



REVISED REGULATIONS ON THE CHEMICAL CONTROL ORDER

for Ozone-Depleting Substances (ODS)
DENR Administrative Order 2013-25

Introduction to the Revised Regulations on the Chemical Control Order for Ozone-Depleting Substances (ODS) - DENR Administrative Order 2013-25

1. Ozone Science

The ozone layer is a thin, fragile shield that envelops the earth and effectively filters about 90% the sun's harmful ultraviolet-B radiation (UV-B) and completely screens out lethal ultraviolet-C radiation (UV-C). It is a region that begins about 10 to 16 kilometers above the earth's surface and extends up to about 50 kilometers. Damage to the ozone layer will naturally mean the entry of harmful rays into the atmosphere. Without the ozone layer, there will be no life on earth.

In the 1980s, scientists discovered the Antarctic ozone hole, which as of September 2013 measures 21 million square kilometres. It was found that the thinning of the ozone layer is a result of the destruction of ozone molecules by certain man-made chemicals called ozone-depleting substances (ODS) such as chlorofluorocarbon (CFCs), halon, methyl bromide, hydrochlorofluorocarbon (HCFC), among others.

2. The Montreal Protocol on Substances that Deplete the Ozone Layer

The alarming rate of ozone depletion has led developed and developing countries to draw up a multilateral environmental agreement known as the Montreal Protocol on Substances that Deplete the Ozone Layer. As of September 16, 2013, this agreement binds 197 member countries to take immediate steps towards ODS phase-out.

Parties to the Montreal Protocol have agreed to gradually reduce and eventually phase out their production and consumption of ODS following an agreed timetable. As of 1 January 2010, developing countries were successful in banning production and consumption of all ODS except for methyl bromide, methyl chloroform and hydrochlorofluorocarbons or HCFCs. All developed and developing countries must completely phase-out methyl bromide(non-QPS uses) and methyl chloroform by 1 January 2015.

In 2007, the Meeting of the Parties to the Montreal Protocol decided to accelerate the phase-out of HCFCs (Decision XIX/6). Below is the new Montreal Protocol HCFC consumption phase-out schedule for developing countries:

HCFC consumption = production + imports - exports	
Base level : Average consumption for 2009 and 2010	
1 January 2013	Freeze at the base level
1 January 2015	10% reduction
1 January 2020	35% reduction
1 January 2025	67.5% reduction
1 January 2030	100% reduction*

*while allowing for servicing an annual average of 2.5% of the baseline during the period 2030-2040

3. National Response to Ozone Depletion

The Philippines signed the Montreal Protocol on September 14, 1988 and ratified it on March 21, 1991. The Philippine Ozone Desk (POD) of the Department of Environment and Natural Resources – Environmental Management Bureau (DENR-EMB) is the national coordinator of programs for the implementation of the Montreal Protocol. It is also known as the country's National Ozone Unit (NOU).

The Philippines' commitment to the Montreal Protocol is to phase out its consumption of all ODS according to the agreed timetable for Article 5 or developing countries. Article 5 countries are given a grace period of 10 years, which means that developed countries must phase out ODS ahead of developing countries.

The Montreal Protocol defines consumption as production plus import minus export. Since the Philippines is neither a producer nor an exporter of ODS, its consumption is equal to its importation. As part of its monitoring and regulatory function, DENR-EMB has been charged with issuance of clearances of all ODS importations. The import of pesticide methyl bromide is monitored/controlled by the Fertilizer and Pesticide Authority (FPA) of the Department of Agriculture (DA). The Bureau of Customs enforces the DENR and DA regulations on the import and export of ODS by checking if importers have the necessary permits from the DENR or DA to allow entry to the national territory.

Other obligations of the Philippines as a Montreal Protocol Party include:

- Article 4 bans imports/exports of ODS between Parties and non-Parties (i.e. countries that have not ratified the Protocol or relevant Amendments). The Article also provides for bans on imports from non-Parties of products made with or containing ODS, as decided by MOP. Annex D specifies a list of products containing CFCs and halons which cannot be imported from non-Parties.
- Article 4A controls trade between Parties, under certain specific circumstances.
- Article 4B makes it mandatory for all Parties to implement a system for licensing the import and export of ODS, for both new and used ODS.
- Article 7 requires all Parties to report ODS data to the Secretariat on an annual basis.
- Article 9 requires Parties to cooperate in promoting public awareness of the environmental effects of ODS, conduct research and development (R&D) and information exchange on technologies to reduce emissions and destroy ODS, ODS alternatives, and control strategies.

4. ODS Phase-out Schedule

As a developing country or an Article 5 country, the Philippines has to adhere to the ODS phase-out schedule in the table below:

Montreal Protocol Control Measures for Article 5/Developing Countries

Substances/ Base Level	1st Jul 1999	2002	2003	2005	2007	2010	2013	2015	2020	2025	2030	2040
A-I: CFC BL = Avg. 95-97	Freeze at BL	Freeze at BL		- 50% of BL	-85% of BL	-100% of BL						
A-II: Halon BL = Avg. 95-97				- 50% of BL		-100% of BL						
B-I: Other CFC BL = Avg. 98-00			- 20% of BL		- 85% of BL	-100% of BL						
B-II: CTC BL = Avg. 98-00				- 85% of BL		-100% of BL						
B-III: TCA BL = Avg. 98-00			Freeze at BL	- 30% of BL		-70% of BL		- 100% of BL				
C-I: HCFC BL = Avg. 09-10							Freeze at BL	-10% of BL	-35% of BL	-67.5% of BL	-97.5% of BL	-100% of BL
E: MeBr BL = Avg. 95-98		Freeze at BL		- 20% of BL				- 100% of BL				

*BL stands for base level

5. The Revised Regulations on the Chemical Control Order for ODS

DENR Administrative Order Number 2013-25, also known as the "Revised Regulations on the Chemical Control Order for Ozone Depleting Substances," was signed by the DENR Secretary on 26 December 2013 and was published for general circulation on 10 January 2014. This is the second revision of the CCO following DAO 2000-18 (Chemical Control Order for Ozone Depleting Substances) DAO 2004-08 (Revised Chemical Control Order for Ozone Depleting Substances).

The rationale for updating the CCO included the following:

- To update the phase-out status of controlled substances covered by the Montreal Protocol on Substances that Deplete the Ozone Layer;
- To reflect the accelerated phase-out schedule for hydrochlorofluorocarbons (HCFCs) as per Decision XIX/6 of the Nineteenth Meeting of the Parties to the Montreal Protocol; and
- To provide the continuing legal basis for ODS phase-out.

