

*Extraordinary*



# Federal Republic of Nigeria

## Official Gazette

---

No. 64

Abuja - 13th October, 2009

Vol. 96

---

*Government Notice No. 285*

The following is published as Supplement to this *Gazette* :

<i>S.I. No.</i>	<i>Short Title</i>	<i>Page</i>
32	National Environmental (Ozone Layer Protection) Regulations, 2009 ..	B 1187-1209

---

Printed and Published by The Federal Government Printer, Abuja, Nigeria.

FGP 108/102009/1,000 (OL 58)

Annual Subscription from 1st January, 2009 is Local : ₦15,000.00 Overseas : ₦21,500.00 [Surface Mail] ₦24,500.00 [Second Class Air Mail]. Present issue ₦500.00 per copy. Subscribers who wish to obtain *Gazette* after 1st January should apply to the Federal Government Printer, Abuja for amended Subscriptions.

**NATIONAL ENVIRONMENTAL STANDARDS AND  
REGULATIONS ENFORCEMENT AGENCY (ESTABLISHMENT)  
ACT, 2007**

**NATIONAL ENVIRONMENTAL (OZONE LAYER PROTECTION)  
REGULATIONS, 2009.**



**ARRANGEMENT OF REGULATIONS**

**REGULATIONS :**

**PART I—PROHIBITION**

1. Prohibition of Ozone Depleting Substance
2. Prohibition of Release
3. Working with an Ozone-depleting Substance
4. Fire Protection Equipment
5. Pressurized Containers
6. Sale of Ozone-depleting Substances
7. Labeling
8. Flexible Insulation Foams
9. Rigid Insulation Foams
10. Packaging and Wrapping Materials

**PART II—POWERS AND RESPONSIBILITIES**

11. Powers of the Agency

**PART III—IMPORT PERMIT**

12. Permit Conditions
13. Application Fees for Permit
14. Bi-annual Report by Permit Holder
15. Permit Numbers to be shown on Records
16. Offence for Handling ODS Refrigerant
17. Possession or Trading in Refrigerant
18. Offence for Possessing Halon
19. Refrigerant Destruction Facilities
20. Application for Halon Special Permit
21. Applications for RAC Industry Permit-General
22. Offences and Penalty
23. Interpretation
24. Citation.

**SCHEDULES**

S. I. 32 of 2009

## NATIONAL ENVIRONMENTAL (OZONE LAYER PROTECTION) REGULATIONS, 2009

[ 30th September, 2009 ]

Commence-  
ment.

In exercise of the powers conferred on me by Section 34 of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 and all other powers enabling me in that behalf, I, JOHN ODEY, Minister of Environment hereby make the following Regulations—

### PART I—PROHIBITIONS

1.—(1) No person shall import, manufacture in part or in whole, install, offer for sale, sell or buy new or refurbished facilities intended to be used for the production of any ozone-depleting substance (ODS), unless for the recovery and recycling of substances already in use.

Prohibition  
of Ozone  
Depleting  
Substance.

(2) No person shall manufacture for purposes of local consumption or export any product which—

(a) contains or is made from ozone-depleting substance listed in Schedule 3 to these Regulations ; and

(b) are used as—

(i) release agents for plastic or elastomeric moulds ;

(ii) protective spray for photographic applications ;

(iii) cleansing solvents for commercial use on electronic equipment.

2.—(1) Subject to the provision of regulation 2 (2) of this regulation, no person shall release or permit the release into the atmosphere an ozone-depleting substance from :

Prohibition  
of Release.

(a) an equipment or any part of an equipment ;

(b) fire extinguishing equipment except during fire fighting ;

(c) a container used in the supply, recovery, recycling, reclamation, transportation or storage of an ozone-depleting substance ; or

(d) an ozone-depleting substance recovery, recycling or reclamation system.

(2) The provision of regulation 2 (1) of this regulation shall not apply to a release from a purging device until the date stipulated for the different substances in schedule 6 to these Regulations after which no person shall operate :

(a) an air purge device ; or

(b) a system for purging non-condensable gases from a centrifugal chiller, which by design would release or permit the release into the atmosphere of more than 0.8 kg of an ozone-depleting substance per kilogram of air.

(3) No person shall dispose of equipment or fire extinguishing equipment that contains an ozone-depleting substance without first ensuring that the ozone-depleting substance is recovered.

(4) The provision of regulation 2(3) of this regulation does not apply to:

- (a) residual amounts of ozone-depleting substances contained in the oil supply of equipment following the completion of a recovery procedure; or
- (b) flexible or rigid insulation foams attached to an equipment.

3.—(1) With effect from the phase-out date for the different substances specified, no person shall:

(a) service, install or dismantle any equipment or a component of any equipment which is in contact with or controls the containment of ozone-depleting substances; or

(b) reclaim, recover, recycle or reuse an ozone-depleting substance, unless that person has successfully completed an approved technical training on ozone depleting substance, or is working under the direct supervision of a person who has successfully completed an approved technical training on ozone depleting substance.

(2) Any person who installs, repairs, or services equipment as listed in Schedule 2 to these Regulations or does any other work on equipment shall recover and either reuse, recycle, reclaim or provide safe storage, any ozone-depleting substance that would otherwise be released into the atmosphere.

(3) No person shall recharge or add an ozone-depleting substance to equipment unless he:

(a) conducts leak tests in accordance with the procedure set out in the Code of Practice or a procedure approved by the Agency; and

(b) has effectively repaired any leaks detected.

4.—(1) No person shall import, manufacture, install, offer for sale, sell or buy new fire extinguishing equipment that contains or is intended to contain an ozone-depleting substance with an ozone-depletion potential greater than 0.05.

