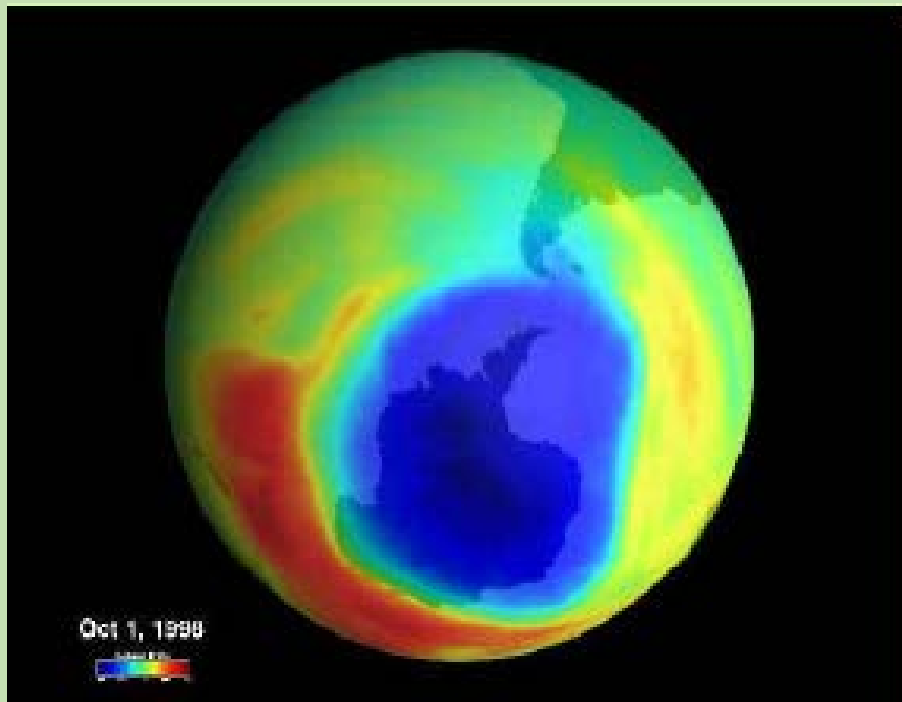


A Concise Guide to the Ozone Layer Protection Ordinance



A Concise Guide to the Ozone Layer Protection Ordinance



**Air Science and Modelling Group
Environmental Protection Department
Hong Kong Special Administrative Region
Government**

2023-12

CONTENTS

	Page
1. Introduction	1
2. Commencement dates of the provisions of the Ordinance	2
3. Definitions	2
4. Registration	3
5. Licence to import or export of scheduled substances	3
6. Cancellation of registration or licence	3
7. Appeal to the Administrative Appeals Board	4
8. Powers of authorized officers in relation to enforcement	4
9. Forfeiture	4
10. Powers to make regulations	5
Appendix 1 Schedule	6
Appendix 2 Guidance notes on substances that are subject to the control of sections 4 and 6 of the Ozone Layer Protection Ordinance	9

Cover Page: "Ozone hole" image

1. Introduction

The main purpose of the Ordinance is to give effect to the international obligations affecting the Hong Kong Special Administrative Region under the 1985 Vienna Convention for the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer.

The Ordinance prohibits the manufacturing of substances that deplete the ozone layer and imposes controls on the import and export of these substances through registration and licensing provisions. The following nine categories of ozone depleting substances are subject to control:

- ◆ chlorofluorocarbons (CFCs);
- ◆ halons;
- ◆ other fully halogenated chlorofluorocarbons
- ◆ 1,1,1-trichloroethane (methyl chloroform);
- ◆ carbon tetrachloride;
- ◆ methyl bromide;
- ◆ hydrobromofluorocarbons (HBFCs);
- ◆ hydrochlorofluorocarbons (HCFCs); and
- ◆ bromochloromethane (BCM).

They are referred to as “scheduled substances” in the Ordinance. Other provisions of the Ordinance include penalties for non-compliance; powers of investigation by the enforcement authority; appeals against the Authority’s decision regarding issue of licence; and powers to make regulations for control and prohibition of manufacture, import or export of products containing or made with ozone depleting substances.

This explanatory booklet contains information that is deliberately simplified. It serves only as an introduction to the understanding of the Ordinance. In case of doubt, the reader is advised to read the Ordinance itself. The descriptions in the brackets following the headings refer to the relevant section numbers of the Ordinance which is on sale at the Government Publications Centre. It can also be found in the web site <http://www.elegislation.gov.hk>.