Implications of the Revised Regulations on the CCO for ODS

The revised regulations on the CCO will have implications on the different sectors that use ODS, particularly those that use HCFCs, among others:

ODS Importation

Any importer of ODS, excluding importers of methyl bromide, must register with the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR). As before, an importer of ODS must secure annually a certificate of registration from EMB and a Pre-Shipment Importation Clearance (PSIC) prior to the entry of each ODS shipment within the Philippine territory. Importers must follow updated phase-out schedule for HCFCs and the quota allocation for HCFCs and conform to the "one-shipment, one clearance" policy. Distribution of ODS shall be limited to EMB-registered dealers, resellers and retailers of ODS. As of 2010, only HCFCs are allowed to be imported in the Philippines among the ODS. Other ODS, including CFCs, have been banned for importation by 1 January 2010.

ODS Exportation and Destruction

The new CCO further regulates the export of controlled substances, in any form, whether alone or in mixtures, including those that are used, stored, reclaimed, recycled, or recovered as well as unwanted ODS. The export of wastes containing ODS shall, however, be governed by the appropriate Department rules and regulations on hazardous waste management and the Basel Convention. Like importers, ODS exporters must secure annually a certificate of registration from EMB and a Pre-Shipment Export Clearance (PSEC) prior to the exit of each ODS shipment from the Philippine territory.

Distribution of ODS in the Country

Only dealers, resellers and retailers of ODS that are registered with the EMB and accredited by the DTI are allowed to purchase, re-sell, distribute, and utilize allowable uses of ODS. Dealers and retailers should also adhere to the Code of Practice for Refrigeration and Air-Conditioning (2013 update), and should keep a record of their ODS sales for reference during inspection. Sale of ODS is allowed only to service shops/providers accredited by the DTI with a TESDA-certified technician. Sale and use of small disposable containers (less than 1 kg) with ODS is not permitted.

Servicing of ODS-using Equipment

Service providers of ODS-using equipment, such as air-conditioners and refrigeration equipment, must secure a certificate of registration from the DENR to assess their capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the purpose of effectively handling ODS, including responsible re-use of refrigerants, minimizing their emissions, and ultimately, phasing out their use by replacing with substitutes or alternatives duly recognized and certified by the DENR/EMB.

DENR encourages the technicians and mechanics of service providers to obtain certification from TESDA on the necessary skills and competencies, and the acquiring of DTI accreditation to ensure the availability of necessary tools and equipment for environmentally-friendly servicing. Service providers must also adhere to the good practices in handling and working with refrigerants set forth in the Code of Practice for Refrigeration and Air-conditioning adopted by the DENR in 2013. From period 2030-2040, an annual HCFC importation of 2.5% of the baseline consumption shall be allowed for use in the servicing sector.

Foam Manufacturing

By 1 January 2015, when HCFC imports shall have been reduced by 10% based on the recorded baseline consumption, all importation of HCFC-141b and pre-blended polyols for foam (rigid and flexible) manufacturing will also be prohibited. Hence, all foam manufacturers are encouraged to shift to alternative technologies in foam manufacturing.

Refrigeration and Air-conditioning

By 1 January 2020, when HCFC imports shall have been reduced by 35% based on the recorded baseline consumption, all importation of HCFC-22 for the manufacturing of refrigeration and air-conditioning will also be absolutely prohibited. Hence, companies are encouraged to shift to alternative technologies in this sector before 2020.

Chillers and Fire-extinguishing

By 1 January 2025, when HCFC imports shall have been reduced by 67.5% based on the recorded baseline consumption, all importation of HCFC-123 as cooling agent for chillers and as fire extinguishing agent will be prohibited. Hence, companies are encouraged to shift to alternative technologies in this sector before 2025.

HCFC Blends

By 1 January 2030, when HCFC imports shall have been reduced by 97.5% based on the recorded baseline consumption, all importation of blends containing HCFCs will be prohibited. Hence, all sectors that use HCFC blends must shift to alternative before 2030.



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DENR ADMINISTRATIVE ORDER

No. 2013- 25

SUBJECT : Revised Regulations on the Chemical Control Order for Ozone Depleting Substances (ODS)

Pursuant to the provisions of Executive Order 192 or the "Reorganization Act of the Department of Environment and Natural Resources"; Republic Act 6969 or the "Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990"; Republic Act 8749 or the "Philippine Clean Air Act of 1999"; and Philippine Senate Resolution No. 25 dated 10 March 1993 concurring with the ratification of the Montreal Protocol on Substances that Deplete the Ozone Layer as adjusted and amended; DENR Administrative Order No. 2004-08 or the "Revised Chemical Control Order for Ozone Depleting Substances (ODS)" is hereby amended to implement further revisions of the Chemical Control Order for Ozone Depleting Substances (ODS), hereinafter referred to as CCO.

Section 1. Basic Policy.

It is the policy of the State to regulate, restrict or prohibit the importation, manufacture, processing, sale, distribution, use and disposal of chemical substances and mixtures that present unreasonable risk and/or injury to health or environment. This policy includes the export and destruction of ozone-depleting substances to abate or minimize risks and hazards to the stratospheric ozone, public health, and the environment.

Section 2. Objectives.

This CCO aims to:

1. Include the legal infrastructure to support the implementation of the Philippine Hydrochlorofluorocarbon (HCFC) Phase-out Management Plan (HPMP); and
2. Sustain the phase-out of other ozone depleting substances.

Section 3. Coverage.

1. This CCO covers the regulation, control, restriction or prohibition of the importation, manufacture, processing, sale, export, distribution, use, disposal, storage, possession and destruction of chemical substances under Annex A, Groups I and II; Annex B, Groups I, II and III; and Annex C, Groups I and II of the Montreal Protocol, as amended, listed in Appendix I.

2. Regardless of source, the chemical substances covered by this CCO can be in forms defined under Article I, Paragraph 4 of the Montreal Protocol as clarified under Decision I/12A of the First Meeting of the Parties and Decision II/4 of the Second Meeting of the Parties, herein attached as Appendix II.
3. In general, these chemical substances can exist alone or in mixtures, can be contained in bulk for transport and/or storage, as part of a use system or equipment, or used and/or contained in a manufactured product.
4. While considered an ODS, Annex E substance (Methyl Bromide), being a pesticide, is covered by Section 9 of Presidential Decree 1144, Department of Agriculture Administrative Order No. 17, series of 2010 and Fertilizer and Pesticide Authority Memorandum Circular No. 01 series of 2011.

Section 4. Definition of Terms.

The following terms as used in this CCO shall mean as follows:

1. Alternative substance

A replacement of ODS with zero Ozone Depleting Potential (ODP), such as hydrofluorocarbons (HFCs).

2. Article 5 country

A developing country that is a party to the Montreal Protocol and whose annual calculated consumption of controlled substances is less than 0.3 kilograms per capita. Such country is considered to operate under Article 5 of the Montreal Protocol.

3. Back conversion

The act of charging with chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) a system designed for and/or using non-CFC or non-HCFC.

4. Baseline consumption of HCFC

The average consumption of HCFC in ODP tonnes for 2009-2010.

5. Blended ODS

A combination or mixture of ODS and other chemical substances.

6. Bureau

The Environmental Management Bureau.

