CHAPTER 216A

MONTREAL PROTOCOL (CONTROLLED SUBSTANCES)

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CHAPTER 216A

MONTREAL PROTOCOL (CONTROLLED SUBSTANCES)

An Act to give effect to the Montreal Protocol on substances that deplete the ozone layer and for matters connected thereto.

5 of 2006

[Commencement 6th February 2006]

S.I. 43/2006.

1. This Act may be cited as the Montreal Protocol (Controlled Substances) Act.

Short title.

2. In this Act —

Interpretation.

- "ambient air" means the atmosphere surrounding the earth, but does not include the atmosphere in a structure in any underground space;
- "a controlled substance" means a substance listed in Annex A, B, C or E of the Montreal Protocol and listed in the First Schedule;

First Schedule.

- "Director" means the Director of the Department of Environmental Health Services;
- "major repair or service" means any repair or service that involves the removal or replacement of a component or accessory of a refrigeration system such as the compressor, condenser, evaporator, auxiliary heat-exchanger, filter-drier, etc. that may allow venting of a controlled substance into the atmosphere;
- "Minister" means the Minister responsible for Environmental Control;
- "the Montreal Protocol" means the Montreal Protocol on Substances that deplete the Ozone Layer ratified by the Government of the Commonwealth of The Bahamas on 4th May, 1993;
- "the National Ozone Unit" (hereinafter referred to as the "NOU") means the National Ozone Unit established by an agreement dated the 5th day of May, 1997 between the Government of the Commonwealth of The Bahamas and the United

- Nations Environment Programme and forming part of the Department of Environmental Health Services under the Ministry of Health;
- "pre-shipment treatment" means a treatment applied directly prior to exporting commodities to meet official pest-control regulations in either the importing or exporting country;
- "quarantine and pre-shipment (QPS)" means the uses of methyl bromide that are defined by the Montreal Protocol as "quarantine" and "preshipment" and are exempt from Protocol controls;
- "quarantine treatment" means an officially required use of methyl bromide to avoid inadvertently transporting pests along with commodities, to places where those pests are not already present, or where they are being officially controlled;
- "recovery" means the collection and storage of controlled substances from machinery, equipment, containment vessels, etc., during servicing or prior to disposal without necessarily testing or processing it in any way;
- "Recovery and Recycling Centre" means the Recovery and Recycling Centre at such site designated by the Minister;
- "retrofit" means the conversion of an air-conditioning or refrigeration system to accommodate an alternative and an approved refrigerant;
- "servicing" means work which may be performed by a service technician, and includes installation, operations, inspection, repair, retrofitting, redesign and de-commissioning of refrigeration systems to handling, storage, R & R of refrigerants as well as record-keeping.
- **3.** (1) No person shall use a controlled substance —
- (a) for laboratory analytical procedures;
- (b) in the course of fire fighting;
- (c) for agricultural purposes; or
- (d) for any other purpose,

unless otherwise specified.

Prohibition on the use of controlled substances.

- (2) Subsection (1) shall not apply to a controlled substance used for human or animal health care applications, such as
 - (a) bronchial dilators;
 - (b) inhalable steroids;
 - (c) topical anesthetics;
 - (d) veterinary wound powder sprays;
 - (e) sterilization of medical equipment.
- (3) No person shall use methyl bromide except for quarantine and pre-shipment treatments as illustrated in the Second Schedule.

Second Schedule.

- (4) A person who is required to use methyl bromide in accordance with subsection (3) shall report to the NOU the quantities of methyl bromide used.
- (5) No person shall use pure, mixed, isomers, virgin, used, recycled or reclaimed bromochloromethane.
- **4.** (1) No person shall knowingly manufacture or offer for sale —

Manufacture or sale of controlled substances.

- (a) anything containing a controlled substance that acts as a propellant;
- (b) any package, wrap, tray, carton or container or other similar item that contains a controlled substance or is manufactured by a process that uses a controlled substance;
- (c) a fixed or portable hand held fire extinguisher that contains a controlled substance or is manufactured by a process that uses a controlled substance;
- (d) any rigid or flexible foam insulation used in roofs, walls, tanks, pipes and solar collectors or flexible furniture foam made with a controlled substance; or
- (e) anything that contains a controlled substance that is
 - (i) a release agent for molds used in the manufacture of plastic materials;
 - (ii) a cleaning solvent for commercial use on electronic, automotive, avionic,

- telecommunication, industrial, medical or electric equipment;
- (iii) for the use of any cleaning, adhesiveness, coatings or inks; or
- (iv) a protective spray for application to photographs.
- (2) Where any item referred to in subsection (1) was in the possession of the owner of that item before the coming into force of this Act, that owner shall contact the NOU, at the expiration of that item's useful life, and the NOU shall arrange the removal of any controlled substance from that item or the disposal of that item.