Enquiries concerning the Ordinance and any other general information on the registration and licensing provisions may be made to the Air Science and Modelling Group of Environmental Protection Department at the following address:

Address	Telephone	Facsimile
33/F., Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong	2594 6593 2594 6225	2827 8040

Enquiries regarding the application for registration and import or export licences should be made to the Rough Diamonds and Ozone Depleting Substances Licensing Unit of Trade & Industry Department at the following address:

Address	Telephone	Facsimile
Room 1604, 16/F, Trade and Industry Tower, 3 Concorde Road, Kowloon City, Hong Kong	2398 5560	2380 8504

2. Commencement dates of the provisions of the Ordinance

The manufacture of all ozone depleting substances is prohibited under section 3 of the Ordinance commencing 1 July 1989. The exception to the prohibition is that the substance is manufactured:

- ◆ for the purpose of research or academic instruction; and
- ◆ in quantity of no more than 1 kg of the substance in a 12-month period.

The following is a summary of the related control:

Measures	Commencement date
● Control of import and export of scheduled substances	1 July 1989
● Banning of import for local consumption of halons	1 January 1994
● Banning of import for local consumption of CFCs, 1,1,1-trichloroethane, carbon tetrachloride and HBFCs	1 January 1996
● Licensing of import of methyl bromide strictly for local quarantine and pre-shipment applications	1 January 1995
● Licensing of import of HCFCs for local consumption	1 January 1996
● Banning of import for local consumption of BCM	1 October 2009
● Banning of import for local consumption of HCFCs*	1 January 2020

*Allow 0.5% of the 1989 base level for servicing of refrigeration and air-conditioning equipment in the period 2020-2029

However, import for re-export of any scheduled substances requires both an import and an export licence. Any person who applies for such a licence must be registered under section 5 of the Ordinance.

3. Definitions (Section 2)

Except where the context otherwise requires, the terms in the Ordinance are defined as follows:

‘aircraft’, ‘export’, ‘import’, ‘vehicle’, and ‘vessel’ have the same meanings as in the Import and Export Ordinance (Cap. 60);

‘authorized officer’ means an officer authorized under section 9;

‘Director’ means the Director of Environmental Protection;

‘licence’ means a licence issued under this Ordinance;

‘scheduled substance’

(a) means a substance listed in the Schedule, whether existing alone or in a mixture; but

(b) in sections 4 and 6 of the Ordinance does not include a substance listed in the Schedule that is:

(i) in a manufactured product (other than one used solely for the transportation or storage of the substance) and the substance is used in the operation of the product or the mere dispensing of the contents of the product constitutes the intended use of the substance; or

(ii) part of a manufactured product solely because the substance was used in the process of

manufacturing the product.

The Schedule, which may be amended from time to time, is reproduced in Appendix 1.

Guidance notes to help clarify the type and form of substances that are subject to the control of sections 4 and 6 of the Ordinance are given in Appendix 2.

4. Registration (Section 5)

Any person who wishes to obtain a licence to import or export a scheduled substance must be registered under section 5 of the Ordinance. The registration will be valid for a specified period and subject to conditions specified by the Director. These conditions will be set out in a certificate of registration issued to the registrant. With effect from July 1990, application for registration should be made to the Trade & Industry Department in a specified form with the required registration fee. A condition of continued registration is that the registrant genuinely intends to import or export scheduled substances.

A person registered under this section who contravenes a condition of registration commits an offence and is liable to a fine of \$25,000.

5. Licence to import or export of scheduled substances (Sections 4 and 6)

Each consignment of import or export of a scheduled substance must be covered by a valid licence issued by the Trade & Industry Department. The licence will be valid for a specified period and subject to the conditions of issue stipulated on the licence. A licensee may apply to the Director to vary the conditions of a licence.

In considering whether to issue a licence or vary the conditions of a licence, the Director shall comply with the international obligations such as those mentioned in section 1 of this Guide. The Director may also impose more stringent measures than are required by the Convention and the Protocols.

A person who imports or exports a scheduled substance without a licence or a licensee who contravenes a condition of a licence commits an offence and is liable to a fine of \$1,000,000 and to imprisonment for 2 years.

6. Cancellation of registration or licence (Section 7)

The Director may at any time cancel a registration or licence when he considers that:

- ◆ a condition of the registration or licence has been contravened; or
- ◆ the registration was made or licence was issued as a result of an error or an unlawful act of the applicant or a false representation of a fact made by him.

