



Fact Sheet *Federal Halocarbon Regulations, 2003*

Information Pertaining to Fire-extinguishing Systems

This fact sheet focuses on the provisions of the *Federal Halocarbon Regulations, 2003* that relate specifically to fire-extinguishing systems. It is not intended to replace the full legal text of the Regulations or to provide legal opinions. You are advised to retain a lawyer should you require a legal opinion.

A similar fact sheet is also available for refrigeration and air-conditioning systems.

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What are halocarbons and why are they regulated?

Halocarbons are synthetic chemical compounds made up of carbon and one or more halogens (chlorine, bromine and fluorine). They are used as refrigerants, fire-extinguishing agents, solvents, foam-blowing agents and fumigants. Common halocarbons include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), halons, hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).

Emissions of halocarbons can lead to ozone layer depletion and contribute to climate change.

How are halocarbons regulated?

In Canada, the federal, provincial and territorial governments have requirements in place to manage halocarbons. At the federal level, Environment Canada administers two regulations under the *Canadian Environmental Protection Act, 1999*:

- the *Ozone-depleting Substances Regulations, 1998*, which control the import, export, manufacture, use, sale and offer for sale of ozone-depleting substances; and
- the *Federal Halocarbon Regulations, 2003*, which are discussed in this fact sheet.

In addition to federal legislation, each province and territory controls halocarbons in activities that come under its jurisdiction.

Scope of the Federal Halocarbon Regulations, 2003

The *Federal Halocarbon Regulations, 2003* replaced the previous *Federal Halocarbon Regulations* on August 13, 2003.

The purpose of the Regulations is to reduce and prevent emissions of halocarbons to the environment from refrigeration, air-conditioning, fire-extinguishing and solvent systems that are

- owned by the federal government (e.g., departments, boards or agencies, Crown corporations) or by federal works or undertakings; or
- located on Aboriginal or federal lands (including all tenants on such lands).

A federal work or undertaking is any work or undertaking that is within the legislative authority of the Parliament of Canada, including but not limited to

- a work or undertaking operated for or in connection with navigation and shipping, whether inland or maritime, including the operation of ships and transportation by ship;
- a railway, canal, telegraph or other work or undertaking connecting one province with another, or extending beyond the limits of a province;
- a line of ships connecting a province with any other province, or extending beyond the limits of a province;
- a ferry between any province and any other province or between any province and any country other than Canada;
- airports, aircraft and commercial air services;
- a broadcast undertaking;
- a bank;
- a work or undertaking that, although wholly situated within a province, is before or after its completion declared by Parliament to be for the general advantage of Canada or for the advantage of two or more provinces (e.g., nuclear facilities, feed mills); and
- a work or undertaking outside the exclusive legislative authority of the legislature of the provinces.

Definitions

Fire-extinguishing system:

fire-extinguishing equipment, including portable or fixed equipment and any associated equipment, that contains or is designed to contain a halocarbon fire-extinguishing agent

Halocarbon:

a substance set out in Schedule 1 of the *Federal Halocarbon Regulations, 2003*, whether existing alone or in a mixture, and including isomers of any such substance

Installation:

does not include the reactivation of a system by the same owner at the same site

Military vehicle:

a vehicle that is designed to be used in combat, or in a combat support role, but does not include an administrative vehicle

Owner:

a person who holds a right in, has possession, control or custody of, is responsible for the maintenance, operation or management of, or has the power to dispose of a system

Portable fire extinguisher:

a cylinder or cartridge containing a halocarbon that is used for extinguishing fires, that has a charging capacity of 25 kg or less and that can be carried or wheeled to the site of a fire

Prohibitions

Prohibited Activities	Exceptions
Releasing a halocarbon from a fire-extinguishing system or associated container or device	Releasing a halocarbon: <ul style="list-style-type: none">• to fight a fire that is not set for training purposes, or• during the recovery of halocarbons into an appropriate container and using recovery equipment operating at a transfer efficiency of at least 99% as referred to in the publication <i>Halon and Halocarbon Clean Agent Recovery and Reconditioning Equipment</i> (ULC/ORD-C1058.5-2004)
Releasing a halocarbon from a container or equipment used in the reuse, recycling, reclamation or storage of that halocarbon	No exceptions

Prohibited Activities	Exceptions
Purchasing, transporting or storing a halocarbon in a container that is not designed and manufactured to be refilled and to contain that specific type of halocarbon	Purchasing, transporting or storing a halocarbon used as a laboratory reagent or analytical standard
Installing a fire-extinguishing system that operates with a halocarbon other than HCFCs, HFCs or PFCs	Installing a system when it is authorized by a permit granted under the <i>Federal Halocarbon Regulations, 2003</i>
Charging a fire-extinguishing system without it first being leak tested	Charging a leaking system during a period, up to 7 days, that is necessary to prevent an immediate danger to human life or health
Charging a fire-extinguishing system with a halocarbon other than HCFCs, HFCs or PFCs for leak testing	No exceptions
Charging a portable fire extinguisher with a halocarbon other than HCFCs, HFCs or PFCs	Charging a portable fire extinguisher for use on an aircraft, military ship or military vehicle or when authorized by a permit granted under the <i>Federal Halocarbon Regulations, 2003</i>
Charging a fire-extinguishing system with a halocarbon other than HCFCs, HFCs or PFCs	Charging a portable fire extinguisher or a fire-extinguishing system for use on an aircraft, military ship or military vehicle or when authorized by a permit granted under the <i>Federal Halocarbon Regulations, 2003</i>

Servicing, leak testing and decommissioning

Servicing

All work (installing, servicing, leak testing, charging or other work that may result in the release of a halocarbon) on a fire-extinguishing system must be done in accordance with the publication *The Servicing of Halon and Clean Agent Extinguishing Systems* (ULC/ORD-C1058.18-2004).