Purchase and sale of controlled substances by licensed dealers.

- **5.** (1) No person shall purchase a controlled substance from a licensed dealer of controlled substances unless that person presents a card of certification issued by the NOU as proof of that person's ability to handle controlled substances adequately.
- (2) No licensed dealer shall sell a controlled substance to another person without recording the transaction details electronically or in a log.
 - (3) The log shall indicate —
 - (a) the name and certification card number of the purchaser;
 - (b) the address of the purchaser;
 - (c) the telephone number of the purchaser;
 - (d) the quantity and cash sale of the controlled substance purchased; and
 - (e) the reason for the intended use of the controlled substance.

Servicing of appliances and vehicles.

- **6.** (1) No person shall service any appliance or vehicle that contains or may contain a controlled substance unless that person
 - (a) is a certified refrigerant management technician approved by the Director;
 - (b) is a certified mechanic approved by the Director; or
 - (c) has participated in and met the requirements of refrigerant management in —

- (i) the United Nations Environment Programme
 - (aa) Recovery and Recycling Workshop; or
 - (bb) Good Practices in Refrigeration Training Workshop; or
- (ii) an approved refrigeration management course with The Bahamas Technical and Vocational Institute (BTVI) or any other accredited institution approved by the NOU,

and that such person has a certification card issued by the Director to do such servicing on the recommendation of the NOU.

- (2) A person who services refrigeration, air-conditioning or any other similar appliances that contain or may contain a controlled substance, shall conduct the service in accordance with procedures specified in the Good Practices in Refrigeration Training Manual prepared by the United Nations Environment Programme or as otherwise specified by the NOU.
- (3) A person who services refrigeration or airconditioning appliances or vehicles that are fitted with ozone-friendly technology shall not —
 - (a) re-charge;
 - (b) install or authorize the installation of; or
 - (c) retrofit,

a refrigeration or air-conditioning appliance or vehicle with a controlled substance.

- (4) For the purposes of this section —
- "appliances" include large equipment;
- "retrofit" means to convert to an alternative and approved system with a minimum change to its cooling performance;
- "vehicles" means a motor vehicle or vessel;
- "vessel" means any ship or boat and any description of vessel in navigation.

- (5) A person who performs a major repair or service refrigeration or air-conditioning appliances or vehicles shall ensure that
 - (a) the air-conditioning refrigerant or controlled substance in the appliance or vehicle is recovered as specified in the Good Practices in Refrigeration Training Manual prepared by UNEP:
 - (b) that a leak test is carried out and that the leak, if any, in the appliance or vehicle is repaired before recharging;
 - (c) a label is attached to the appliance or vehicle stating
 - (i) the certification card number of the technician or mechanic;
 - (ii) the name of the company represented;
 - (iii) the date the equipment was retrofitted;
 - (iv) the date the leak test was performed;
 - (v) the warranty date of the servicing performed on the appliance or vehicle; and
 - (vi) whether the leak test was positive or negative;
 - (d) a label is attached
 - (i) on the right hand side of the back of the refrigerator;
 - (ii) inside of the driver's side door;
 - (iii) to the front right hand side of an airconditioning system; or
 - (iv) to the front right hand side of any other type of equipment;
 - (e) no label previously attached to an appliance or vehicle shall be removed unless that label is replaced by a certified technician or mechanic;
 - (f) no controlled substance should be added to equipment for leak testing except for mobile air-conditioners in accordance with the Codes of Good Practices in Refrigeration; and

- (g) a log is maintained of all equipment containing a controlled substance.
- (6) No person shall carry out the services referred to in subsection (5) without the customer's knowledge and permission.
- (7) Any person who suspects that an air-conditioning or refrigeration technician or mechanic is not complying with the provisions of this section shall report the matter to the NOU.
- (8) A person who services refrigeration or airconditioning appliances or vehicles that contain controlled substances shall obtain a copy of the Good Practices in Refrigeration Training Manual from the NOU free of charge.
- 7. A person desirous of disposing of a refrigeration, air-conditioning system or any other similar appliance that contains a controlled substance shall, on the expiration of that item's useful life, contact the NOU and the NOU shall cause the controlled substance to be recovered by a certified technician at the Recovery and Recycling Centre before disposal.