The person whose registration or licence is cancelled shall deliver the relevant certificate of registration or licence to the Director within 10 days after being served with a notice of cancellation. A person who fails to deliver a cancelled certificate of registration or licence commits an offence and

is liable to a fine of \$25,000.

Where a person is not given an opportunity to be heard before he is served a notice of cancellation of his registration or licence, he may apply to the Director to review the decision. The Director may, subject to any conditions he may impose, reinstate the registration or licence after hearing the applicant.

7. Appeal to the Administrative Appeals Board (Section 8)

A person who is aggrieved by a decision made in respect of him by the Director under :

- ◆ sections 5, 6 or 7 of the Ordinance; or
- ◆ provisions of the regulations for which appeal under this section is allowed may appeal to the Administrative Appeals Board within 28 days after receiving notice of the decision. The Director shall take necessary action to give effect to the Board's decision.

8. Powers of authorized officers in relation to enforcement (Sections 10, 11, 12 and 13)

The authorized officers are given a wide range of powers to enforce the Ordinance. They include the power to:

- ◆ enter and search premises other than domestic premises;
- ◆ require a person to produce documents for his inspection;
- ◆ take samples;
- ◆ examine anything;
- ◆ seize anything other than an aircraft, vessel or vehicle;
- ◆ use reasonable force to enter premises, remove a person or detain a person during the searching of the place or premises; and
- ◆ search a person and his belongings.

Any person commits an offence and is liable to a fine of \$100,000 and to imprisonment for 6 months if he:

- ◆ wilfully resists or delays an authorized officer to exercise these powers;
- ◆ fails to comply with any requirement under sections 10, 11 or 12 of the Ordinance; or
- ◆ gives incorrect or false information.

9. Forfeiture (Section 14 and 14A)

Anything seized under section 11(2) of the Ordinance may be forfeited. The Director may apply to a court or magistrate for the forfeiture in proceedings under the Ordinance or in separate proceedings relating to the things seized. In the latter case, the owner of the thing or his authorized agent will be notified in writing of such application at once. If there is no apparent owner, the Director shall cause a notice to notify the application for forfeiture in a public accessible place at the Environmental Protection Department.

Any person wishing to claim the return of anything so forfeited may submit a petition within 6 weeks to the Secretary for the Environment.

10. Powers to make regulations (Section 16)

Regulations may be made generally for the purpose of the Ordinance regarding scheduled substances, products containing a scheduled substance and products made with a scheduled substance. The regulations may include control or prohibition of their import, export, manufacture, use, sale, distribution, storage, handling, recovering, recycling, emission, labelling and disposal. Regulations may also be used to issue related codes of practice or to empower the Director to approve the type of equipment to be used in related process.

Acknowledgement:

Permission to use the image of “ozone hole ” from the Ozone Processing Team, Goddard Space Flight Center, NASA is gratefully acknowledged.

SCHEDULE
Scheduled Substances

PART 1

Chlorofluorocarbons (CFC)

<i>Chemical Name</i>	<i>Common Name</i>
CFCl ₃ --Trichlorofluoromethane	CFC-11
CF ₂ Cl ₂ --Dichlorodifluoromethane	CFC-12
C ₂ F ₃ Cl ₃ --Trichlorotrifluoroethane	CFC-113
C ₂ F ₄ Cl ₂ --Dichlorotetrafluoroethane	CFC-114
C ₂ F ₅ Cl--Chloropentafluoroethane	CFC-115

PART 2

Halons

<i>Chemical Name</i>	<i>Common Name</i>
CF ₂ BrCl--Bromochlorodifluoromethane	halon 1211
CF ₃ Br--Bromotrifluoromethane	halon 1301
C ₂ F ₄ Br ₂ --Dibromotetrafluoroethane	halon 2402

PART 3

Other Fully Halogenated Chlorofluorocarbons

<i>Chemical Name</i>	<i>Common Name</i>
CF ₃ Cl--Chlorotrifluoromethane	CFC-13
C ₂ FCl ₅ --Pentachlorofluoroethane	CFC-111
C ₂ F ₂ Cl ₄ --Tetrachlorodifluoroethane	CFC-112
C ₃ FCl ₇ --Heptachlorofluoropropane	CFC-211
C ₃ F ₂ Cl ₆ --Hexachlorodifluoropropane	CFC-212
C ₃ F ₃ Cl ₅ --Pentachlorotrifluoropropane	CFC-213
C ₃ F ₄ Cl ₄ --Tetrachlorotetrafluoropropane	CFC-214
C ₃ F ₅ Cl ₃ --Trichloropentafluoropropane	CFC-215
C ₃ F ₆ Cl ₂ --Dichlorohexafluoropropane	CFC-216
C ₃ F ₇ Cl--Chloroheptafluoropropane	CFC-217