(2) The provision of sub-regulation (1) of this regulation does not apply in the following circumstances:

(a) use of fire extinguishing equipment for fire protection in an aircraft;

(b) use of fire extinguishing equipment for fire protection in a military tactical vehicle or vessel; or

(c) sale of fire extinguishing equipment for the purpose of recovering and recycling of halon contained in the extinguisher.

Working  
with an  
Ozone-  
Depleting  
Substance.

Fire  
Protection  
Equipment.

(3) No person shall use halon to test fire extinguishing equipment.

5.—(1) No person shall import, manufacture, offer for sale, sell, and supply or lease a pressurized container which contains 10 kg or less of an ozone-depleting substance listed in Schedule 3 to these Regulations, either alone or in a mixture.

Pressurized  
Containers.

(2) The provision of sub-regulation (1) of this regulation does not apply to a pressurized container which is used to contain :

- (a) a prescription drug ;
- (b) a topical anaesthetic ;
- (c) a bronchial dilator ;
- (d) a veterinary powder wound spray ;
- (e) a cytospray ; or
- (f) a spermicidal contraceptive foam.

(3) The provision of sub-regulation (1) of this regulation does not apply to a pressurized container containing azeotropic mixtures listed in paragraph 1 of Schedule 3 to these Regulations.

(4) With effect from the phase-out date for the different substances as specified in Schedule 6 to these Regulations, no person shall offer for sale, sell, supply or lease an ozone-depleting substance in a disposable pressurized container for the purpose of charging equipment or fire extinguishing equipment.

6.—(1) With effect from the phase-out date for the different substances as specified in Schedule 6 to these Regulations, no person shall offer for sale, sell, supply or lease an ozone-depleting substance to a person for the purpose of servicing equipment unless :

Sale of  
Ozone  
Depleting  
Substances .

(a) the recipient produces information to show :

(i) that the recipient has successfully completed an approved technical training ; or

(ii) where the recipient is a commercial business, that a person employed by the business has successfully completed an approved technical training ; and

(b) the vendor or supplier records the information produced in paragraph (a) of this regulation and keeps the information for a period of 2 years from the date of the sale or transaction.

7.—(1) No person shall—

Labelling.

(a) install equipment that does not have a permanent label indicating the type of ozone-depleting substance and oil it contains ; or

(b) service equipment with an ozone-depleting substance or oil that is different from the substance indicated on the original permanent label.

(2) The permanent label in regulation 7(1) of this Regulation shall:

(a) clearly indicate the type of ozone-depleting substance and oil contained in the system and the date of the installation or service, and

(b) advise that only certified persons shall perform any service, repair or recharge to the system or equipment that could result in the release of an ozone-depleting substance.

Flexible  
Insulation  
Foams.

8.—(1) No person shall manufacture, import, offer for sale, sell, supply, lease or apply flexible insulation foam which uses as a foaming agent an ozone-depleting substance listed in Schedule 3 to these Regulations.

(2) The prohibition of sale, supply, lease or application of flexible insulation foam in subregulation (1) of this Regulation does not apply to flexible or rigid insulation foam manufactured or imported prior to the effective date of these Regulations.

Rigid  
Insulation  
Foams.

9.—(1) No person shall manufacture, import, offer for sale, sell, supply, lease or apply rigid insulation foam which uses as a foaming agent an ozone-depleting substance listed in Schedule 3 to these Regulations.

(2) The provision of regulation 9 (1) of this regulation does not apply to rigid insulation foam manufactured prior to the effective date of these Regulations.

Packaging  
and  
Wrapping  
Materials.

10. No person shall import or manufacture packaging or wrapping materials that contain a ozone depleting substances listed in Schedule 3 to these Regulations.

## PART II—POWERS AND RESPONSIBILITIES

Powers of  
the Agency.

11.—(1) The Agency shall exercise the powers under its enabling Act to enforce compliance with the provisions of these Regulations:

(2) The Agency or its authorized agents, shall exercise such powers over any premises used by RAC and other industries or enterprises using ozone depleting substances and who shall require permit for its activities.

(3) The permit shall show:

(a) activities covered; and

(b) details of records relating to activities covered.

## PART III—IMPORT PERMIT

Permit  
Conditions.

12.—(1) The Agency may specify that a permit to import ODS be subject to such conditions set out in—

(a) the permit document; or

(b) a written notice given by the Agency to the permit holder.

(2) The procedure for application for permit for importation of ODS including revocation of such permits shall be as contained in the National Environmental (Permitting and Licensing System) Regulations, 2009.

(3) The Agency may update the conditions on a permit from time to time and whenever it is updated, the permit holder shall be issued notice of the new conditions.

(4) A permit holder shall not contravene any of the conditions contained in the permit.

13.—(1) The Agency shall prescribe appropriate fee for the various permits.

Application  
Fees for  
Permit.

(2) The Agency may waive the application fee for a controlled substance if:

(a) the purpose of the permit is to allow the import or export of less than half a tonne of scheduled substances ;

(b) based on the application for such waiver, the Agency is satisfied that the import or export is for :

(i) test, educational or research purposes by such educational or research institution concerned ; or

(ii) safe disposal by the person authorized to undertake such safe disposal.

14.—(1) A permit holder shall keep accurate records and submit bi-annual reports, not later than :

Bi-Annual  
Report by  
Permit  
Holder.

(a) 31st July for January to June Report ; and

(b) 31st January of the following year for July to December Report, to the Agency as specified in Schedule 4 to these Regulations.

