



Ministry of Environment
& Climate Affairs



Regulations for the Protection of the Ozone Layer



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& Climate Affairs**

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Ministerial Decision

No. (107/2013)

Issuing Regulations for the Protection of the Ozone Layer

Based on the Royal Decree No. (73/98) approving the accession of the Sultanate of Oman to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substance that Deplete the Ozone Layer,

And the Law on Conservation of the Environment and Prevention of Pollution issued by Royal Decree No. (114/2001),

And the Regulations for the Control and Management of Ozone Depleting Substances issued by Ministerial Decision No. (243/2005).

And The approval of the Ministry of Finance in its letter No. TD/8/1/3728 dated 6/4/2013,

And according to the requirements of public interest.

It is decided

- Article (1):** The provisions of the attached Regulations for the Protection of the Ozone Layer shall be effective.
- Article (2):** The mentioned Ministerial Decision No. (243/2005) and all that violate or contradict with the provisions of the attached regulations shall be cancelled.
- Article (3):** This decision shall be published in the Official Gazette and shall be effective from the day following the date of its publication.

Mohammed bin Salem bin Said Al Toobi
Minister of Environment and Climate Affairs

Issued on: 7/Muharram/ 1435

C. T. : 11/November/2013

Regulations for the Protection of the Ozone Layer

Article (1): In applying the provisions of this regulations, the words and terms used herein shall have the same meanings stated in the Law on Conservation of the Environment and Prevention of Pollution issued by Royal Decree No. (114/2001), and the following words and terms shall have the meanings stated against each of them unless otherwise stated.

The Ministry: Ministry of Environment and Climate Affairs.

The Directorate: The Directorate General of Climate Affairs.

The Concerned Authority in the Directorate: Ozone Layer Protection Section of the Directorate.

The Concerned Authority: Any authority related to the application of the provisions of the Regulations for the Protection of the Ozone Layer.

The Convention: Vienna Convention for the Protection of the Ozone Layer, which was adopted on 22 March, 1985.

The Protocol: The Montreal Protocol on Substance that Deplete the Ozone Layer, which was adopted in 1987 at Montreal city in Canada, and its amendments in London, 1990, Copenhagen, 1992, Montreal, 1997 and Beijing, 1999.

State Parties: States, which ninety days have passed since they deposited their instruments of ratification, acceptance, approval or accession to the Convention and Protocol.

Ozone Layer: A layer situated in the earth's stratosphere containing a high density of the ozone gas molecules and protecting the earth from exposure to the harmful ultra violet rays from the sun.

Ozone Depleting Substances (ODS): Substances having the characteristics of chemical stability in the lower atmosphere, comprising one or more chlorine or bromine atom or both and beginning a series of reactions in the stratosphere layer causing depletion of the ozone, including:

1. **Controlled Substances:** Substances listed in Annexes (A), (B), (C) and (E) in Appendix (1) of this regulations whether existing alone or in a mixture in any proportion.
2. **Recovered Substances:** ODS that have been collected from machinery, equipment and containment vessels during servicing or prior to disposal.
3. **Recycled Substances:** ODS recovered from a certain unit for reuse after purification through filtration and drying.
4. **Destroyed Substances:** ODS destroyed through approved destruction technologies according to the provisions of the Protocol.
5. **Extracted Substances:** ODS that have been processed to a high level of quality through filtering, drying, distillation or chemical treatment.

6. Mixed substances: A chemical compound containing more than one ODS.
Alternatives: Non-ozone depleting substances.

Appliances, Equipment and Products: Appliances, equipment and products containing or depending in operation on ODS listed in Annex (D) of Appendix (1) of this Regulations.

Essential Uses: Uses of ODS approved by the Conference of the Parties, where these substances are either necessary for health, safety or for the functioning of society and no acceptable alternatives are available.