PART 4

Methyl Chloroform

<i>Chemical Name</i>	<i>Common Name</i>
C ₂ H ₃ Cl ₃ --1,1,1-Trichloroethane	Methyl Chloroform

PART 5
Carbon Tetrachloride

<i>Chemical Name</i>	<i>Common Name</i>
CCl ₄ --Tetrachloromethane	Carbon Tetrachloride

PART 6
Methyl Bromide

<i>Chemical Name</i>	<i>Common Name</i>
CH ₃ Br--Bromomethane	Methyl bromide

PART 7
Hydrobromofluorocarbons (HBFC)

<i>Chemical Name</i>	<i>Common Name</i>
CHFBr ₂ --Dibromofluoromethane	---
CHF ₂ Br--Bromodifluoromethane	HBFC-22B1
CH ₂ FBr--Bromofluoromethane	---
C ₂ HFBr ₄ --Tetrabromofluoroethane	---
C ₂ HF ₂ Br ₃ --Tribromodifluoroethane	---
C ₂ HF ₃ Br ₂ --Dibromotrifluoroethane	---
C ₂ HF ₄ Br--Bromotetrafluoroethane	---
C ₂ H ₂ FBr ₃ --Tribromofluoroethane	---
C ₂ H ₂ F ₂ Br ₂ --Dibromodifluoroethane	---
C ₂ H ₂ F ₃ Br--Bromotrifluoroethane	---
C ₂ H ₃ FBr ₂ --Dibromofluoroethane	---
C ₂ H ₃ F ₂ Br--Bromodifluoroethane	---
C ₂ H ₄ FBr--Bromofluoroethane	---
C ₃ HFBr ₆ --Hexabromofluoropropane	---
C ₃ HF ₂ Br ₅ --Pentabromodifluoropropane	---
C ₃ HF ₃ Br ₄ --Tetrabromotrifluoropropane	---
C ₃ HF ₄ Br ₃ --Tribromotetrafluoropropane	---
C ₃ HF ₅ Br ₂ --Dibromopentafluoropropane	---
C ₃ HF ₆ Br--Bromohexafluoropropane	---
C ₃ H ₂ FBr ₅ --Pentabromofluoropropane	---
C ₃ H ₂ F ₂ Br ₄ --Tetrabromodifluoropropane	---
C ₃ H ₂ F ₃ Br ₃ --Tribromotrifluoropropane	---
C ₃ H ₂ F ₄ Br ₂ --Dibromotetrafluoropropane	---
C ₃ H ₂ F ₅ Br--Bromopentafluoropropane	---
C ₃ H ₃ FBr ₄ --Tetrabromofluoropropane	---
C ₃ H ₃ F ₂ Br ₃ --Tribromodifluoropropane	---
C ₃ H ₃ F ₃ Br ₂ --Dibromotrifluoropropane	---
C ₃ H ₃ F ₄ Br--Bromotetrafluoropropane	---
C ₃ H ₄ FBr ₃ --Tribromofluoropropane	---
C ₃ H ₄ F ₂ Br ₂ --Dibromodifluoropropane	---

<i>Chemical Name</i>	<i>Common Name</i>
C ₃ H ₄ F ₃ Br--Bromotrifluoropropane	---
C ₃ H ₅ FBr ₂ --Dibromofluoropropane	---
C ₃ H ₅ F ₂ Br--Bromodifluoropropane	---
C ₃ H ₆ FBr--Bromofluoropropane	---

PART 8

Hydrochlorofluorocarbons (HCFC)