(2) The records shall be retained for 5 years from the last day of the month to which the records relate.

15. Any record kept by a permit holder shall :

Permit  
Number to  
be shown on  
Records.

(a) show the name and permit number of the permit holder ; and

(b) if the record consists of more than 1 page, it shall :

(i) be numbered in a regular arithmetic series beginning with the number 1 ; and

(ii) show the permit number of the permit holder on each page.

16.—(1) With effect from the phase out date for the different substances as specified in Schedule 6 to these Regulations, no person shall handle or deal in ODS refrigerant unless such a person :

Offence for  
Handling  
ODS  
Refrigerant.

- (a) holds an ODS refrigerant handling permit ; or
- (b) has undertaken and be certified in an approved technical training relevant to handling of ODS refrigerant ; and
- (c) is certified in the approved relevant Code of Practice.

(2) It is an offence for a person who holds a specified ODS refrigerant handling permit to carry out ODS refrigerant handling work without being entitled to carry out such work under the item in column 3 of Schedule 1 to these Regulations that corresponds to the item in column 2 of Schedule 1 to these Regulations which describes the kind of refrigerant handling permit held by the permit holder.

Possession  
or Trading in  
Refrigerant.

**17.—**(1) With effect from the phase out date for the different substances as specified in Schedule 6 to these Regulations, a person shall not acquire, store or dispose of bulk ODS refrigerant unless :

- (a) he is a holder of an ODS refrigerant trading authorisation or an RAC equipment manufacturing authorisation ; or
- (b) he is an operator of a safe refrigerant destruction facility ; or
- (c) the stored refrigerants were acquired prior to the date specified in regulation 18 of this regulation.

Offence for  
Possessing  
Halon.

**18.** With effect from 1st January, 2010 a person shall not possess halon that is, or has been, for use in halon based equipment, unless :

- (a) he is a holder of a halon special permit ; or
- (b) he is an operator of a safe refrigerant destruction facility ;
- (c) the halon was acquired prior 1st January, 2010.

Refrigerant  
Destruction  
facilities.

**19.—**(1) The Agency may, on application, give approval for a person to operate a ODS refrigerant safe destruction facility.

(2) An application shall include :

- (a) the name and address of the applicant,
- (b) the address of the facility, and
- (c) adequate information about the facility,

to enable the Agency decide on the application.

(3) The Agency may approve such a facility only if satisfied that the facility is able to operate in a way that ensures safe handling and safe disposal.

Application  
for Halon  
Special  
Permit.

**20.—**(1) The Agency may, on application, grant to a person a permit, entitling that person to store halon that is being used, or is to be used in halon based equipment.

(2) The application fee for a halon special permit shall be as stipulated by the Agency from time to time.



(3) The Agency shall grant a halon special permit to a person only if satisfied that—

(a) from the applicant's demonstrated training and experience, he is competent to carry out the activities covered by the permit ; and

(b) the applicant's use of the halon is for a purpose that is necessary to protect human life or operate equipment that is critical to the well being of the community at that point in time ; and

(c) there is no alternative to the halon's use which is :

(i) practicable ;

(ii) available at a reasonable cost ;

(iii) safe ; and

(iv) likely to result in less damage to the environment.

(4) A permit granted under this regulation shall remain in force for 12 months from the date of the grant.

**21.—**(1) An application for an RAC industry permit shall be as specified in Schedule 5 to these Regulations.

Applications  
for RAC  
industry  
permits -  
general.

(2) Where an applicant has not provided all the information required, the Agency :

(a) may ask the applicant for the information ; and

(b) need not consider the application until the applicant provides the information.

(3) If the Agency has not made a decision regarding an application within 30 days of complete submission of the required information, the Agency shall be deemed to have refused the application.

(4) The Agency shall convey to the applicant its decision in writing.

**22.—**(1) Any person who violates the provisions of these Regulations commits an offence and liable on conviction to—

Offence and  
Penalty.

(a) a fine of not more than ₦200,000 and an additional fine of ₦10,000 for every day the offence subsists ; or

(b) imprisonment for a term not exceeding one year ; or

(c) both fine and imprisonment.

(2) Where an offence under these Regulations is committed by a body corporate, it shall be liable to a fine of not exceeding ₦1,000,000 and an additional fine of ₦50,000 for everyday the offence subsists.

**23. In these Regulations :**

Interpreta-  
tion.

"Act" means the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007 ;

"Agency" means National Environmental Standards and Regulations Enforcement Agency established under Section 1 of the Act ;

"Approved Technical Training" means a short technical training course approved by the Agency in respect of Ozone Depleting Substances control in fire fighting, refrigeration and air conditioning industry ;

"Bulk Refrigerant" means refrigerant other than halon, but does not include refrigerant that is contained in RAC equipment ;

"Code of Practice" means a publication adopted and approved by the Agency which contains the guidelines under which specific tasks or set of processes or actions shall be performed in order to meet the quality assurance, quality control and professional practice to be acceptable as basis in performing and approving performed tasks relevant to these Regulations ;

"Director-General" means the Director-General of National Environmental Standards and Regulations Enforcement Agency ;

"Disposable Pressurized Container" means a pressurized container designed to be used only once ;

"Dispose" means to dismantle, break up, or abandon ;

"Equipment" means a device, system, or mechanical installation located in mobile and stationary air conditioning units, refrigerating units, freezing units and heat pump units which is designed to operate using an ozone depleting substance but does not include fire extinguishing equipment ;

"Fire Extinguishing Equipment" means a fire extinguishing unit or system, whether portable or fixed, that contains an ozone-depleting substance ;