Climate Affairs License: An approval issued by the Directorate including permission to the owner to complete procedure for operation of the source or area of work according to the specific conditions and controls allowed to control greenhouse gas emissions and minimize the adverse impacts of climate change.

License to protect the ozone layer: An approval issued by the Concerned Authority including conditions permitting the owner to import, export or re-export ODS, alternatives or appliances, equipment and products containing them and the license to protect the ozone layer include the following types:

- 1- License to import, export or re-export of ODS.
- 2- License to import, export or re-export alternatives.
- 3- License to import, export or re-export appliances, equipment and products containing ODS and/or alternatives.

Article (2): All existing establishments, which their production depends on the use of ODS or products containing them, shall obtain a climate affairs license. The license prohibits creation of a new establishment or expansion of existing ones depending on the use of the said substances.

Article (3): The import, export or re-export of ODS and alternatives is prohibited unless after registration with the Concerned Authority and obtaining the license to protect the ozone layer.

Article (4): An application for registration of ODS and alternatives shall be submitted to the Concerned Authority using the form prepared for this purpose, accompanied by a copy of the following documents:

- a. A valid license from the competent authority which shows their engagement in the activities of import, export and re-export of such substances.
- b. A valid commercial registration certificate.
- c. A valid Oman Chamber of Commerce and Industry affiliation certificate.
- d. Names of the authorized signatories with specimen signatures.
- e. Any other documents or data required by the Concerned Authority.

Article (5): An application for a license to protect the ozone layer shall be submitted to the Concerned Authority using the form prepared for this purpose,

accompanied by a copy of the following documents:

- a. An original purchase invoice.
- b. An original up-to-date chemical material safety data sheet.
- c. An authenticated country of origin certificate.
- d. A license from the exporting country.
- e. Appliances, equipment and products catalogue.
- f. Any other documents or data required by the Concerned Authority.

Article (6): A license to protect the ozone layer shall be issued by the Concerned Authority in accordance with the policies and objectives of the National Strategy for Phasing-out Substances that Deplete the Ozone Layer, and in a manner that achieves the Sultanates requirements to meet the obligations of the Protocol.

Article (7): The import, export or re-export of the ODS from and to non-parties to the Protocol is prohibited.

Article (8): The import of used appliances and equipment, in which ODS are used is prohibited, unless for personal use.

Article (9): The Concerned Authority shall collect fee against licenses to protect the ozone layer or an approval to transfer the ODS import quotas as per Appendix (2) of this Regulations.

Article (10): The validity period of licenses to protect the ozone layer shall be as follows:

- a. **A license to import, export or re-export ODS:** valid for one time only, and expires on the 31 December of the year of issue.
- b. **A license to import, export or re-export alternatives:** valid for one time only, and expires on the 31 December of the year of issue.
- c. **A license to import, export or re-export appliances, equipment and products containing ODS or alternatives:** valid for one year from the date of issue, or until the licensed quantity or number is out of stock.

Article (11): The Concerned Authority shall take necessary measures to protect the ozone layer, according to available means and resources, as follows:

- a. Take appropriate legislative and administrative measures.
- b. Coordinate policies to monitor, identify, reduce or prevent human activities affecting the ozone layer.
- c. Cooperate to develop agreed measures, procedures and standards to implement the requirements of the Convention and the Protocol.
- d. Cooperate on the assessment of the impacts of human activities on the ozone layer.
- e. Review and evaluate applications for licenses to protect the ozone layer, and ensure that they satisfied the required data and documents.
- f. Issue licenses to protect the ozone layer.

- g. Carry out field visits to inspect ozone depleting substances' storage and use sites.
- h. Collect and keep data and information related to ODS and alternatives import, export, re-export and use in its own database.
- i. Cooperate with the concerned international organizations and agencies for the purposes of implementation of the Convention and Protocol.

Article (12): Substances that deplete the ozone layer shall be phased-out according to phase-out schedule contained in Appendix (3) of this Regulations and/or the obligations adopted in the National Strategy for Phasing- out ODS.