7. Chlorofluorocarbons or CFCs

The family of chemicals that contains chlorine, fluorine and carbon. CFCs are often used as refrigerants, aerosol propellants, cleaning solvents, and blowing agents (i.e., in the manufacture of foam).

8. Consumption

The sum of production and imports minus exports of ODS. The amount recycled and reused is not considered as production. Since the Philippines does not produce nor export ODS, the country's consumption is equivalent to imports as measured by ODP weight.

9. Controlled substance

Any chemical that is subject to control measures, such as a phase-out requirement pursuant to the schedule of the Montreal Protocol on Substances that Deplete the Ozone Layer, as amended.

10. Dealer

Any person that buys ODS, ODS-containing equipment or ODS-containing product in any form in order to sell these for business or commercial purposes.

11. Department

The Department of Environment and Natural Resources.

12. Destruction

The removal or obliteration of unwanted ODS with an efficiency of 99.9% or higher using technologies approved for destruction of concentrated sources (largely refrigerants) and for dilute sources (foams containing ODS). Destruction technologies may include cement kilns, argon and nitrogen plasma, and gaseous or fume oxidation. The full list of approved technologies was updated at the 23rd Meeting of the Parties through Decision XXIII/12 (Bali 2011). It also refers to a process which, when applied to controlled substances, results in the permanent transformation or decomposition of all or a significant portion of such substances.

13. Disposal of ODS

The collection, sorting, transport, storage, and treatment of unwanted ODS.

14. Essential use

The use of ODS that is exempt from phase-out and other control measures. Exempted use of controlled substances does not count towards a country's consumption. A global exemption has been granted for laboratory and analytical uses. Countries may request essential use exemptions on behalf of individual enterprises if the specific ODS is either for health, safety or for functioning of society where no acceptable alternative is available. The Meeting of the Parties decides on such requests on a case-by-case basis.

15. Exporter

Any person that undertakes to bring outside of the country an equipment, substance, or product, in any form, including those that are used, stored, restored or recovered, which is intended for direct consumption, warehousing, sale, or distribution in another country. The term also includes a person who brings outside the country any unwanted ODS or wastes containing ODS.

16. Flushing

The act of cleaning a contaminated refrigeration or air conditioning system or a system with a burnt compressor by pumping or blowing gas, medium or solvent through the system, then releasing the compounds to the atmosphere or to a system in contact with the atmosphere.

17. Hydrochlorofluorocarbons or HCFCs

The family of hydrogenated chemicals related to CFCs which contain hydrogen as well as chlorine, fluorine, and carbon. The hydrogen reduces their atmospheric lifetime, making HCFCs less ozone-depleting than CFCs and thus considered as transitional substances.

18. Philippine HCFC Phase-out Management Plan or HPMP

The overarching strategy and investment projects aimed to phase out the use of HCFCs in the following sectors in the Philippines: foam, airconditioning and refrigeration, fire extinguishing and chillers, and servicing sectors. Implementation of the Philippine HPMP is supported by the Multilateral Fund (MLF) of the Montreal Protocol on Substances that Deplete the Ozone Layer and its Implementing Agencies such as the United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Industrial Development Organization (UNIDO), and the World Bank.

19. Importer

Any person that undertakes the entry of an equipment, substance or product into the country that is intended for direct consumption, warehousing, sale, or distribution.

20. Installation

Any permanent mounting or setting-up of a system, or transfer of equipment from one location to another, which involves opening the system to the atmosphere, such as when the piping has to be cut and reconnected, or involving fixed installation to water piping or electricity.

21. Methyl bromide

An ozone-depleting substance that covers a broad spectrum of pesticides registered with the Fertilizer and Pesticide Authority for use as space and soil fumigant for the control of weeds, nematodes, fungi, and insect pests.

22. Montreal Protocol on Substances that Deplete the Ozone Layer or Montreal Protocol

The Protocol to the Vienna Convention, signed in 1987 and subsequently adjusted or amended, which commits Parties to take concrete measures to protect the ozone layer by freezing, reducing, or ending production and consumption of controlled substances.

23. Ozone

A gas whose molecules contain three atoms of oxygen, and whose presence in the stratosphere constitutes the ozone layer that protects life against harmful radiation. Ozone is toxic to humans, animals, and plants at high concentrations. It is a pollutant when it occurs in smog in the lower atmosphere.

24. Ozone depletion

The process by which the stratospheric ozone is destroyed by man-made chemicals, leading to a reduction in its concentration.

25. Ozone-depleting potential or ODP

A measure of the ability of a substance to destroy the stratospheric ozone based on its atmospheric lifetime, stability, reactivity, and content of elements that can attack the ozone, such as chlorine and bromine. All ODPs are based on the reference measure of 1 for CFC-11 and CFC-12.

26. ODP Tonne (equal to Metric Tonne x ODP)

A measurement of the ozone depleting potential weight of a substance.

27. Ozone-Depleting Substance or ODS

Any substance which is controlled under the Montreal Protocol and its amendments. ODS includes CFCs, HCFCs, halons, carbon tetrachloride, methyl chloroform, hydrobromofluorocarbons, bromochloromethane, and methyl bromide. ODS has an ozone-depleting potential greater than zero (0) and can deplete the stratospheric ozone layer.

28. Ozone layer

A thin, fragile shield created as ozone forms and breaks down in the stratosphere. This ozone layer envelopes the entire earth which efficiently and effectively filters and screens most of the harmful ultraviolet (UV) rays like UV-B.

29. Party

A country that signs and/or ratifies the Montreal Protocol and its relevant adjustments or amendments indicating that it agrees to be bound by the rules set out therein. Article 4 of the Montreal Protocol restricts trade with countries that are not parties to the Protocol.

30. Person

A natural or juridical entity. A person may be an individual, a corporation, partnership, or association.

31. Phase-out

The ceasing of the production and consumption of a chemical substance controlled under the Montreal Protocol other than those considered for essential uses.

31. Pre-blended polyol

The product resulting from the mixing or blending of HCFC 141b into polyols usually done by specialized facilities or system houses and are often traded across countries. Individual enterprises that manufacture foam products usually procure such pre-blended or pre-mixed polyols.

32. Recycle

The act of reducing contaminants in used refrigerants by separating oil, removing condensables, and using devices, such as filter dryers to reduce moisture, acidity, and particulate matter.

33. Re-seller

Any person who is engaged in the business of buying an equipment, product, or substance in any form from a dealer or an original seller for the purpose of selling it to another.

34. Retailer

Any person who sells an equipment, product, or substance in any form directly to a consumer or end user.

35. R-502

A blend of refrigerant composed of 51.2% CFC-115 and 48.8% HCFC-22. This is commonly used for low temperature refrigeration systems.

36. Service provider

Any person engaged in the business of or who directly performs the installation, maintenance, service, repair or operation of ODS-using equipment located on any land or water body. Service providers may be technicians, mechanics, contractors, service shops, and repair shops.

37. Servicing

Any act of repair, maintenance, testing, or trouble-shooting of parts, including mechanical and electrical component, of existing ODS-using equipment located on any land or water body.