"Foaming Agent" means a substance that is added to a plastic during the process of manufacturing flexible or rigid insulation foam so that gas cells are formed throughout the plastic ;

"Halon" means a bromofluorocarbon listed in Schedule 3 to these Regulations ;

"Leak Test" means a procedure performed on equipment to determine whether or not an ozone-depleting substance is being released to the environment ;

"Ozone" means the layer of gas containing three atoms of oxygen formed at the stratosphere within 10 to 50km above the surface of the earth which has the ability to filter out a very high proportion of the incoming ultra violet radiation and is essential for the survival of life on earth ;

"*Ozone-Depleting Potential*" means, with respect to a substance, the quotient obtained by dividing the mass of stratospheric ozone that would be destroyed by a unit mass of the substance if it were introduced into the environment, by the mass of stratospheric ozone that would be destroyed by the same unit mass of fluorotrichloro-methane if it were introduced into the environment ;

"*Ozone-Depleting Substance*" means a substance or mixture of substances listed in Schedule 3 to these Regulations, including their isomers ;

"*Person*" means a natural and juristic personality

"*Purging device*" means any device that uses pressure or gas to remove something in an enclosed area forcefully, often violently ;

"*RAC*" means refrigeration and air conditioning equipment, used for the cooling or heating of anything, that uses a refrigerant ;

"*Reclaim*" means to return a recovered ozone-depleting substance to its original minimum specifications as verified by laboratory analysis ;

"*Recover*" means to collect an ozone-depleting substance in a container outside the system from which it was removed ;

"*Recycle*" means the restoration of a recovered ozone-depleting substance to a higher level of purity by operations such as filtering, drying, and cleaning but does not include testing the product to verify its purity ;

"*Reuse*" means to return a recovered ozone-depleting substance to equipment, including fire extinguishing equipment, without any prior cleaning ;

"*Servicing*" means the act of repairing, maintaining, charging, recharging or adjusting a component of equipment or fire extinguishing equipment, where the component or part contains an ozone-depleting substance ;

"*Vehicle*" means any vehicle propelled or driven other than by muscular power whether or not the vehicle is registered with Vehicle Inspection Officer and includes an aircraft.

**24.** These Regulations may be cited as the National Environmental (Ozone Layer Protection) Regulations 2009. Citation.

## SCHEDULE 1

## PERMITS AND ENTITLEMENTS

<i>Item</i>	<i>Permit</i>	<i>Entitlement of permit holder</i>
1.	Full refrigeration and air conditioning permit.	To handle a refrigerant for any work in the refrigeration and air conditioning industry, other than the automotive industry.
2.	Automotive air conditioning permit.	To handle a refrigerant for any work on air conditioning equipment fitted to the cabin of a motor vehicle.
3.	Restricted split system air conditioning installation and de-commissioning permit.	To handle a refrigerant for the installation and de-commissioning of a single-head split system of less than 18kW.
4.	Restricted domestic refrigeration and air conditioning appliances permit.	To handle a refrigerant for any work on domestic refrigeration or air conditioning equipment.
5.	Portable Fire Extinguisher Maintenance Permit.	To charge and recharge a portable fire extinguisher and repair the extinguisher valve.
6.	Fixed System Installation and Decommissioning Permit.	<p>(1) To install and decommission a gaseous fire extinguishing system (fire protection equipment) include:</p> <p>(a) to install and disconnect actuation devices (mechanisms) to and from container valves ;</p> <p>(b) to install and disconnect gaseous agent containers ;</p> <p>(c) to install and disconnect any interconnections to other gaseous system containers ;</p> <p>(d) to install and disconnect ancillary equipment connections to manifold and pipe work ; and</p>

Item	Permit	<i>Entitlement of permit holder</i>
		(e) to attach and remove transport equipment such as valve outlet and devices installed to prevent accidental discharge.
		(2) Commission actuation control devices set to operate and engage safety devices as needed and decommission these devices.
7.	Fixed System Testing and Maintenance Permit.	To test and maintain a gaseous fire extinguishing system (fire protection equipment), includes :
		(a) to test actuation release systems ;
		(b) to disconnect and reconnect actuation devices (mechanisms) ;
		(c) to disconnect and reconnect any interconnections to other gaseous systems containers ;
		(d) to disconnect and reconnect ancillary equipment connections from containers to manifold and pipe work ;
		(e) to test actuation devices (mechanisms) ;
		(f) to perform any tests and maintenance on any Fire Detection and Alarm System, including any remote operation panel and actuation and control system that interfaces with or forms part of a gaseous fire extinguishing system ; and
		(g) to perform any tests and maintenance on gaseous agent containers and ancillary equipment connections from containers to manifold and pipe work.

<i>Item</i>	<i>Permit</i>	<i>Entitlement of permit holder</i>
8.	Recovery, Reclamation, Fill and Recycling Permit.	To recover, reclaim, fill and recycle an extinguishing agent into and from a fire extinguisher and gaseous fire extinguishing system container from and to a bulk agent container.
9.	Warehouse Maintenance Permit.	To monitor for leakage stocks of extinguishing agent bulk agent containers in a warehouse and, as needed, to transfer the extinguishing agent from a leaking storage container.
10.	Control Systems Installation, Commissioning and Decommissioning Permit.	To install, commission and decommission a fire detection and alarm system, including any remote operation panel and actuation and control system that interfaces with or forms part of a gaseous fire extinguishing system.