Article (13): The Concerned Authority shall prepare bill of quantities and ODS Quotas allowed for the owner to import, in accordance with the obligations in the protocol and the National Strategy for Phasing-out ODS. Importers shall be informed about their quotas for the next year prior to the end of each year.

Article (14): Transfer of ODS quantities and quotas permitted for import from one importer to another is possible after submission of a written application from the owners explaining the reasons and justifications thereof, and the Concerned Authority shall study, evaluate and express its opinion about the application, and in the event of approval of the application the transferred quantity shall be deducted from the quota of the original importer.

Article (15): ODS transport companies shall submit an application to the Concerned Authority prior to the passage of the Sultanate's entry ports using the form prepared for this purpose, accompanied by a copy of the following documents:

- a. Country of origin certificate.
- b. Export permit from the country of export.
- c. Import permit from the country of import.
- d. Any other documents or data required by the Concerned Authority.

Article (16): Actions for customs clearance shall be taken at the customs port indicated in the license to protect the ozone layer.

Article (17): The recording unit used in applications for licenses to protect the ozone layer or reporting of imported, exported or re-exported quantities of substances that deplete the ozone layer and alternatives shall be the kilogram.

Article (18): An annual report indicating the names, types, quantities and dates of imported, exported or re-exported substances that deplete the ozone layer and alternatives together with information of end users shall be Submitted by the owner to the Concerned Authority.

Article(19): Establishments for repair, maintenance and servicing of refrigeratorscontaining substances that deplete the ozone layer shall apply the best practices, including provision of gas recovery/re-cycle and control of ODS emissions according to the standard practices approved by the Concerned Authority.

Article (20): The Concerned Authority shall determine standard specifications for all imported, exported, re-exported or manufactured substances, appliances, equipment and products in accordance with the provisions of this Regulations.

Article (21): Importers of ODS and alternatives cylinders and containers shall label them with labels indicating clearly and accurately type, quantity, state and name of the substance's country of origin, provided that each consignment shall be accompanied by all documents confirming such data. Labels and stickers shall also be placed on all imported refrigerants, air conditioning, aerosols and other imported products stating that they are free of ODS.

Article (22): The Concerned Authority and Royal Oman Police, Directorate General of Customs, shall register ODS and alternatives consumed quantities, and shall review and check periodically and utmost each year the clearance data of these consignments.

Article (23): Technicians dealing with servicing and maintenance of refrigerators, air conditioning and fire protection equipment, or those dealing with recovery/re-cycling of ODS shall take a technical test to be conducted by the Concerned Authority prior to practicing their profession.

Article (24): Destruction or disposal of ODS or appliances, equipment and products containing such substances is prohibited unless obtaining prior approval from the Concerned Authority.

Article(25): The importer shall return the imported consignment of ODS and alternatives or quantity in excess of the permitted one, depending on the circumstances, to the exporting country at his own expense in any of the following conditions:

- a. Importing without a license.
- b. Inconformity of the imported consignment with the license data.

Article (26): All ODS dealers are prohibited from the Following:

- a. Providing false or misleading information to the Ministry.
- b. Smuggling or assist in smuggling of ODS, or appliances, equipment and products harmful to the ozone layer.
- c. Commercial fraud such as replacing types of gases used in refrigerants with gases other than those designated by the manufacturing company or import of substances and equipment or products not conforming with the specifications attached to the license application.

Article (27): The competent authorities shall coordinate with the Ministry on the application of the provisions of this Regulations.

Article (28): Without prejudice to any severe penalty stipulated in the Law on Conservation of the Environment and Prevention of Pollution issued by Royal Decree No. (114/2001) or any other law, any offender to the provisions of this Regulations shall be fined an amount not exceeding R.O. (5000/=).