Disposal of appliances.

8. (1) No person shall release or permit the release of —

Prohibits release of controlled substance into atmosphere.

- (a) a controlled substance from an air purged system for purging non-condensible gases from a centrifugal chiller, a refrigeration system or an air conditioning system installed;
- (b) any solvents or diluents containing a controlled substance.

into the ambient air.

- (2) Any person who contravenes this section shall be liable on summary conviction to a fine of not exceeding two thousand dollars or to a term of imprisonment not exceeding six months, or both.
- **9.** (1) If an air-conditioning or refrigeration technician or company does not own a recovery or recycling machine, then such technician or company shall utilize the recovery and recycling machine at the Recovery and Recycling Centre.

Recovery and Recycling Centre.

Third Schedule.

- (2) A refrigeration and air-conditioning company that utilizes a machine referred to in subsection (1) shall pay an annual fee as prescribed in the Third Schedule for the use of the Recovery and Recycling Centre no later than the 31st day of December.
- (3) The Recovery and Recycling Centre shall be staffed with at least two persons who shall assist technicians during the hours of 9:30 a.m. to 4:30 p.m. on normal working days to recover and recycle the controlled substances and to record the amount of controlled substances recovered and recycled.
- (4) Reports of the amount of controlled substances recovered and recycled shall be submitted to the NOU by the first week of each month for the month preceding.

Regulations.

- 10. The Minister may make regulations generally for carrying out the provisions of this Act and without prejudice to the generality of this provision for
 - (a) the licensing of the import or export of controlled substances;
 - (b) prescribing the forms in which application for licensing may be made under the Act;
 - (c) prescribing fees that may be charged under this Act.

Amendment of Schedules.

11. The Minister may by Order amend the First, Second and Third Schedules.

Penalty.

- 12. (1) Any person who contravenes any of the provisions of this Act and any regulations made thereunder commits an offence and is liable unless otherwise specified on summary conviction to a fine not exceeding ten thousand dollars or to a term of imprisonment not exceeding two years, or both.
- (2) Where a person commits a second offence, that person is liable on summary conviction to a fine not exceeding twenty thousand dollars or a term of imprisonment not exceeding four years.

FIRST SCHEDULE (section 2 & 11)

ANNEX A: CONTROLLED SUBSTANCES

Group	Substance	Ozone-Depleting Potential*
Group 1		
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
$C_2F_4Br_2$	(halon-2402)	6.0

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

ANNEX B: CONTROLLED SUBSTANCES

Group	Substance	Ozone-Depleting Potential*		
Group 1				
CF ₃ Cl	(CFC-13)	1.0		
C ₂ FCl ₅	(CFC-111)	1.0		
C ₂ F ₂ Cl ₄	(CFC-112)	1.0		
C ₃ FCl ₇	(CFC-211)	1.0		
$C_3F_2Cl_6$	(CFC-212)	1.0		
$C_3F_3Cl_5$	(CFC-213)	1.0		
$C_3F_4Cl_4$	(CFC-214)	1.0		
$C_3F_5Cl_3$	(CFC-215)	1.0		
$C_3F_6Cl_2$	(CFC-216)	1.0		
$C_3F_7C_1$	(CFC-217)	1.0		
Group II	carbon	1.1		
CCl ₄	tetrachloride			
Group III				
C ₂ H ₃ Cl ₃ *	1, 1, 1			
	-			
	trichloroethane*	0.1		
	(methyl chloroform)			
* This formula does not refer to 1,1,2-trichloroethane.				