## SCHEDULE 2

*Regulation 3 (2)*

## CATEGORIES OF PRE-CHARGED EQUIPMENT

<i>Item</i>	<i>Category</i>
1.	Commercial portable refrigerators.
2.	Commercial refrigerated cabinets.
3.	Other commercial refrigeration equipment.
4.	Domestic refrigerators and freezers.
5.	Vehicle powered truck refrigerator.
6.	Self-powered truck or trailer refrigerator.
7.	Refrigerated portable air conditioning.
8.	Single head split system air conditioning.
9.	Multi head or variable reverse flow (vrf) split system air conditioning.
10.	Packaged window air conditioning.
11.	Packaged water cooled air conditioning.
12.	Packaged air cooled air conditioning.
13.	High pressure chillers.
14.	Low pressure chillers.
15.	Cabin air conditioning for a motor vehicle of 3.5 tonnes gross vehicle mass or less.
16.	Cabin air conditioning for a motor vehicle of more than 3.5 tonnes gross vehicle mass.

## SCHEDULE 3

Regulations 1(2), 5 (1), 5 (3), 8 (1), 9 (1) and 10

## OZONE DEPLETING SUBSTANCES

Paragraph 1		Chlorofluorocarbon (CFCs)	
	Substance		Ozone Depleting Potential
(1)	$\text{CFCl}_3$	(CFC-11)	1.0
(2)	$\text{CF}_2\text{Cl}_2$	(CFC-12)	1.0
(3)	$\text{C}_2\text{F}_3\text{Cl}_3$	(CFC-13)	0.8
(4)	$\text{C}_2\text{F}_4\text{Cl}_2$	(CFC-114)	1.0
(5)	$\text{C}_2\text{F}_5\text{Cl}$	(CFC-115)	0.6
(6)	$\text{C}_2\text{F}_2\text{BrCl}$	(halon-1211)	3.0
(7)	$\text{C}_2\text{F}_3\text{Br}$	(halon-1301)	10.0
(8)	$\text{C}_2\text{F}_4\text{Br}_2$	(halon-2402)	6.0
(9)	$\text{CF}_3\text{Cl}$	(CFC-13)	1.0
(10)	$\text{C}_2\text{FCl}_5$	(CFC-111)	1.0
(11)	$\text{C}_2\text{F}_2\text{Cl}_4$	(CFC-112)	1.0
(12)	$\text{C}_3\text{FCl}_7$	(CFC-211)	1.0
(13)	$\text{C}_3\text{F}_2\text{Cl}_6$	(CFC-212)	1.0
(14)	$\text{C}_3\text{F}_3\text{Cl}_5$	(CFC-213)	1.0
(15)	$\text{C}_3\text{F}_4\text{Cl}_4$	(CFC-214)	1.0

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

$\text{C}_3\text{F}_5\text{Cl}_3$	(CFC-215)	1.0
$\text{C}_3\text{F}_6\text{Cl}_2$	(CFC-216)	1.0
$\text{C}_3\text{F}_7\text{Cl}$	(CFC-217)	1.0
$\text{CCl}_4$	carbon tetrachloride	1.1
$\text{C}_2\text{H}_3\text{Cl}_3$	1,1,1-trichloroethane" (Methy chloroform)	0.1

## Azeotropic Mixtures

- (16) CFC-500 (CFC-12/HFC-132a, 73.8/26.2 wt. %)
- (17) CFC-501 (CFC-12/HCFC-22, 25.0/75.0 wt. %)
- (18) CFC-502 (HCFC-22/CFC-115, 48.8/51.2 wt. %)
- (19) CFC-503 (CFC-13/HCFC-23, 59.9/40.1 wt. %)
- (20) CFC-504 (HFC-32/CFC-115, 48.2/51.8 wt. %)
- (21) CFC-505 (CFC-12/HCFC-31, 78/22 wt. %)
- (22) CFC-506 (HCFC-31/CFC-114, 55.1/44.9 wt. %)

## Paragraph 2

## Halons

Regulation 20(3)