Appendix No. (1)

Montreal Appendices of Controlled Substances and Equipment Harmful to the Ozone Layer Annex (A): Substances that deplete the ozone layer.

Group	Substance	Ozone Depleting Potential
Group I		
CFC13	(CFC-11)	1.0
CF2Cl2	(CFC-12)	1.0
C2F3Cl3	(CFC-113)	0.8
C2F4Cl2	(CFC-114)	1.0
C2F5Cl	(CFC-115)	0.6
Group II		
CF2BrCl	(halon-1211)	3.0
CF3Br	(halon-1301)	10.0
C2F4Br2	(halon-2402)	6.0

*These ozone depleting potentials are estimates based on existing knowledge and will be reviewed and revised periodically.

Annex (B): Substances that deplete the ozone layer.

Group	Substance	Ozone Depleting Potential
Group I		
CF3Cl	(CFC-13)	1.0
C2FCl5	(CFC-111)	1.0
C2F2Cl4	(CFC-112)	1.0
C3FCl7	(CFC-211)	1.0
C3F2Cl6	(CFC-212)	1.0
C3F3Cl5	(CFC-213)	1.0
C3F4Cl4	(CFC-214)	1.0
C3F5Cl3	(CFC-215)	1.0
C3F6Cl2	(CFC-216)	1.0
C3F7Cl	(CFC-217)	1.0
Group II		
CCl4	Carbon tetrachloride	1.1
Group III		
C2H3Cl3*	1,1,1-trichloroethane* (methyl chloroform)	0.1

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

Annex (C): Substances that deplete the ozone layer.

Group	Substance	Number of isomers	Ozone Depleting Potential
Group I			
CHFCl ₂	(HCFC-21)**	1	0.04
CHF ₂ Cl	(HCFC-22)**	1	0.055
CH ₂ FCl	(HCFC-31)	1	0.02
C ₂ HFC ₃	(HCFC-121)	2	0.01-0.04
C ₂ H ₂ FC ₂	(HCFC-122)	3	0.02-0.08
C ₂ H ₂ F ₂ Cl	(HCFC-123)	3	0.02-0.06
CHCl ₂ CF ₃	(HCFC-123)**	-	0.02
C ₂ H ₂ FC ₂	(HCFC-124)	2	0.02-0.04
CHFC ₂ CF ₃	(HCFC-124)**	-	0.022
C ₂ H ₂ FC ₂	(HCFC-131)	3	0.007-0.05
C ₂ H ₂ F ₂ Cl ₂	(HCFC-132)	4	0.008-0.05
C ₂ H ₂ F ₃ Cl	(HCFC-133)	3	0.02-0.06
C ₂ H ₃ FC ₂	(HCFC-141)	3	0.005-0.07
CH ₃ CF ₂ Cl	(HCFC-141b)**	-	0.11
C ₂ H ₃ F ₂ Cl	(HCFC-142)	3	0.008-0.07
CH ₃ CF ₂ Cl	(HCFC-142b)**	-	0.065
C ₂ H ₄ FC ₂	(HCFC-151)	2	0.003-0.005
C ₃ HFC ₃	(HCFC-221)	5	0.015-0.07
C ₃ H ₂ F ₂ Cl ₂	(HCFC-222)	9	0.01-0.09
C ₃ H ₂ F ₃ Cl	(HCFC-223)	12	0.01-0.08
C ₃ H ₂ F ₄ Cl	(HCFC-224)	12	0.01-0.09
C ₃ H ₂ F ₅ Cl	(HCFC-225)	9	0.02-0.07
CF ₃ CF ₂ CHCl ₂	(HCFC-225ca)**	-	0.025
CF ₂ CF ₂ CHClF	(HCFC-225cb)**	-	0.033
C ₃ H ₂ F ₆ Cl	(HCFC-226)	5	0.02-0.10
C ₃ H ₂ F ₂ Cl ₃	(HCFC-231)	9	0.05-0.09
C ₃ H ₂ F ₂ Cl ₂	(HCFC-232)	16	0.008-0.10
C ₃ H ₂ F ₃ Cl ₂	(HCFC-233)	18	0.007-0.23
C ₃ H ₂ F ₄ Cl	(HCFC-234)	16	0.01-0.28
C ₃ H ₂ F ₅ Cl	(HCFC-235)	9	0.03-0.52
C ₃ H ₃ FC ₃	(HCFC-241)	12	0.004-0.09
C ₃ H ₃ F ₂ Cl ₂	(HCFC-242)	18	0.005-0.13
C ₃ H ₃ F ₃ Cl	(HCFC-243)	18	0.007-0.12
C ₃ H ₃ F ₄ Cl	(HCFC-244)	12	0.009-0.14
C ₃ H ₄ FC ₃	(HCFC-251)	12	0.001-0.01
C ₃ H ₄ F ₂ Cl ₂	(HCFC-252)	16	0.005-0.04
C ₃ H ₄ F ₃ Cl	(HCFC-253)	12	0.003-0.03
C ₃ H ₅ FC ₂	(HCFC-261)	9	0.002-0.02
C ₃ H ₅ F ₂ Cl	(HCFC-262)	9	0.002-0.02
C ₃ H ₆ FC ₂	(HCFC-271)I	5	0.001-0.03

