

Federal Halocarbon Regulations, 2022 (FHR 2022):

# **Prohibitions and Permits**

The *Federal Halocarbon Regulations*, **2022 (FHR 2022)** set out different prohibitions to prevent and reduce halocarbon emissions in the environment and requires that a permit be issued for certain activities involving refrigeration, air-conditioning, fire-extinguishing, and solvent systems and containers under federal jurisdiction.

The FHR 2022 establish prohibitions in order to help prevent and reduce releases of ozone-depleting substances and Hydrofluorocarbons (HFCs) to lessen adverse effects associated with the destruction of the earth's ozone layer and from climate change.

# **Prohibitions**

# Releases

It is prohibited **to release, allow or cause the release of a halocarbon** (Section 3) from all types of systems and containers and from equipment used in the reuse, recycling, reclamation or storage of a halocarbon.

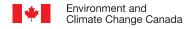
This prohibition does not apply if the release of a halocarbon:

- > is for the purpose of calibrating leak-detecting devices with equipment designed specifically for that purpose and the manufacturer's recommended procedures are followed;
- > results from the connecting or disconnecting of hoses that are less than 1 metre (m) in length and used for the charging with, or recovery of, a halocarbon;
- > results from a purge system on an air-conditioning system or a refrigeration system, including any associated recovery equipment, that emits less than 0.1 kg of halocarbon per kilogram of air purged to the environment;
- > is from a fire-extinguishing system for the purpose of fighting a fire that is not set for training purposes
- > is from a fire-extinguishing system for the purpose of testing the system in a military vehicle as authorized by a permit issued under subsection 20(2).

### Substances covered under the Regulations (Schedule 1)

### List of Halocarbons

- 1. Tetrachloromethane (carbon tetrachloride)
- 2. 1,1,1-trichloroethane (methyl chloroform), except 1,1,2-trichloroethane
- 3. Chlorofluorocarbons (CFC)
- 4. Bromochlorodifluoromethane (Halon 1211)
- 5. Bromotrifluoromethane (Halon 1301)
- 6. Dibromotetrafluoroethane (Halon 2402)
- 7. Bromofluorocarbons except those set out in items 4 to 6
- 8. Bromochloromethane (Halon 1011)
- 9. Hydrobromofluorocarbons (HBFC)
- 10. Hydrochlorofluorocarbons (HCFC)
- 11. Hydrofluorocarbons (HFC)
- 12. Perfluorocarbons (PFC)





#### Installation or use

It is prohibited to **install or activate** a system that contains or is designed to contain **a halocarbon listed in any of items 1 to 9 of Schedule 1** (Section 4).

This prohibition does not apply in the case of an air-conditioning system, refrigeration system or fire-extinguishing system if:

- > the person is reactivating the system at the same site;
- > the person is installing a fire-extinguishing system in a military vehicle;
- > the person is installing a fire-extinguishing system during the manufacture of a new civilian aircraft in accordance with the Convention on International Civil Aviation, signed at Chicago, December 7, 1944, as amended from time to time; or
- > in the case of a fire-extinguishing system, the person is authorized to do so by a permit issued under subsection 20(2).

It is prohibited to **install or use** a solvent system that contains or is designed to contain **a halocarbon listed in any of items 1 to 12 of Schedule 1** (Section 5) unless:

> the person is authorized to use the halocarbon listed in item 11 or 12 of Schedule 1 by a permit issued under subsection 20(2).

It is prohibited to operate a chiller\* containing a halocarbon listed in any of items 1 to 9 of Schedule 1 (Section 7)

\*Definition of Chiller: an air-conditioning system or refrigeration system that has a compressor, an evaporator and a secondary coolant, but does not include an absorption chiller.

It is prohibited to **install or operate** a purge system, including any associated recovery equipment, unless the system **emits less than 0.1 kg of halocarbon per kilogram of air purged** to the environment (Section 8).