38. Venting

The practice of intentionally releasing and/or purging ODS to the atmosphere.

Section 5. Ban on Importation of ODS.

This CCO affirms the previous ban on importation, except for essential uses, in any amount, of the following substances, whether alone or in mixtures, as provided under the Department's Notice to the Public dated December 1998, relevant administrative orders, and listed in Appendix I of this CCO:

1. Annex A Group I
 - a. CFC-11 and CFC-12 banned for importation for manufacturing products and equipment since 01 January 1998;

- b. CFC-113 since 01 January 1996; and
 - c. CFC-114 and CFC-115, except as component in R-502, since 01 January 1998;
2. Annex A Group II since 01 January 1999;
 3. Annex B Group I since 01 January 1999;
 4. Annex B Group II since 01 January 1996;
 5. Annex B Group III since 01 January 1996; and
 6. Annex E Group I: Non-QPS Methyl Bromide since 01 January 2009.

Notwithstanding the above provisions, the importation of CFC-11, regardless of sector or purpose, is absolutely banned since 01 January 2005. Further, importation of all CFCs, including those in R-502, regardless of sector or purpose, is absolutely banned since 01 January 2010.

Section 6. Phase-Out Schedule and Control of Importation of ODS.

1. For Annex C Group 1 (HCFCs):
 - a. By 01 January 2013, imports shall not exceed the recorded baseline consumption in ODP tonnes.
 - b. By 01 January 2015, imports shall have been reduced by 10% based on the recorded baseline consumption in ODP tonnes.

By this date, all importation of HCFC-141b and pre-blended polyols for foam (rigid and flexible) manufacturing will also be absolutely prohibited, except for the servicing and solvent sectors.
 - c. By 01 January 2020, imports shall have been reduced by 35% based on the recorded baseline consumption in ODP tonnes.

By this date, all importation of HCFC-22 for the manufacturing of refrigeration and air-conditioning will also be absolutely prohibited, except for the servicing sector.
 - d. By 01 January 2025, imports shall have been reduced by 67.5% based on the recorded baseline consumption in ODP tonnes.

By this date, all importation of HCFC-123 as cooling agent for chillers and as fire extinguishing agent will likewise be absolutely prohibited, except for the servicing sector.

- e. By 01 January 2030, imports shall have been reduced by 97.5% based on the recorded baseline consumption in ODP tonnes.

By this date, all importation of blends containing HCFCs will likewise be absolutely prohibited.

- f. By 01 January 2040, importation shall have been absolutely prohibited.

By this date, all kinds of importation of HCFC substances for the manufacturing and servicing sectors, except for essential use, will be prohibited.

- h. However, during the period 2030-2040, an annual importation of 2.5% of the baseline consumption shall be allowed for the servicing sector.

- 2. Consistent with Section 6.1.a-6.1.g of this CCO, an annual import quota allocation system shall be implemented by the Department through the Bureau.
- 3. The annual import quota is non-cumulative, that is, any remainder of the quota allocation for a particular substance is deemed consumed at the end of the calendar year. The total annual imports shall be in accordance with the phase-out schedule outlined in Section 6.1.a-6.1.g of this CCO.
- 4. The Department, through the Bureau, may accelerate the phase-out schedule for the servicing sector as it may deem necessary, through the issuance of an appropriate policy instrument.

Section 7. Registration and Renewal of Registration of Importers of ODS.

- 1. Any person who imports ODS (regardless of source as allowed under the agreements of the Montreal Protocol, as amended) for any industry or activity, such as those listed under Appendix IV, must register with the Department through the Bureau.
- 2. A Certificate of Registration issued by the Department through the Bureau is valid only for the calendar year when it was obtained. An application for the renewal of registration for every succeeding period prior to any importation must be submitted within the last thirty (30) days of the current calendar year.
- 3. A Certificate of Registration may be granted and renewed only upon showing proof of the following:

- a. Understanding and appreciation of the role of ODS in depleting the stratospheric ozone and its consequences, as well as capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the purpose of effectively handling ODS, including responsible reuse of refrigerants, minimizing their emissions, and ultimately phasing out their use by replacing them with substitutes or alternatives duly recognized and certified by the Department through the Bureau, as shown by proof of attendance or certificate of participation by the applicant firm's chemical handler in at least one relevant training/ seminar organized within the last three (3) years from the date of application by any of the following entities:
 - i. Department/Bureau;
 - ii. Technical Education and Skills Development Authority (TESDA) and TESDA-accredited training institutions;
 - iii. Industry in-house seminars and hands-on training; or
 - iv. Internationally-recognized or foreign-based training institutions.
 - b. Compliance with Section 8 (Pre-Manufacturing and Pre-Importation Notification or PM-PIN requirements) of Republic Act No. 6969; and Section 14 (Chemical Substances Inventory), Section 15 (PM-PIN), and Section 17 (Notification of New Chemicals) of DENR Administrative Order No. 29, series of 1992 (Implementing Rules and Regulations of Republic Act No. 6969); and other pertinent environmental laws and regulations, such as the Philippine Environmental Impact Statement (EIS) system.
4. The application for registration, including its renewal, must be accompanied by the following documents:
- a. Duly accomplished and notarized registration form;
 - b. Photocopy of the Environmental Compliance Certificate (ECC) or Certificate of Non-Coverage (CNC) issued by the appropriate office of the Department;
 - c. Photocopy of registration with the Securities and Exchange Commission (SEC), Cooperatives Development Authority (CDA), or Department of Trade and Industry (DTI), with an updated list of its officers;
 - d. Photocopy of the Material Safety Data Sheet (MSDS) from the manufacturing firm every time an importer applies for registration of a new chemical;

- e. Document describing the applicant's handling procedure, safety precautions, and emergency response for the chemical; and
 - f. Other pertinent documents or information as may be required by the Department and the Bureau.
5. Notwithstanding the foregoing provisions, the Department through the Bureau may, at its option and when circumstances warrant, conduct further verification of the applicant's capability as an importer before the issuance or renewal of such registration.
 6. For an importation covered by Section 6 hereof, the Department through the Bureau shall, upon evaluation of the application, determine the annual quota per substance for every importer.

Section 8. Pre-Shipment Importation Clearance (PSIC) for ODS.