Group II			
CHFBr ₂		1	1.00
CHF ₂ Br	(HBFC-22B1)	1	0.74
CH ₂ FBr		1	0.73
C ₂ H ₂ FBr ₄		2	0.3-0.8
C ₂ H ₂ F ₂ Br ₃		3	0.5-1.8
C ₂ H ₂ F ₃ Br ₂		3	0.4-1.6
C ₂ H ₂ F ₄ Br		2	0.7-1.2
C ₂ H ₂ F ₂ Br ₃		3	0.1-1.1
C ₂ H ₂ F ₃ Br ₂		4	0.2-1.5
C ₂ H ₂ F ₃ Br		3	0.7-1.6
C ₂ H ₃ FBr ₂		3	0.1-1.7
C ₂ H ₃ FBr ₂		3	0.2-1.1
C ₂ H ₄ FBr		2	0.07-0.1
C ₃ HFBr ₆		5	0.3-1.5
C ₃ HF ₂ Br ₅		9	0.2-1.9
C ₃ HF ₃ Br ₄		12	0.3-1.5
C ₃ HF ₄ Br ₃		12	0.5-2.2
C ₃ HF ₅ Br ₂		9	0.9-2.0
C ₃ HF ₆ Br		5	0.7-3.3
C ₃ H ₂ FBr ₅		9	0.1-1.9
C ₃ H ₂ F ₂ Br ₄		16	0.2-2.1
C ₃ H ₂ F ₃ Br ₃		18	0.2-5.6
C ₃ H ₂ F ₄ Br ₂		16	0.3-7.5
C ₃ H ₂ F ₅ Br		8	0.9-14.0
C ₃ H ₃ FBr ₄		12	0.08-1.9
C ₃ H ₃ F ₂ Br ₃		18	0.1-3.1
C ₃ H ₃ F ₃ Br ₂		18	0.1-2.5
C ₃ H ₃ F ₄ Br		12	0.3-4.4
C ₃ H ₄ FBr ₃		12	0.03-0.3
C ₃ H ₄ F ₂ Br ₂		16	0.1-1.0
C ₃ H ₄ F ₃ Br		12	0.07-0.8
C ₃ H ₅ FBr ₂		9	0.04-0.4
C ₃ H ₅ F ₂ Br		9	0.07-0.8
C ₃ H ₆ FBr		5	0.02-0.7
Group III			
CH ₂ BrCl	bromochloromethane	1	0.12

* Where a range of ODPs is indicated, the highest value in that range shall be used for the purposes of 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.