# Charging

It is prohibited to charge a system with a halocarbon listed in any of items 1 to 9 of Schedule 1:

- > in an air-conditioning system or refrigeration system (Section 12), unless:
  - the charge replaces a halocarbon that was recovered to service the system and the charge does not result in a net gain in the amount of halocarbon contained in the system
- > in a fire-extinguishing system (Section 13), unless:
  - the charge replaces a halocarbon that is recovered to service the system and the charge does not result in a net gain in the amount of halocarbon contained in the system;
  - the system is for use in a military vehicle;
  - the system is for use in a civilian aircraft; or
  - · the person is authorized to charge the system by a permit issued under subsection 20(2).

# Storage and transportation

It is prohibited to **store or transport a halocarbon** unless it is in a container designed and manufactured to be refilled and to contain that specific type of halocarbon (Section 6).

This prohibition does not apply in respect of a halocarbon that is used as a laboratory analytical standard or a laboratory reagent.

Other prohibitions are also applicable with respect to leaks and leak tests, please see the associated factsheet.

# **Activities requiring a permit**

To be granted a permit, it must be determined that no technically or financially feasible alternative to the use of the halocarbon exists that could have a less harmful impact on the environment or on human life or health (Section 20).

Type of system	Substances used (listed in Schedule 1 of the FHR 2022)	Permit required
Fire-extinguishing system	Item 1 to 12	to test a fire-extinguishing system in a military vehicle (par. 20(1)(a))
Fire-extinguishing system	Item 1 to 9	to install a fire-extinguishing system referred to in section 4 (par. 20(1)(b))
Solvent system	Item 11 or 12	to install or use a solvent system referred to in subsection 5(2) (par. 20(1)(c))
Fire-extinguishing system	Item 1 to 9	to charge a fire-extinguishing system referred to in section 13 (par. 20(1)(d))

# **Application for a permit**

In the application for a permit, the owner must provide a declaration that there is no technically or financially feasible alternative to the use of the halocarbon that exists that could have a less harmful impact on the environment or on human life or health. The owner must also provide information in support of the declaration, including research on alternatives and the reasons they are not technically or financially feasible.

The permit application must be sent to:

Halocarbons Management Chemical Production Division Environment and Climate Change Canada 351 St. Joseph Boulevard, 19<sup>th</sup> floor Gatineau QC K1A 0H3

halocarbures-halocarbons@ec.gc.ca

### Permit application forms are available.

- > Request for Permit for Fire-Extinguishing System
- > Request for Permit for Solvent System

Once all the required information is received by the Department, the decision on the issuance of the permit is rendered within 10 working days.

# Good to know - other useful information

- > Overview of the Federal Halocarbon Regulations, 2022
- > Owner, responsible person and certified person
- > Size-dependent obligations for systems or containers
- > Leaks and leak tests
- > Maintenance of systems and containers
- > Reporting a release of a halocarbon
- > Prohibitions and permits

For more information, visit our website www.canada.ca/federal-halocarbon-regulations.

If the information you need is not available on our website, contact your regional office or the Halocarbon Program:

Pacific & Yukon: <a href="mailto:rfhpromcon-py-fhrcompro@ec.gc.ca">rfhpromcon-py-fhrcompro@ec.gc.ca</a>
Prairies & Northern: <a href="mailto:promcon-py-fhrcomproper.gc.ca">promcon-py-fhrcompro@ec.gc.ca</a>

Ontario: promcon-on-compro@ec.gc.ca

Quebec: rfh-qc-fhr@ec.gc.ca
Atlantic: rfh-atl-fhr@ec.gc.ca

Halocarbon Program:

halocarbures-halocarbons@ec.gc.ca

**Disclaimer:** This material has been prepared for convenience of reference and accessibility and does not have an official character. It is of a general nature only. For all purposes of interpreting and applying the Regulations, users must consult the official version of the *Federal Halocarbon Regulations*, 2022 and seek their own legal advice as appropriate.

Cat. No.: En14-488/8-2022E-PDF ISBN: 978-0-660-43416-2 EC22062

For information regarding reproduction rights, please contact Environment and Climate Change Canada's Public Inquiries Centre at 1-800-668-6767 (in Canada only) or 819-938-3860 or email to enviroinfo@ec.gc.ca.

© Her Majesty the Queen in Right of Canada, represented by the Minister of Environment and Climate Change, 2022

Aussi disponible en français