(1) Halon-1211, also known as bromochlorodifluoromethane

(2) Halon-1301, also known as bromotrifluoromethane

(3) Halon-2402, also known as dibromotetrafluoroethane

## Paragraph 3

## Hydrochlorofluorocarbons (HCFCs)

(1)	$\text{CHFCI}_2$	(HCFC-21)	1	0.04
(2)	$\text{CHF}_2\text{Cl}$	(HCFC-22)	1	0.055
(3)	$\text{CH}_2\text{FCI}$	(HCFC-31)	1	0.02
(4)	$\text{C}_2\text{HFCI}_4$	(HCFC-121)	2	0.04
(5)	$\text{C}_2\text{HF}_2\text{Cl}_3$	(HCFC-122)	3	0.08
(6)	$\text{C}_2\text{HF}_3\text{Cl}_2$	(HCFC-123)	3	0.06
(7)	$\text{CHCl}_2\text{CF}_3$	(HCFC-123)	—	0.02
(8)	$\text{C}_2\text{HF}_4\text{Cl}$	(HCFC-124)	2	0.04
(9)	$\text{CHFCICF}_3$	(HCFC-124)	—	0.022
(10)	$\text{C}_2\text{H}_2\text{FCI}_3$	(HCFC-131)	3	0.05
(11)	$\text{C}_2\text{H}_2\text{F}_2\text{Cl}_2$	(HCFC-132)	4	0.05
(12)	$\text{C}_2\text{H}_2\text{F}_3\text{Cl}$	(HCFC-133)	3	0.06
(13)	$\text{C}_2\text{H}_2\text{FCI}_2$	(HCFC-141)	3	0.07
(14)	$\text{CH}_3\text{CFCl}_2$	(HCFC-141B)	—	0.11
(15)	$\text{C}_2\text{H}_3\text{F}_2\text{Cl}$	(HCFC-142)	3	0.07
(16)	$\text{CH}_3\text{CF}_3\text{Cl}$	(HCFC-142B)	—	0.065
(17)	$\text{C}_2\text{H}_2\text{FCI}$	(HCFC-151)	2	0.005
(18)	$\text{C}_3\text{HFCI}_6$	(HCFC-221)	5	0.07
(19)	$\text{C}_3\text{HF}_2\text{Cl}_5$	(HCFC-222)	9	0.09
(20)	$\text{C}_3\text{HF}_3\text{Cl}_4$	(HCFC-223)	12	0.08
(21)	$\text{C}_3\text{HF}_4\text{Cl}_3$	(HCFC-224)	12	0.09
(22)	$\text{C}_3\text{HF}_5\text{Cl}_2$	(HCFC-225)	9	0.07
(23)	$\text{CF}_3\text{CF}_2\text{CHCl}_2$	(HCFC-225ca)	—	0.025
(24)	$\text{CF}_2\text{ClCF}_2\text{CHClF}$	(HCFC-225cb)	—	0.033
(25)	$\text{C}_3\text{HF}_6\text{Cl}$	(HCFC-226)	5	0.10
(26)	$\text{C}_3\text{H}_2\text{FCI}_5$	(HCFC-231)	9	0.09
(27)	$\text{C}_3\text{H}_2\text{F}_2\text{Cl}_4$	(HCFC-232)	16	0.10
(28)	$\text{C}_3\text{H}_2\text{F}_3\text{Cl}_3$	(HCFC-233)	18	0.23
(29)	$\text{C}_3\text{H}_2\text{F}_4\text{Cl}_2$	(HCFC-234)	16	0.28
(30)	$\text{C}_3\text{H}_2\text{F}_5\text{Cl}$	(HCFC-235)	9	0.052
(31)	$\text{C}_3\text{H}_3\text{F}_2\text{Cl}_4$	(HCFC-241)	12	0.90
(32)	$\text{C}_3\text{H}_3\text{F}_3\text{Cl}_3$	(HCFC-242)	18	0.13
(33)	$\text{C}_3\text{H}_3\text{F}_4\text{Cl}_2$	(HCFC-243)	18	0.12
(34)	$\text{C}_3\text{H}_3\text{F}_5\text{Cl}$	(HCFC-244)	12	0.14
(35)	$\text{C}_3\text{H}_4\text{FCI}_3$	(HCFC-251)	12	0.01
(36)	$\text{C}_3\text{H}_4\text{F}_2\text{Cl}_2$	(HCFC-252)	16	0.01



(37)	$C_3H_4F_3Cl$	(HCFC-253)	12	0.003
(38)	$C_3H_5Cl_2$	(HCFC-261)	9	0.02
(39)	$C_3H_5F_2Cl$	(HCFC-262)	9	0.02
(40)	$C_3H_6FCl$	(HCFC-271)	5	0.03

## Paragraph 4

## Hydrofluorobromide

(1)	$CHFBr_2$		1	1.00
(2)	$CHF_2Br$	(HBFC-22bl)	1	0.74
(3)	$CH_2FBr$		1	0.73
(4)	$C_2HFBr_4$		2	0.08
(5)	$C_2HF_2Br_3$		3	1.8
(6)	$C_2HF_3Br_2$		3	1.6
(7)	$C_2HF_4Br$		2	1.2
(8)	$C_2H_2FBr_3$		3	1.1
(9)	$C_2H_2F_2Br_2$		4	1.5
(10)	$C_2H_2F_3Br$		3	1.6
(11)	$C_2H_3FBr_2$		3	1.7
(12)	$C_2H_3F_2Br$		3	1.1
(13)	$C_2H_4FBr$		2	0.1
(14)	$C_3HFBr_6$		5	1.5
(15)	$C_3HF_2Br_5$		9	1.9
(16)	$C_3HF_3Br_4$		12	1.8
(17)	$C_3HF_4Br_3$		12	2.2
(18)	$C_3HF_5Br_2$		9	2.0
(19)	$C_3HF_6FBr$		5	3.3
(20)	$C_3H_2FBr_5$		9	1.9
(21)	$C_3H_2F_2Br_4$		16	2.1
(22)	$C_3H_2F_3Br_3$		18	5.6
(23)	$C_3H_2F_4Br_2$		16	7.5
(24)	$C_3H_2F_5Br$		8	14.0
(25)	$C_3H_3FBr_4$		12	1.9
(26)	$C_3H_3F_2Br_3$		18	3.1
(27)	$C_3H_3F_3Br_2$		18	3.1
(28)	$C_3H_3F_4Br$		12	4.4
(29)	$C_3H_4FBr_3$		12	0.3
(30)	$C_3H_4F_2Br_2$		16	1.0
(31)	$C_3H_4F_3Br$		12	0.8
(32)	$C_3H_5FBr_2$		9	0.4
(33)	$C_3H_5F_2Br$		9	0.8
(34)	$C_3H_4FBr$		5	0.7
(35)	$CH_2BrCl$			0.2

bromochloromethane 1

 $CG_3Br$ 

methyl bromide

## SCHEDULE 4

*Regulation 14*

## BI-ANNUAL REPORT REQUIREMENTS BY PERMIT HOLDERS

Each permit holder shall give a bi-annual report stating :

(a) the quantities of each scheduled substance manufactured, imported and exported by the person for each month ; and

(b) each quantity of a scheduled substance that has been imported by the person for each month :

(i) the date of importation ;

(ii) the country of origin of the scheduled substance ;

