2: Stop the stopwatch when the volume reads 12.0 litres.

Step 3: Time should be 16 seconds or higher.



Environment
Canada

Environnement
Canada

Canada



PCB Regulations (PCBR)

About the PCB Regulations

- Regulations under the Canadian Environmental Protection Act (CEPA), 1999
- Current *PCB Regulations* came into force on September, 5, 2008
- Purpose
 - improve the protection of Canada's environment and the health of Canadians by minimizing the risks posed by the use, storage and release of PCBs
 - accelerate the elimination of these substances
- The *PCB Regulations* set:
 - prohibitions, including on the release, manufacture, export, import and sale of PCBs
 - restrictions on processing, use, storage and disposal
 - requirements for reporting

Application

- The *Regulations* apply to PCBs and to any products containing PCBs
- The *Regulations* do not apply to export and import of PCBs that are hazardous waste or hazardous recyclable materials

Where Are PCBs Typically Found?

- Mainly in use in electrical equipment
- Equipment may be in use in the following types of facilities:
 - electricity utility (generation, transmission and distribution)
 - primary industry (oil and gas, pulp and paper, mining and mineral processing, iron and steel)
 - federal/provincial/municipal government facilities
 - commercial facilities, such as shopping centres
 - food and feed processing industry, drinking water treatment plant
 - institutional facilities: hospitals, schools, daycare and seniors care facilities
- Other, minor uses

What's Included in PCB Regulations?

The *Regulations* are arranged in 5 parts:

1. General
2. Prohibitions and permitted activities
3. Storage
4. Labelling, reports and records
5. Repeals and coming into force

More information can be found at : <http://www.ec.gc.ca/bpc-pcb/>

ePCB Reporting System

- ePCB
 - New electronic reporting system established to improve the former PCB Reporting System (PCBRS) and include changes resulting from the 2015 amendments
 - Increased clarity for reporting via imbedded help and instructions
 - ePCB is accessed through the Single Window Information Manager (SWIM) platform
 - SWIM guidance: <http://ec.gc.ca/gu-sw/>

PCB Fact Sheets

Available online

- PCB Regulations: An Overview
- Do the PCB Regulations Apply to You?
- Use and Storage of PCBs in Prescribed Locations
- PCB Labelling, Reporting and Records
- PCBs Releases to the Environment
- Regulations Amending the PCB Regulations and Repealing the Federal Mobile PCB Treatment and Destruction Regulations
- Electrical Contractors and the PCB Regulations
- Metal Recyclers and Hazardous Waste Service Providers



PCBR – References

Website: www.ec.gc.ca/bpc-pcb

Generic email: PCBProgram@ec.gc.ca

Ontario Contact:

Lisa McClemens

lisa.mcClemens@ec.gc.ca or 613-949-8278



Environment
Canada

Environnement
Canada

Canada



Environmental Emergency Regulations (E2R)

What is an *Environmental Emergency*?

Canadian Environmental Protection Act, 1999 - an environmental emergency is:

(a) *an uncontrolled, unplanned or accidental release... **of a substance** into the environment; or*

(b) *the reasonable likelihood of such a release into the environment.*



E2R – Background

- **Goal**

Reduce the frequency and consequences of uncontrolled, unplanned or accidental releases of hazardous substances into the environment, through emergency planning

- List of 200+ hazardous substances, with associated concentrations and threshold quantities
- Substances have been deemed to pose a risk to the environment and human health because they are: explosive, flammable, a toxic inhalant, aquatically toxic or carcinogenic

E2R – Application

- Own or manage one or more substances at or above the threshold are required to provide information on the substance(s) and their on-site quantities and may be required to prepare and implement environmental emergency plans (E2 Plans)
- E2 Plans require regulatees to do emergency planning that addresses the prevention, preparedness, response and recovery aspects of potential incidents involving the E2-regulated substance(s)

Further Information

Further information can be found in the **Implementation Guidelines for the Environmental Emergency Regulations**

www.cepae2.ec.gc.ca

Generic email: CEPAE2-LCPEUE-ON@ec.gc.ca