1. Registered importers must secure a Pre-Shipment Importation Clearance (PSIC) from the Department through the Bureau prior to the entry of ODS listed in Section 3 and Appendix I (Annex C) of this Administrative Order in any area within the Philippine territory. Any shipment not covered by such importation clearance shall be deemed to have been illegally imported, in which case, the same shall be confiscated and forfeited in favor of the government. Likewise, any transaction not covered by the terms and conditions of the said PSIC shall be considered a violation of this CCO.
2. Applicants for a PSIC must observe the following:
 - a. The application for importation clearance for substances under Section 3 of this CCO must be within the prescribed quota pursuant to Section 7.6 of this CCO;
 - b. In order for applications to be considered as received for processing, an applicant must duly accomplish the application form and pay the corresponding prescribed fees and charges; and
 - c. Application forms shall be accomplished in three (3) copies and filed with the Department through the Bureau for assessment and evaluation.
3. The following information must be provided in the application for a PSIC:
 - a. Commercial name, trade name, or brand name of the substance as usually promoted or marketed by the manufacturers;
 - b. Generic name of the substance;
 - c. Name and address of the manufacturing company;
 - d. Port of loading or the country or port immediately before the substance enters the Philippine territory;

- e. Exporting company or any entity that transacts or brokers the chemical substance from the manufacturer to the importing company; and
 - f. Current inventories of the substance that is the subject of the application for importation clearance, including the area or building within which the same is stored either for further transshipment or distribution.
4. All accomplished application forms must also include the following documents:
- a. Official receipt showing that the prescribed application fees and charges have been paid;
 - b. Photocopy of the pro-forma invoice;
 - c. Photocopy of the accomplished Record of Actual Arrival of Shipment accompanied by a photocopy of the Bill of Lading issued by the carrier (shipping or transport contractor) of the most recent importation of the chemical made by the applicant. However, this provision does not apply to new or first-time importers;
 - d. A summary of the transactions made under the most recent importation clearance issued on the same chemical applied for. However, this provision does not apply to new or first-time importers;
 - e. Import Entry and Internal Revenue Declaration;
 - f. List of intended buyers and/or end-users; and
 - g. Any other pertinent documents that the Department and the Bureau may deem appropriate and necessary.
5. Importers shall distribute these substances only to registered/accredited dealers, retailers, re-sellers, service providers and service shops pursuant to Sections 9 and 10 hereof or to those entities utilizing these substances for essential uses as certified by the Department through the Bureau.
6. The PSIC shall only be issued on a per substance per shipment basis.
7. The PSIC shall be issued in three copies, one each for the Department, the Bureau of Customs, and the importer.
8. The PSIC shall only be valid within the same calendar year of the date of issuance. Applicants are thus encouraged to submit their respective applications for renewal and accompanying documents within the last thirty (30) days of the current calendar year.

Section 9. Registration and Renewal of Registration of Dealers, Retailers, and Re-sellers of ODS.

1. Consistent with the Department's Memorandum Circular No. 2005-23 on the Registration of Dealers, Re-sellers, and Retailers of ODS, any person who is engaged in trading, selling, and/or distribution of ODS (regardless of source as allowed under the agreements of the Montreal Protocol, as amended) for any industry or activity, such as those listed under Appendix IV, must first register with the Department through the concerned Regional Office of the Bureau in order to determine their capability in handling and using these substances. Such registration is on an enterprise and site-specific basis, and not on a chemical basis.

2. A Certificate of Registration may be granted and renewed only when the applicant shows proof of the following:

Understanding and appreciation of the role of ODS in depleting the stratospheric ozone and its consequences, as well as capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the purpose of effectively handling ODS including responsible reuse of refrigerants, minimizing their emissions, and ultimately phasing out their use by replacing them with substitutes or alternatives duly recognized and certified by the Department through the Bureau, as shown by proof of attendance or certificate of participation by the applicant firm's chemical handler in at least one relevant training/seminar organized within the last five (5) years from the date of application by any of the following entities:

- a. Department/Bureau;
- b. Technical Education and Skills Development Authority (TESDA) and TESDA-accredited training institutions;
- c. Industry in-house seminars and hands-on training; or
- d. Internationally-recognized or foreign-based training institutions.

Such training must include an orientation on the preservation of the ozone layer, the provisions of this CCO, and training on handling chemicals from suppliers (including refilling activities).

3. The application for registration, including its renewal, must be accompanied by the following documents:

- a. Duly accomplished and notarized registration form;
- b. Photocopy of registration with the Securities and Exchange Commission (SEC), Cooperatives Development Authority (CDA), or Department of Trade and Industry (DTI), or local government permits and clearances, and updated list of its officers; and

- c. Copy of the disposition report of the previous year.
4. A Certificate of Registration issued by the Department through the Regional Offices of the Bureau is valid only for the calendar year when it was obtained. Applicants are thus encouraged to submit their respective applications for renewal and accompanying documents within the last thirty (30) days of the current calendar year.
5. Only dealers, retailers, and re-sellers registered by the Department through the Regional Offices of the Bureau may purchase, re-sell, and distribute the ODS listed under Section 3 for allowable uses in Appendix IV. The ODS may only be sold or distributed to service providers that are duly registered under Section 10 of this CCO.

Section 10. Registration and Renewal of Registration of Service Providers of ODS-using Equipment.

1. Service providers of ODS-using equipment must register with the Department through the Bureau to determine their capability in handling and working on these substances. However, a Certificate of Registration may only be granted by the Department upon showing proof that the service provider has been duly certified by TESDA in the case of individual mechanics or those accredited by DTI in the case of service/repair shops.
2. Service providers should have the capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the purpose of effectively handling ODS, including responsible re-use of refrigerants, minimizing their emissions, and ultimately phasing out their use by replacing with substitutes or alternatives duly recognized and certified by the Department through the Bureau.
3. Service providers shall adhere to the good practices in handling and working with refrigerants set forth in the Code of Practice for Refrigeration and Airconditioning approved and adopted by the Department in 2013.
4. Service providers shall also participate in a system to recover, reclaim, and re-use refrigerants that will be led by the Department.
5. A Certificate of Registration issued by the Department through the Bureau is valid for a period of three (3) years. Applications for renewal may thus be submitted within the last thirty (30) days of the third calendar year.

Section 11. Regulation of the Export of ODS.

1. This CCO further regulates the export of controlled substances, in any form, whether alone or in mixtures, including those that are used, stored, reclaimed, recycled, or recovered as well as unwanted ODS. The export of wastes containing ODS shall, however, be governed by the appropriate Department rules and regulations on hazardous waste management and the Basel Convention.
2. The export of ODS shall be subject to licensing, in which case an export license shall be issued by the Department through the Bureau after verification of compliance with the requirements for export.
3. The export of ODS to any country that is not a party to the Montreal Protocol and its amendments is prohibited.

Section 12. Registration and Renewal of Registration of Exporters of ODS.

1. Any person who exports ODS (regardless of source as allowed under the agreements of the Montreal Protocol, as amended) for any industry or activity, such as those listed under Appendix IV, must register with the Department through the Bureau.
2. A Certificate of Registration issued by the Department through the Bureau is valid only for the calendar year when it was obtained. Applicants are thus encouraged to submit their applications for renewal and accompanying documents within the last thirty (30) days of the current calendar year.
3. A Certificate of Registration may be granted and renewed only when the applicant shows proof of the following:
4. Understanding and appreciation of the role of ODS in depleting the stratospheric ozone and its consequences, as well as capability to take effective measures, including the necessary equipment, technology, training and infrastructure, for the purpose of effectively handling ozone-depleting substances, including responsible reuse of refrigerants, minimizing their emissions, and ultimately phasing out their use by replacing them with substitutes or alternatives duly recognized and certified by the Department through the Bureau, as shown by proof of attendance or certificate of participation by the applicant firm's chemical handler in at least one relevant training/seminar organized within the last three (3) years from the date of application by any of the following entities:
 - a. Department/Bureau;
 - b. Technical Education and Skills Development Authority (TESDA) and TESDA-accredited training institutions;
 - c. Industry in-house seminars and hands-on trainings; or
 - d. Internationally-recognized or foreign-based training institutions.