Before any such work is started, the halocarbon must be recovered into a container designed and manufactured to be refilled and to contain that specific type of halocarbon. The recovery must be completed using recovery equipment with a transfer efficiency of at least 99% in accordance with the

publication *Halon and Halocarbon Clean Agent Recovery and Reconditioning Equipment* (ULC/ORD-C1058.5-2004).

Once such work is completed, an entry describing the work must be made in a service log containing the information outlined in item 6 of Schedule 2 of the *Federal Halocarbon Regulations, 2003*.

In addition, fire-extinguishing systems other than portable fire extinguishers must not be serviced until the owner is notified and a notice is affixed to the control panel indicating that the system is out of operation.

Leak testing

A leak test is required before charging any fire-extinguishing system except to charge a system for a period, up to seven days, that is necessary to prevent an immediate danger to human life or health.

Except for portable fire extinguishers and fire-extinguishing systems whose cylinder or cartridge has a charging capacity of 10 kg or less and are which located in military vehicles, military ships or military aircraft, leak tests of all system components that come in contact with a halocarbon are also required at least once every 12 months.

As soon as possible after a leak is detected but not later than seven days, the technician must notify the owner of the system and the owner must either

- repair the leak;
- isolate the leaking portion of the system and recover the halocarbon from that portion; or
- recover the halocarbon from the entire system.

Dismantling, decommissioning and destruction

Prior to dismantling, decommissioning or destroying any fire-extinguishing system, all halocarbon must be recovered into a container designed and manufactured to be refilled and to contain that specific type of halocarbon.

A Dismantling, Decommissioning and Destruction Notice containing the information outlined in item 1 of Schedule 2 of the *Federal Halocarbon Regulations, 2003* must be affixed to the system. The Notice cannot be removed except to replace it with another notice.

Release reports

Owners must report all halocarbon releases of more than 10 kg to Environment Canada.

In the event of a release of 100 kg or more from a fire-extinguishing system—or from a container or equipment used in the reuse, recycling, reclamation or storage of the halocarbon—the owner must submit a verbal or written report within 24 hours of detecting the release. The report must indicate the name of the owner, the type of halocarbon released and the type of system, container or equipment from which it was released.

Within 14 days of a release of 100 kg or more, a written report must also be submitted that more fully details the circumstances leading to the release, as well as the corrective and preventative action(s) taken. The information that must be reported is outlined in item 8 of Schedule 2 of the *Federal Halocarbon Regulations, 2003*.

For releases of more than 10 kg but less than 100 kg, the owner must submit no later than January 31 or July 31 a written report containing the information outlined in item 8 of Schedule 2 of the Regulations for all releases in the preceding calendar half-year.

Written reports must be mailed or faxed to the appropriate Environment Canada regional representative (See the **For more information** section).

Permits

Permits may be issued for installing or charging a fire-extinguishing system with a halocarbon other than HCFCs, HFCs or PFCs as an extinguishing agent. Permits may be granted when there is no technically and financially feasible alternative that could have a less harmful impact on the environment and on health.

Permits are valid for one year beginning on the date of issuance. The Minister of the Environment may cancel a permit if it has been determined that false or misleading information was provided in support of the permit application.

Requests for a permit to install a fire-extinguishing system or charge a portable fire-extinguishing system must contain the information outlined in item 10 or 11, as the case may be, of Schedule 2 of the *Federal Halocarbon Regulations, 2003*.

Record keeping

The owner must keep a copy of all logs, notices, records and reports required by the *Federal Halocarbon Regulations, 2003* at the premises or site where the fire-extinguishing system is located, for a period of at least five years.

In the case of a fire-extinguishing system at an unoccupied site or installed on a means of transportation, the owner must keep these documents at a single location in Canada occupied by the owner.

Regulatory compliance

Environment Canada undertakes regular inspections in order to verify compliance with the requirements of the *Canadian Environmental Protection Act, 1999* (CEPA 1999) and its regulations. Investigations are conducted when there are reasonable grounds to believe that a violation has occurred. In situations of non-compliance, enforcement officers may issue a warning or an environmental protection compliance order, proceed with prosecution or take some other enforcement action, depending on the circumstances (see the *Compliance and Enforcement Policy for the Canadian Environmental Protection Act, 1999* at <http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=5082BFBE-1>).

Where an officer proceeds with prosecution and a conviction is obtained, the court may order a fine and/or imprisonment. In 2012, maximum fines were increased and mandatory minimum fines were introduced for certain specified offences. For further information, consult Environment Canada's website at <http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=66B8D849-1>.

For more information

Visit Environment Canada's Stratospheric Ozone website at www.ec.gc.ca/ozone for more information, including information regarding

- Canada's Ozone Layer Protection Program
- the *Federal Halocarbon Regulations, 2003*

For additional information, please contact your Environment Canada regional representative listed on the Ozone website.

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