(iii) the full name and address of the person from whom the scheduled substance was imported ;

(iv) the place at which the scheduled substance was discharged from the carrier (ship, aircraft or other) on which the scheduled substance was carried ;

(v) the name and transit particulars of the carrier ; and

(vi) whether the scheduled substance was imported for use as feedstock ;

(c) each quantity of a scheduled substance that has been exported by the person in each month ;

(i) the date of export ;

(ii) the country of destination of the scheduled substance ;

(iii) the full name and address of the person to whom the scheduled substance was exported ;

(iv) the place at which the scheduled substance was loaded on the carrier (ship, aircraft, others) on which the scheduled substance was carried; and

(v) the name and transit particulars of the carrier (ship, aircraft, others);

(d) each quantity of a scheduled substance that has been manufactured by the person in each month, whether the scheduled substance was manufactured for use as feedstock ; and

(e) the quantity of each scheduled substance destroyed by the person in each month.

## SCHEDULE 5

*Regulation 21*

## APPLICATION FOR PERMIT

Application for permit in respect of RAC shall :

- (a) be made to the Agency ;
- (b) be in a Form approved by the Agency ;
- (c) be accompanied by the fee prescribed for the particular kind of permit ; and
- (d) include the relevant information required by the Agency to decide the application, stating :
  - (i) details about the applicant's relevant training and professional experience ;
  - (ii) in the case of an application by an individual, evidence about the applicant's training and certification in approved technical training, code of practice and any standard that is relevant to the work to be carried out under the permit ; and
  - (iii) evidence that the applicant is qualified to hold the permit.

## SCHEDULE 6 Regulations 16, 17 and 18

## PHASE OUT DEADLINE FOR CONTROLLED SUBSTANCES

## PART A

<i>Group</i>	<i>Substance</i>	<i>Phase-out deadline</i>
<i>Group I</i>		
(1) $\text{CFCl}_3$	(CFC-11)	Total phase-out by 1st January, 2010.
(2) $\text{CF}_2\text{Cl}_2$	(CFC-12)	
(3) $\text{C}_2\text{F}_3\text{Cl}_2$	(CFC-113)	
(4) $\text{C}_2\text{F}_4\text{Cl}_2$	(CFC-114)	
(5) $\text{C}_2\text{F}_5\text{Cl}$	(CFC-115)	
<i>Group II</i>		
(1) $\text{CF}_2\text{BrCl}$	(halon-1211)	Total phase-out by 1st January, 2010.
(2) $\text{CF}_3\text{Br}$	(halon-1301)	
(3) $\text{C}_2\text{F}_3\text{Cl}_2$	(CFC-113).	
(4) $\text{C}_2\text{F}_4\text{Br}_2$	(halon-2402)	

## PART B

Group	Substance	Phase-out deadline
Group I		
(1) $\text{CF}_3\text{Cl}$	(CFC-13)	Total phase-out by 1st January, 2010.
(2) $\text{C}_2\text{FCl}_5$	(CFC-111)	
(3) $\text{C}_2\text{F}_2\text{Cl}_4$	(CFC-112)	
(4) $\text{C}_3\text{FCl}_7$	(CFC-211)	
(5) $\text{C}_3\text{F}_2\text{Cl}_6$	(CFC-212)	
(6) $\text{C}_3\text{F}_3\text{Cl}_5$	(CFC-213)	
(7) $\text{C}_3\text{F}_4\text{Cl}_4$	(CFC-214)	
(8) $\text{C}_3\text{F}_5\text{Cl}_3$	(CFC-215)	
(9) $\text{C}_3\text{F}_6\text{Cl}_2$	(CFC-216)	
(10) $\text{C}_3\text{F}_7\text{Cl}$	(CFC-217)	
Group II		
$\text{CCl}_4$	Carbon Tetrachloride	Total phase-out by 1st January, 2010.
Group III		
$\text{C}_2\text{H}_3\text{Cl}_3$	1, 1, 1- Trichloroethane (Methyl chloroform)	Total phase-out by 1st January, 2015.