ANNEX C: CONTROLLED SUBSTANCES

Group	Substance	Number of isomers	Ozone-Depleting Potential*
Group 1			
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 HFCl ₄	(HCFC-121)	2	0.01-0.04
C ₂ HF ₂ Cl ₃	(HCFC-122)	3	0.02-0.08
C ₂ HF ₃ Cl ₂	(HCFC-123)	3	0.02-0.06
CHCl ₂ CF ₃	(HCFC-123)**	-	0.02
C ₂ HF ₄ Cl	(HCFC-124)	2	0.02-0.04
CHFClCF ₃	(HCFC-124)**	-	0.022
C ₂ H ₂ FCl ₃	(HCFC-131)	3	0.007-0.05
$C_2H_2F_2Cl_2$	(HCFC-132)	4	0.008-0.05
$C_2H_2F_3Cl$	(HCFC-133)	3	0.02-0.06
C ₂ H ₃ FCl ₂	(HCFC-141)	3	0.005-0.07
CH ₃ CFCl ₂	(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 FCl	(HCFC-151)	2	0.003-0.005
C ₃ H ₆ FCl	(HCFC-221)	5	0.005-0.005
C ₃ HF ₂ Cl ₅	(HCFC-221)	9	0.013-0.07
$C_3HF_3Cl_4$	(HCFC-222)	12	0.01-0.09
$C_3HF_4Cl_3$	(HCFC-223) (HCFC-224)	12	0.01-0.08
	(HCFC-224)	9	
C ₃ HF ₅ Cl ₂ CF ₃ CF ₂ CHCl ₂	(HCFC-225ca)**	-	0.02-0.07 0.025
CF ₂ CICF ₂ CHCI ₂	(HCFC-225cb)**		
	(HCFC-223cb) (HCFC-226)	5	0.033
C ₃ HF ₆ Cl		9	
C ₃ H ₂ FCl ₅	(HCFC-231)		0.05-0.09
C ₃ H ₂ F ₂ Cl ₄	(HCFC-232)	16	0.008-0.10
C ₃ H ₂ F ₃ Cl ₃	(HCFC-233)	18	0.007-0.23
C ₃ H ₂ F ₄ Cl ₂	(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 FCl ₄	(HCFC-241)	12	0.004-0.09
C ₃ H ₃ F ₂ Cl ₃	(HCFC-242)	18	0.005-0.13
C ₃ H ₃ F ₃ Cl ₂	(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 FCl 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 FCl 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 FCl	(HCFC-271)	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 HFBr ₄		2	0.3-0.8
$C_2HF_2Br_3$		3	0.5-1.8

Group	Substance	Number of	Ozone-Depleting
		isomers	Potential*
$C_2HF_3Br_2$		3	0.4-1.6
C ₂ HF ₄ Br		2	0.7-1.2
$C_2H_2FBr_3$		3	0.1-1.1
$C_2H_2F_2Br_2$		4	0.2-1.5
$C_2H_2F_3Br$		3	0.7-1.6
$C_2H_3FBr_2$		3	0.1-1.7
$C_2H_3F_2Br$		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	0.3-1.8
C ₃ HF ₄ Br ₃		12	0.5-2.2
C ₃ HF ₅ B _{r2}		9	0.9-2.0
$C_3HF_6B_r$		5	0.7-3.3
$C_3H_2FB_{r5}$		9	0.1-1.9
$C_3H_2F_2B_{r4}$		16	0.2-2.1
$C_3H_2F_3B_{r3}$		18	0.2-5.6
$C_3H_2F_4B_{r2}$		16	0.3-7.5
$C_3H_2F_5B_r$		8	0.9-14.0
$C_3H_3FB_{r4}$		12	0.8-1.9
$C_3H_3F_2B_{r3}$		18	0.1-3.1
$C_3H_3F_3B_{r2}$		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
$C_3H_4F_2Br_2$		16	0.1-1.0
$C_3H_4F_3Br$		12	0.07-0.8
C ₃ H ₅ FBr ₂		9	0.04-0.4
$C_3H_5F_2Br$		9	0.07-0.8
C ₃ H ₆ FBr		5	0.02-0.7
GROUP III			
CH2BrCl	bromochloromethane	1	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.

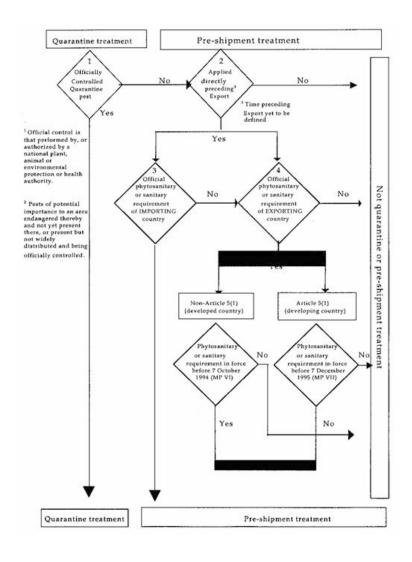
Identifies the most commercially viable substances with ODP values listed against them to be used for the purposes of the Protocol.

ANNEX E: CONTROLLED SUBSTANCES

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

SECOND SCHEDULE (section 3(3))

QUARANTINE AND PRE-SHIPMENT-DECISION TREE



THIRD SCHEDULE (section 9(2) & 11)

FEES

Size of Company	\$
Petty	50.00
Very Small	75.00
Small	100.00
Medium	300.00
Large	360.00
Very Large	420.00