5. The application for registration, including its renewal, must be accompanied by the following documents:
 - a. Duly accomplished and notarized registration form;
 - b. Photocopy of the Environmental Compliance Certificate (ECC) or Certificate of Non-Coverage (CNC) issued by the appropriate office of the Department;
 - c. Photocopy of registration with the Securities and Exchange Commission (SEC), Cooperatives Development Authority (CDA), or Department of Trade and Industry (DTI), with an updated list of its officers;
 - d. Photocopy of the Material Safety Data Sheet (MSDS) from the manufacturing firm every time an exporter applies for registration of a new chemical, when applicable;
 - e. Document describing the applicant's handling procedure, safety precautions, and emergency response for the chemical; and
 - f. Other pertinent documents or information as may be required by the Department and the Bureau.

Section 13. Pre-Shipment Export Clearance (PSEC).

1. Registered exporters must secure a Pre-Shipment Export Clearance (PSEC) from the Department through the Bureau prior to the exit of ODS listed in Section 3 from the Philippine territory. Any shipment not covered by such PSEC shall be deemed to have been illegally exported. Likewise, any transaction not covered by the terms and conditions of the said PSEC clearance shall be considered a violation of this CCO.
2. Applicants of PSEC must observe the following:
 - a. In order for applications to be considered as received for processing, an applicant must duly accomplish the application form and pay the prescribed fees and charges; and
 - b. Application forms shall be accomplished in three (3) copies and filed with the Department through the Bureau.
3. The following information must be provided in the application for a PSEC:
 - a. Commercial name, trade name, or brand name of the substance as usually promoted or marketed by the manufacturers;
 - b. Generic name of the substance;
 - c. Name of the manufacturing company;
 - d. Port of entry of receiving country; and

- e. Importing company or any entity that transacts or brokers the chemical substance from the manufacturer to the exporting company.
4. All accomplished application forms must also include the following documents:
 - a. Official receipt showing that the prescribed application fees and charges have been paid;
 - b. Photocopy of the Material Safety Data Sheet (MSDS) from the manufacturing firm every time an exporter applies for clearance of a new chemical, when applicable;
 - c. Photocopy of the purchase order or its equivalent;
 - d. Document describing the applicant's handling procedure, safety precautions, and emergency response for the chemical; and
 - e. Photocopy of the Bill of Lading issued by the carrier (shipping or transport contractor).
 5. The PSEC shall only be issued on a per substance per shipment basis.
 6. The PSEC shall be issued in three copies, one each for the Department, the Bureau of Customs, and the exporter.
 7. The PSEC shall be valid for a period not exceeding one (1) calendar year from the date of issuance.

Section 14. Records Keeping.

All importers, exporters, dealers, retailers, and re-sellers must keep a record of all transactions and prepare an annual report, which must be submitted to the Bureau by the 31st of January of the following year. The annual report shall be prepared according to formats prescribed by the Bureau.

All service providers shall likewise keep a record of all transactions, including quantity of recovered refrigerants, for purposes of validation by the Bureau.

Records retained by importers, exporters, dealers, retailers, and re-sellers must be available for inspection at any time by an authorized officer of the Department through the Bureau.

Section 15. Public Access to Records and Confidentiality of Business Information.

The reports received by the Department or Bureau shall be considered as public documents. As such, the public shall have access to these records, reports or information concerning chemical substances and mixtures, including safety data submitted, data on emission or discharge into the environment. Such documents shall be available for inspection or reproduction during normal business hours, except when the report, in full or part thereof, is claimed or regarded as confidential pursuant to Sections 40(1) and 40(2) of DENR Administrative Order No. 29, series of 1992, in which case disclosure of information may only be allowed in cases under Section 40(3) thereof.

Section 16. Capability-Building Program.

In order to support the implementation of the HCFC phase-out and promote the use of alternative substances, the Department through the Bureau shall formulate a capability-building program that will increase research as well as information, education, and communication (IEC) efforts on this CCO.

Section 17. Administrative Violations.

In addition to the relevant provisions of Republic Act No. 6969, Republic Act No. 8749, DENR Administrative Order No. 29, series of 1992, and other violations arising from the implementation of Sections 4-15 of this CCO, the following acts and omissions shall be considered as administrative violations:

1. Back conversion;
2. Installation of CFC-using system;
3. Sale and use of small disposable containers (less than 1 kg) with CFCs;
4. Importation or manufacturing or placing in the market of products or equipment containing Halons or CFCs;
5. Use of CFC-containing equipment in mobile transportation starting in 2012 pursuant to the DOTC-DENR Joint Administrative Order No. 03, series of 2006 or the "Enforcement of Regulation on the Implementation of the NCPP on Motor Vehicles" under the Revised Chemical Control Order (CCO) for Ozone Depleting Substances (ODS) (DENR Administrative Order No. 08, series of 2004);
6. Use of CFC-11 as blowing agent for foam manufacturing;
7. Intentional release or venting of ODS;
8. Use of CFC-11 and other banned ODS as flushing or cleaning agent; and
9. Possession of unregistered refrigerants, including mislabeling of controlled substances.

Section 18. Penal Provisions

In addition to the relevant provisions of Republic Act No. 6969, Republic Act No. 8749, DENR Administrative Order No. 29, series of 1992, and other violations arising from the implementation of Sections 4-15 of this CCO, the following acts and omissions shall be considered as administrative violations:

1. Cancel the registration of importers, exporters, dealers, retailers, and resellers;
2. Recommend the cancellation of the DTI accreditation of service or repair shops, and;
3. Recommend the cancellation of the TESDA certificates of competency of technicians, mechanics, contractors, and other service providers.

The foregoing administrative and penal provisions shall not prevent the Department through the Bureau from issuing interim orders to stop the continued commission of the pertinent violation.

Section 19. Separability Clause.

If any part or section of this CCO is declared unconstitutional or invalid by a competent court, the other provisions hereof shall continue to be in force and effect as if the part or section so declared unconstitutional or invalid had never been incorporated herein.

Section 20. Repealing Clause.

DENR Administrative Order Nos. 2004-08 or the "Revised Chemical Control Order for Ozone Depleting Substances (ODS)", 2002-22 or the "Deletion of Footnote No. 3 of DENR Administrative Order No. 2000-18", and 2000-18 or the "Chemical Control Order for Ozone Depleting Substances (ODS)" are hereby repealed. All other Department orders and issuances inconsistent herewith are hereby amended or modified accordingly.