## PART C

Group 1	Substance	Phase-out deadline
		Total phase-out by 1st January, 2030.
(1)	$\text{CHFCI}_2$	(HCFC-21)
(2)	$\text{CHF}_2\text{Cl}$	(HCFC-22)
(3)	$\text{CH}_2\text{FCI}$	(HCFC-31)
(4)	$\text{C}_2\text{HFCI}_4$	(HCFC-121)
(5)	$\text{C}_2\text{HF}_2\text{Cl}_3$	(HCFC-122)
(6)	$\text{C}_2\text{HF}_3\text{Cl}_2$	(HCFC-123)
(7)	$\text{CHCl}_2\text{CF}_3$	(HCFC-123)
(8)	$\text{C}_2\text{HF}_4\text{Cl}$	(HCFC-124)
(9)	$\text{CHFCICF}_3$	(HCFC-124)
(10)	$\text{C}_2\text{H}_2\text{FCI}_3$	(HCFC-131)
(11)	$\text{C}_2\text{H}_2\text{F}_2\text{Cl}_2$	(HCFC-132)
(12)	$\text{C}_2\text{H}_2\text{F}_3\text{Cl}$	(HCFC-133)
(13)	$\text{C}_2\text{H}_3\text{FCI}_2$	(HCFC-141)
(14)	$\text{CH}_3\text{CFCI}_2$	(HCFC-141B)
(15)	$\text{C}_2\text{H}_3\text{F}_2\text{Cl}$	(HCFC-142)
(16)	$\text{CH}_3\text{CF}_2\text{Cl}$	(HCFC-142B)
(17)	$\text{C}_2\text{H}_3\text{FCI}$	(HCFC-151)
(18)	$\text{C}_3\text{HFCI}_6$	(HCFC-221)
(19)	$\text{C}_3\text{HF}_2\text{Cl}_5$	(HCFC-222)
(20)	$\text{C}_3\text{HF}_3\text{Cl}_4$	(HCFC-223)
(21)	$\text{C}_3\text{HF}_4\text{Cl}_3$	(HCFC-224)
(22)	$\text{C}_3\text{HF}_5\text{Cl}_2$	(HCFC-225)
(23)	$\text{CF}_3\text{CF}_2\text{CHCl}_2$	(HCFC-225ca)
(24)	$\text{CF}_2\text{ClCF}_2\text{CHClF}$	(HCFC-225cb)
(25)	$\text{C}_3\text{HF}_6\text{Cl}$	(HCFC-226)
(26)	$\text{C}_3\text{H}_2\text{FCI}_5$	(HCFC-231)
(27)	$\text{C}_3\text{H}_2\text{F}_2\text{Cl}_4$	(HCFC-232)
(28)	$\text{C}_3\text{H}_2\text{F}_3\text{Cl}_3$	(HCFC-233)
(29)	$\text{C}_3\text{H}_2\text{F}_4\text{Cl}_2$	(HCFC-234)
(30)	$\text{C}_3\text{H}_2\text{F}_5\text{Cl}$	(HCFC-235)
(31)	$\text{C}_3\text{H}_3\text{F}_2\text{Cl}_4$	(HCFC-241)
(32)	$\text{C}_3\text{H}_3\text{F}_3\text{Cl}_3$	(HCFC-242)
(33)	$\text{C}_3\text{H}_3\text{F}_4\text{Cl}_2$	(HCFC-243)
(34)	$\text{C}_3\text{H}_3\text{F}_5\text{Cl}$	(HCFC-244)
(35)	$\text{C}_3\text{H}_4\text{F}_2\text{Cl}_3$	(HCFC-251)
(36)	$\text{C}_3\text{H}_4\text{F}_3\text{Cl}_2$	(HCFC-252)
(37)	$\text{C}_3\text{H}_4\text{F}_4\text{Cl}$	(HCFC-253)
(38)	$\text{C}_3\text{H}_5\text{FCI}_2$	(HCFC-261)
(39)	$\text{C}_3\text{H}_5\text{F}_2\text{Cl}$	(HCFC-262)
(40)	$\text{C}_3\text{H}_6\text{FCI}$	(HCFC-271)

## PART C—continued

Group II	Phase-out deadline
	Total phase-out by 1st January, 2015
(1) $\text{CHFBr}_2$ (2) $\text{CHF}_2\text{Br}$	(HBFC-22bl)
(3) $\text{C}_2\text{H}_2\text{FBr}_4$	
(4) $\text{C}_2\text{HF}_3\text{Br}$	
(5) $\text{C}_2\text{HF}_2\text{Br}_3$	
(6) $\text{C}_2\text{HF}_4\text{Br}$	
(7) $\text{C}_2\text{H}_2\text{FBr}_3$	
(8) $\text{C}_2\text{H}_2\text{F}_2\text{Br}_2$	
(9) $\text{C}_2\text{H}_2\text{F}_3\text{Br}$	
(10) $\text{C}_2\text{H}_3\text{FBr}_2$	
(11) $\text{C}_2\text{H}_3\text{F}_2\text{Br}$	
(12) $\text{C}_3\text{H}_4\text{FBr}$	
(13) $\text{C}_3\text{HFBBr}_6$	
(14) $\text{C}_3\text{HF}_2\text{Br}_5$	
(15) $\text{C}_3\text{HF}_3\text{Br}_4$	
(16) $\text{C}_3\text{HF}_4\text{Br}_3$	
(17) $\text{C}_3\text{HF}_5\text{Br}_2$	
(18) $\text{C}_3\text{HF}_6\text{Br}$	
(19) $\text{C}_3\text{H}_2\text{FBr}_5$	
(20) $\text{C}_3\text{H}_2\text{F}_2\text{Br}_4$	
(21) $\text{C}_3\text{H}_2\text{F}_3\text{Br}_3$	
(22) $\text{C}_3\text{H}_2\text{F}_4\text{Br}_2$	
(23) $\text{C}_3\text{H}_2\text{F}_5\text{Br}$	
(24) $\text{C}_3\text{H}_3\text{FBr}_4$	
(25) $\text{C}_3\text{H}_3\text{F}_2\text{Br}_3$	
(26) $\text{C}_3\text{H}_3\text{F}_3\text{Br}_2$	
(27) $\text{C}_3\text{H}_3\text{F}_4\text{Br}$	
(28) $\text{C}_3\text{H}_4\text{FBr}_3$	
(29) $\text{C}_3\text{H}_4\text{F}_2\text{Br}_2$	
(30) $\text{C}_3\text{H}_4\text{F}_3\text{Br}$	
(31) $\text{C}_3\text{H}_5\text{FBr}_2$	
(32) $\text{C}_3\text{H}_5\text{F}_2\text{Br}$	
(33) $\text{C}_3\text{H}_4\text{FBr}$	

*Group III* $\text{CH}_2\text{BrCl}$ 

bromochloromethane

Total phase-out by 1st January, 2015.

## PART D

*Group* $\text{CH}_3\text{Br}$ *Substance*

methylbromide

Total phase-out by 1st January, 2015.

DATED at Abuja this 30th day of September, 2009.

MR JOHN ODEY  
*Honourable Minister*  
*Ministry of Environment*