<i>Chemical Name</i>	<i>Common Name</i>
CHFC ₂ --Dichlorofluoromethane	HCFC-21
CHF ₂ Cl--Chlorodifluoromethane	HCFC-22
CH ₂ FCl--Chlorofluoromethane	HCFC-31
C ₂ HFCl ₄ --Tetrachlorofluoroethane	HCFC-121
C ₂ HF ₂ Cl ₃ --Trichlorodifluoroethane	HCFC-122
C ₂ HF ₃ Cl ₂ --Dichlorotrifluoroethane	HCFC-123
C ₂ HF ₄ Cl--Chlorotetrafluoroethane	HCFC-124
C ₂ H ₂ FC ₃ --Trichlorofluoroethane	HCFC-131
C ₂ H ₂ F ₂ Cl ₂ --Dichlorodifluoroethane	HCFC-132
C ₂ H ₂ F ₃ Cl--Chlorotrifluoroethane	HCFC-133
C ₂ H ₃ FC ₂ --Dichlorofluoroethane	HCFC-141
C ₂ H ₃ F ₂ Cl--Chlorodifluoroethane	HCFC-142
C ₂ H ₄ FC ₁ --Chlorofluoroethane	HCFC-151
C ₃ HFCl ₆ --Hexachlorofluoropropane	HCFC-221
C ₃ HF ₂ Cl ₅ --Pentachlorodifluoropropane	HCFC-222
C ₃ HF ₃ Cl ₄ --Tetrachlorotrifluoropropane	HCFC-223
C ₃ HF ₄ Cl ₃ --Trichlorotetrafluoropropane	HCFC-224
C ₃ HF ₅ Cl ₂ --Dichloropentafluoropropane	HCFC-225
C ₃ HF ₆ Cl--Chlorohexafluoropropane	HCFC-226
C ₃ H ₂ FC ₅ --Pentachlorofluoropropane	HCFC-231
C ₃ H ₂ F ₂ Cl ₄ --Tetrachlorodifluoropropane	HCFC-232
C ₃ H ₂ F ₃ Cl ₃ --Trichlorotrifluoropropane	HCFC-233
C ₃ H ₂ F ₄ Cl ₂ --Dichlorotetrafluoropropane	HCFC-234
C ₃ H ₂ F ₅ Cl--Chloropentafluoropropane	HCFC-235
C ₃ H ₃ FC ₄ --Tetrachlorofluoropropane	HCFC-241
C ₃ H ₃ F ₂ Cl ₃ --Trichlorodifluoropropane	HCFC-242
C ₃ H ₃ F ₃ Cl ₂ --Dichlorotrifluoropropane	HCFC-243
C ₃ H ₃ F ₄ Cl--Chlorotetrafluoropropane	HCFC-244
C ₃ H ₄ FC ₃ --Trichlorofluoropropane	HCFC-251
C ₃ H ₄ F ₂ Cl ₂ --Dichlorodifluoropropane	HCFC-252
C ₃ H ₄ F ₃ Cl--Chlorotrifluoropropane	HCFC-253
C ₃ H ₅ FC ₂ --Dichlorofluoropropane	HCFC-261
C ₃ H ₅ F ₂ Cl--Chlorodifluoropropane	HCFC-262
C ₃ H ₆ FC ₁ --Chlorofluoropropane	HCFC-271

PART 9
Bromochloromethane (BCM)

Chemical Name

CH₂BrCl--Bromochloromethane

Common Name

--

Guidance notes on substances that are subject to the control of sections 4 and 6 of the Ozone Layer Protection Ordinance

For the purpose of sections 4 and 6 of the Ordinance, the definition of ‘scheduled substance’ under section 2 of the Ordinance excludes any substance which is in a manufactured product other than a container used for transportation or storage.

Therefore, if a substance or mixture of scheduled substance must first be transferred from a bulk container to another container, vessel or piece of equipment in order to realize its intended use, the first container is in fact used only for storage and/or transport. The substance or mixture so packaged by the first container is a scheduled substance.

However, if the mere dispensing of the product from a container constitutes the intended use of the substance but the container is itself part of a use system, the substance contained in it is not a scheduled substance. Examples of use systems to be considered as products are:

- ◆ an aerosol can
- ◆ a refrigerator or refrigerating plant, air conditioner or air conditioning plant, heat pump, etc.
- ◆ a polyurethane prepolymer or any foam containing, or manufactured with, a controlled substance

If any amount or mixture of a scheduled substance kept in a bulk container of which is not part of a use system, the substance is a scheduled substance. Hence, the size of the container or whether the container is rechargeable is immaterial.

The followings are examples of bulk containers that are commonly found to be used for shipment of scheduled substances and mixtures containing scheduled substances. The sizes in the brackets are typical figures associated with the containers:

- ◆ tanks installed on board ships
- ◆ rail tank cars (10-40 tonnes)
- ◆ road tankers (up to 20 tonnes)
- ◆ cylinders (0.4 kg to one tonne)
- ◆ drums (5-300 kg)

Although the above examples of products are not considered as scheduled substances, section 16 of the Ordinance provides that regulations may be made to control or prohibit the import, export, manufacture, use, sale, distribution, storage, recycling and disposal of products containing or made with a scheduled substances.