Section 21. Effectivity.

This CCO shall take effect fifteen (15) days after its publication in a newspaper of general circulation and upon acknowledgment of receipt of a copy hereof by the Office of the National Administrative Register (ONAR).

Recommending Approval


ATTY. JUAN MIGUEL T. CUNA
Director
Environmental Management Bureau


RAMON J. PAJE
Secretary



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES



SENRO36289

APPENDIX I¹

Annex A: CONTROLLED SUBSTANCES

Group	Substance	Ozone Depleting Potential*
Group I		
CFCl ₃	CFC-11	1.0
CF ₂ Cl ₂	CFC-12	1.0
C ₂ F ₃ Cl ₃	CFC-113	0.8
C ₂ F ₄ Cl ₂	CFC-114	1.0
C ₂ F ₅ Cl	CFC-115	0.6
Group II		
CF ₂ BrCl	Halon-1211	3.0
CF ₃ Br	Halon-1301	10.0
C ₂ F ₄ Br ₂	Halon-2402	6.0

Annex B: CONTROLLED SUBSTANCES

Group	Substance	Ozone Depleting Potential*
Group I		
CF ₃ Cl	CFC-13	1.0
C ₂ FCI ₅	CFC-111	1.0
C ₂ F ₂ Cl ₄	CFC-112	1.0
C ₃ FCI ₇	CFC-211	1.0
C ₃ F ₂ Cl ₆	CFC-212	1.0
C ₃ F ₃ Cl ₅	CFC-213	1.0
C ₃ F ₄ Cl ₄	CFC-214	1.0
C ₃ F ₅ Cl ₃	CFC-215	1.0
C ₃ F ₆ Cl ₂	CFC-216	1.0
C ₃ F ₇ Cl	CFC-217	1.0
Group II		
CCl ₄	Carbon tetrachloride	1.1
Group III		
C ₂ H ₃ Cl ₃ **	1,1,1-trichloroethane**	0.1

*These ODSs are estimates based on existing knowledge and will be reviewed and revised periodically.

**This formula does not refer to 1,1,2-trichloroethane.

¹Source: United Nations Environment Programme. Ozone Secretariat. Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer. Ninth Edition (2012).

ANNEX C: CONTROLLED SUBSTANCES

Group	Substance	Ozone-Depleting Potential***	Common Uses	
Group I				
	CHFCI ₂	HCFC-21****	0.04	Refrigerant
	CHF ₂ Cl	HCFC-22****	0.055	
	CH ₂ FCI	HCFC-31	0.02	
	C ₂ HFCl ₄	HCFC-121	0.01-0.04	
	C ₂ HF ₂ Cl ₃	HCFC-122	0.02-0.08	
	C ₂ HF ₃ Cl ₂	HCFC-123****	0.02-0.06	Fire Extinguishant
	CHCl ₂ CF ₃	HCFC-123	0.02	Refrigerant
	C ₂ HF ₄ Cl	HCFC-124	0.02-0.04	Blowing agent
	CHFClCF ₃	HCFC-124****	0.022	
	C ₂ H ₂ FCI ₃	HCFC-131	0.007-0.05	
	C ₂ H ₂ F ₂ Cl ₂	HCFC-132	0.008-0.05	
	C ₂ H ₂ F ₃ Cl	HCFC-133	0.02-0.06	
	C ₂ H ₃ FCI ₂	HCFC-141	0.005-0.07	
	CH ₃ CFCl ₂	HCFC-141b****	0.11	Blowing agent
	C ₂ H ₃ F ₂ Cl	HCFC-142	0.008-0.07	
	CH ₃ CF ₂ Cl	HCFC-142b****	0.065	
	C ₂ H ₄ FCI	HCFC-151	0.003-0.005	
	C ₃ HFCl ₆	HCFC-221	0.015-0.07	
	C ₃ HF ₂ Cl ₅	HCFC-222	0.01-0.09	
	C ₃ HF ₃ Cl ₄	HCFC-223	0.01-0.08	
	C ₃ HF ₄ Cl ₃	HCFC-224	0.01-0.09	
	C ₃ HF ₅ Cl ₂	HCFC-225	0.02-0.07	Cleaning agent Solvent
	CF ₃ CF ₂ CHCl ₂	HCFC-225ca****	0.025	Cleaning agent Solvent
	CF ₂ ClCF ₂ CHClF	HCFC-225cb****	0.033	Cleaning agent Solvent
	C ₃ HF ₆ Cl	HCFC-226	0.02-0.10	
	C ₃ H ₂ FCI ₅	HCFC-231	0.05-0.09	
	C ₃ H ₂ F ₂ Cl ₄	HCFC-232	0.008-0.10	
	C ₃ H ₂ F ₃ Cl ₃	HCFC-233	0.007-0.23	
	C ₃ H ₂ F ₄ Cl ₂	HCFC-234	0.01-0.28	
	C ₃ H ₂ F ₃ Cl	HCFC-235	0.03-0.52	
	C ₃ H ₃ FCI ₄	HCFC-241	0.004-0.09	
	C ₃ H ₃ F ₂ Cl ₃	HCFC-242	0.005-0.13	
	C ₃ H ₃ F ₃ Cl ₂	HCFC-243	0.007-0.12	
	C ₃ H ₃ F ₄ Cl	HCFC-244	0.009-0.14	
	C ₃ H ₄ FCI ₃	HCFC-251	0.001-0.01	
	C ₃ H ₄ F ₂ Cl ₂	HCFC-252	0.005-0.04	
	C ₃ H ₄ F ₃ Cl	HCFC-253	0.003-0.03	
	C ₃ H ₅ FCI ₂	HCFC-261	0.002-0.02	
	C ₃ H ₅ F ₂ Cl	HCFC-262	0.002-0.02	
	C ₃ H ₆ FCI	HCFC-271	0.001-0.03	

***Where a range of ODPs is indicated, the highest value in that range shall be used for the purposes of the Protocol. The ODPs listed as a single value have been determined from calculations based on laboratory measurements. Those listed as a range are based on estimates and are less certain. The range pertains to an isomeric group. The upper value is the estimate of the ODP of the isomer with the highest ODP, and the lower value is the estimate of the ODP of the isomer with the lowest ODP.

****Identifies the most commercially viable substances with ODP values listed against them to be used for the purposes of the Protocol.