Annex (D): A list of products containing controlled substances specified in Annex (A)**

Products		Customs code number
1	Automobile and truck air conditioning units (whether incorporated in vehicles or not)	
2	Domestic and commercial refrigeration and air conditioning/heat pump equipment*** e.g. Refrigerators Freezers Dehumidifiers Water coolers Ice machines Air conditioning and heat pump units	
3	Aerosol products, except medical aerosols	
4	Portable fire extinguisher	
5	Insulation boards, panels and pipe covers	
6	Pre-polymers	

* This Annex was adopted by the Third Meeting of the Parties in Nairobi, 21 June 1991 as required by paragraph 3 of Article 4 of the Protocol.

** Though not when transported in consignments of personal or household effects or in similar non-commercial situations normally exempted from customs attention.

*** When containing controlled substances in Annex A as a refrigerant and/or in insulating material of the product.

Annex (E): Substances that deplete the ozone layer

Group	Substance	Ozone-Depleting Potential
Group I		
CH ₃ Br	methyl bromide	0.6

Appendix (2)

Fees for licenses to protect the ozone layer :

- a. Fees for licenses to protect the ozone layer with regard to import, export or re-export of ODS or pre-mixed foam products containing ODS :

Imported Quantity in Kilogram	Fees (R.O.)
Up to 1000	50
More than 1000 – 5000	100
More than 5000 – 15000	200
More than 15000	300

- b. Fees for licenses to protect the ozone layer with regard to import, export or re-export of alternatives:

Imported Quantity in Kilogram	Fees (R.O.)
1 – 5000	25
More than 5000	50

- c. Fees for licenses to protect the ozone layer with regard to import, export or re-export of refrigeration and their air compressors:

Number of Refrigeration and their Air Compressors	Fees (R.O.)
Not exceeding 20 domestic appliances for personal use only	No fees
1-5000	20
5000-10000	30
More than 10000	50

- d. Fees for the transfer of ODS import quotas:

R.O. (50) to be collected from the party to whom the quota is transferred

Appendix (3)

Phase-out Schedule of ODS Under Montreal Protocol

(Article 5 Countries)

Annex	Substance	Reduction Schedule
Annex 1	CFCs (Group I): CFC 11, CFC 12, CFC 13, CFC 14, CFC 15	(a) Freeze: July 1999 (Not exceeding base level of 1995-97) (b) 5%: January 01, 2005 (c) 85%: January 01, 2007 (d) 100%: January 01, 2010
	Halons (Group II): Halon 1211 Halon 1301 Halon 2402	(a) Freeze: January 01, 2002 (Not exceeding base level of 1995-97) (b) 5%: January 01, 2005 (c) 100%: January 01, 2010
Annex B	CFCs (Group I): CFC 13, CFC 111, CFC 112, CFC 211, CFC 212, CFC 213, CFC 214, CFC 215, CFC 216, CFC 217	(a) 20%: January 01, 2003 (b) 85%: January 01, 2007 (c) 100%: January 01, 2010
	Carbon Tetrachloride (Group II):	(a) 85%: January 01, 2005 (b) 100%: January 01, 2010
	1, 1, 1, Trichloroethene (Methyl Chloroform) (Group III)	(a) Freeze: January 01, 2003 (b) 30%: January 01, 2005 (c) 70%: January 01, 2010 (d) 100%: January 01, 2015
Annex C	HCFCs (Group I):	(a) Freeze: January 01, 2013 (Not exceeding base level of 2009-2010) (b) 10%: January 01, 2015 (c) 35%: January 01, 2020 (d) 67.5%: January 01, 2025 (e) 100%: January 01, 2030
	HBFCs (Group II):	100%: January 01, 1996
	Bromochloromethane	100%: January 01, 2002
Annex E	Methyl Bromide:	(a) Freeze: January 01, 2002 (b) 20%: January 01, 2005 (c) 100%: January 01, 2015