Group	Substance	Ozone-Depleting Potential****
Group II		
	CHBr ₂	1.00
	CHF ₂ Br	0.74
	CH ₂ FBr	0.73
	C ₂ H ₂ FBr ₄	0.3-0.8
	C ₂ H ₂ F ₂ Br ₃	0.5-1.8
	C ₂ H ₂ F ₃ Br ₂	0.4-1.6
	C ₂ H ₂ F ₄ Br	0.7-1.2
	C ₂ H ₂ FBr ₃	0.1-1.1
	C ₂ H ₂ F ₂ Br ₂	0.2-1.5
	C ₂ H ₂ F ₃ Br	0.7-1.6
	C ₂ H ₃ FBr	0.1-1.7
	C ₂ H ₃ F ₂ Br	0.2-1.1
	C ₃ H ₂ FBr ₆	0.07-0.1
	C ₃ H ₂ F ₂ Br ₅	0.3-1.5
	C ₃ H ₂ F ₃ Br ₄	0.2-1.9
	C ₃ H ₂ F ₄ Br ₃	0.3-1.8
	C ₃ H ₂ F ₅ Br ₂	0.5-2.2
	C ₃ H ₂ F ₆ Br	0.9-2.0
	C ₃ H ₂ FBr ₅	0.7-3.3
	C ₃ H ₂ F ₂ Br ₄	0.1-1.9
	C ₃ H ₂ F ₃ Br ₃	0.2-2.1
	C ₃ H ₃ F ₄ Br	0.2-5.6
	C ₃ H ₄ FBr ₃	0.3-7.5
	C ₃ H ₄ F ₃ Br	0.9-1.4
	C ₃ H ₄ F ₂ Br ₂	0.08-1.9
	C ₃ H ₅ F ₂ Br	0.1-3.1
	C ₃ H ₆ FBr	0.1-2.5
	C ₃ H ₄ FBr ₃	0.3-4.4
	C ₃ H ₄ F ₃ Br	0.03-0.3
	C ₃ H ₄ F ₂ Br ₂	0.1-1.0
	C ₃ H ₄ F ₃ Br	0.07-0.8
	C ₃ H ₅ FBr ₂	0.04-0.4
	C ₃ H ₅ F ₂ Br	0.07-0.8
	C ₃ H ₆ FBr	0.02-0.7

Group	Substance	Ozone-Depleting Potential***
Group III CH ₂ BrCl	Bromochloromethane	0.12

***Where a range of ODPs is indicated, the highest value in that range shall be used for the purposes of the Protocol. The ODPs listed as a single value have been determined from calculations based on laboratory measurements. Those listed as a range are based on estimates and are less certain. The range pertains to an isomeric group. The upper value is the estimate of the ODP of the isomer with the highest ODP, and the lower value is the estimate of the ODP of the isomer with the lowest ODP.

ANNEX D: CONTROLLED SUBSTANCE

Group	Substance	Ozone depleting potential	Common use
Group I CH ₃ Br	Methyl bromide	0.6	Quarantine pre-shipment

APPENDIX II Decisions on Controlled Substances

Decision 1/12A: Clarification of terms and definitions: Controlled substances (in bulk)

The First Meeting of the Parties decided in Dec. 1/12A to agree to the following clarification of the definition of controlled substances (in bulk) in Article I, paragraph 4 of the Montreal Protocol:

1. Article I of the Montreal Protocol excludes from consideration as a "controlled substance" any listed substance, whether alone or in a mixture, which is in a manufactured product other than a container used for transportation or storage;
2. Any amount of a controlled substance or a mixture of controlled substances which is not part of use system containing the substance is a controlled substance for the purpose of the Protocol (i.e. a bulk chemical);
3. If a substance or mixture 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 utilized only for storage and/or transport, and the substance or mixture so packaged is covered by Article I, paragraph 4 of the Protocol;
4. If, on another hand, the mere dispensing of the product from container constitutes the intended use of the substance, then that container is in itself part of use system and the substance contained in it is therefore excluded from definition;

5. Example of use systems to be considered as products for the purposes of Article I, paragraph 4 are inter alia;
 - a. An aerosol can;
 - b. A refrigerator or a refrigerating plant, air conditioner or air-conditioning plant, heat pump, etc.;
 - c. A polyurethane prepolymer or any foam containing, or manufactured with, a controlled substance;
 - d. A fire extinguisher (wheel or hand-operated) or an installed container incorporating a release device (automatic or hand-operated);
6. Bulk containers for shipment of controlled substances and mixtures containing controlled substances to user include (numbers being illustrative), inter alia;
 - a. Tanks installed on board ship;
 - b. Rail tank cars (10-10 metric tons);
 - c. Road tankers (up to 20 metric tons);
 - d. Cylinders from 0.4 kg. to one metric ton;
 - e. Drums (5-300 Kg.);
7. Because containers of all sizes are used for either bulk or manufactured products, distinguishing on the basis of size is not consistent with the definition in the Protocol. Similarly, since containers for bulk or manufactured products can be designed to be rechargeable or not rechargeable, - rechargeability is not sufficient for a consistent definition;
8. If the purpose of the container is used as the distinguishing characteristic as in the Protocol definition, such as CFC or Halon-containing products as aerosol spray cans and fire extinguishers, whether of the portable or the flooding type, would therefore be excluded, because it is the mere release from such containers which constitute the intended use.

Decision II/4: Isomers

The Second Meeting of the Parties decided in Dec. II/4 to clarify the definition of "controlled substance" in paragraph 4 of Article I of the Protocol so that it is understood to include the isomers of such substances except as specified in the relevant Annex.

**APPENDIX III
PHASE-OUT SCHEDULE AND CONTROL OF IMPORTATION OF ODS**

Annex C, Group 1 (HCFCs)

Phase-Out Date

- | | |
|-----------------------------|---|
| By January 1, 2013 | Imports shall not exceed the recorded baseline consumption in ODP tonnes |
| By January 1, 2015 | Imports shall have been reduced by 10% based on the recorded baseline consumption in ODP tonnes

Importation of HCFC 141b and pre-blended polyols for foam (rigid and flexible) manufacturing will be absolutely prohibited, except for the servicing and solvent sectors |
| By January 1, 2020 | Imports shall have been reduced by 35% based on the recorded baseline consumption in ODP tonnes

Importation of HCFC 22 for the manufacturing of refrigeration and air-conditioning will be absolutely prohibited, except for the servicing sector |
| By January 1, 2025 | Imports shall have been reduced by 67.5% based on the recorded baseline consumption in ODP tonnes

Importation of HCFC 123 as cooling agent for chillers and fire extinguishing agent will be absolutely prohibited, except for the servicing sector |
| By January 1, 2030 | Imports shall have been reduced by 97.5% based on the recorded baseline consumption in ODP tonnes

Importation of blends containing HCFCs will be absolutely prohibited |
| During the period 2030-2040 | An annual importation of 2.5% of the baseline consumption shall be allowed for the servicing sector |
| By January 1, 2040 | All importation shall have been absolutely prohibited

All kinds of importation of HCFC substances for manufacturing and servicing sector will be prohibited, except for essential use |

APPENDIX IV
EXAMPLE LIST OF INDUSTRIES AND ACTIVITIES

INDUSTRY	ACTIVITY
Motor vehicle air conditioning	Service and installation
Commercial and industrial refrigeration and airconditioning	Service, installation and decommissioning
Domestic refrigeration and airconditioning	Service
Fixed flooding fire protection	Service, design, installation, commissioning and decommissioning
Portable fire extinguisher	Service and decommissioning



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