GOVERNMENT NOTICE

DEPARTMENT OF TRADE AND INDUSTRY

No. 18

3 February 2010

NON-PROLIFERATION OF WEAPONS OF MASS DESTRUCTION ACT, 1993 (ACT NO. 87 OF 1993)

DECLARATION OF CERTAIN CHEMICAL GOODS AS CONTROLLED GOODS AND CONTROL MEASURES APPLICABLE TO SUCH GOODS

Declaration

- 1. I, Dr Rob Davies, Minister of Trade and Industry, under section 13(1) of the Non-Proliferation of Weapons of Mass Destruction Act, 1993 (Act No. 87 of 1993), and on the recommendation of the South African Council for the Non-Proliferation of Weapons of Mass Destruction, hereby declare the goods listed in paragraph 4 of, and in the annexures to, this notice to be controlled goods.
- 2. I hereby—
- (a) in terms of section 13(2)(e) of the Act and pursuant to South Africa's obligations under the Chemical Weapons Convention, prohibit—
 - the development, production, acquisition, stockpiling or retention of chemical weapons or the transfer, whether direct or indirect, of chemical weapons to any person;
 - (ii) the use of chemical weapons;
 - (iii) engagement in any military preparations to use chemical weapons;
 - the assistance, encouragement or induction, in any way, of any person to engage in any activity prohibited under the Chemical Weapons Convention;

- (v) the use of riot control agents as a method of warfare; and
- (vi) the export or re-export of the toxic chemicals or precursors listed in Annexures A and B, whether in substantially pure form or in a mixture with any other substance, to countries which are not States Parties to the Chemical Weapons Convention;
- (b) in terms of section 13(2)(b) of the Act, determine that the import, export, reexport or transit (including transshipment) of the controlled goods, as listed in Annexures A, B and C and Part A of Annexure E to this notice, shall take place under a permit issued by the Council: A permit is not required for quantities of 5 milligrams or less of saxitoxin, if the transfer is made for medical or diagnostic purposes, in which case a notification to that effect shall be made to the Council before the transfer;
- in terms of section 13(2)(b) of the Act, determine that the export and re-export of the controlled goods, as listed in Annexure D, Part B of Annexure E and Annexure F to this notice, shall take place under a permit issued by the Council;
- (d) in terms of section 13(2)(b) of the Act, determine that the internal (intranational) transfer of chemicals listed in Annexure A to this notice, shall take place under a permit issued by the Council;
- (e) in terms of section 13(2)(c) of the Act, determine that the Council may require a State-to-State assurance or an end-user or end-use certificate for the export or re-export of the controlled goods listed in the annexures to this notice;
- in terms of section 13(2)(c) of the Act, determine that the Council shall require an end-user or end-use certificate for the export or re-export of the controlled goods listed in Annexure C to this notice, whether in substantially pure form or in a mixture with any other substance in a concentration of greater than or equal to 30 per cent by weight, to countries which are not States Parties to the Chemical Weapons Convention; and

(g) in terms of section 13(2)(f) of the Act, determine that the manufacture of, and provision of services with respect to, controlled goods listed in Annexure A to this notice shall take place under a permit issued by the Council.

Definitions

3. In this notice any word or expression to which a meaning has been assigned in the Act or the Chemical Weapons Convention, as the case may be, shall have the meaning so assigned and, unless the context otherwise indicates—

"antiplant agent" means any chemical listed in Annexure F to this notice, which can defoliate plants or which can destroy crops or plants or which can sterilise the soil to prevent plant growth;

"Chemical Weapons Convention" means the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, as ratified by the Government of the Republic of South Africa on 14 September 1995 and published for general information as Government Notice No. 754 on 2 May 1997;

"development" means all phases before production, and includes conceptualisation, research, analysis, testing, configuration or pilot production schemes;

"discrete organic chemical" means any chemical belonging to a class of chemical compounds consisting of all compounds of carbon, except for its oxides, sulphides and metal carbides or carbonates, identifiable by chemical structure, by structural formula, if known, and by the Chemical Abstracts Service (CAS) registry number, if assigned, and not contained in the chemicals listed in Annexures A, B or C to this notice:

"harassing agent" means any toxic chemical, which is not among the toxic chemicals listed in Annexures A, B, C or D to this notice, which can produce rapidly in humans sensory irritation or disabling physical effects, which disappear within a short time following the termination of exposure;

"manufacture", in relation to a chemical, includes development and production;

"PSF discrete organic chemical" means any discrete organic chemical containing one or more of the elements phosphorus, sulphur or fluorine;

"services" includes freight forwarding, storing and stockpiling (if not part of the manufacture and transfer processes), transporting, maintaining (repairing, overhauling, refurbishing), trading, consulting, disposing, and technical assistance;

"the Act" means the Non-Proliferation of Weapons of Mass Destruction Act, 1993 (Act No. 87 of 1993);

"transfer" means the change of ownership or custodianship or change in the location of controlled goods, whether or not they cross an international border;

"use", in relation to a chemical, means the depletion of reserves by adding a chemical to formulations, as a constituent in a mixture, in a scrubber of unwanted chemicals, as a starting material in a process, as a component of a reaction or as a catalyst.

Controlled goods

- 4. The following goods are controlled goods at the control thresholds indicated in paragraph 5 of this notice:
 - (a) The toxic chemicals and precursors listed in Annexures A, B and C, which may be used for purposes that are not prohibited as indicated in paragraph 9 of Article II of the Chemical Weapons Convention: Provided that the types and quantities are consistent with such purposes, whether in substantially pure form or in a mixture. Whenever, in Annexures A and B, reference to groups of dialkylated chemicals is followed by a list of alkyl groups in parentheses, all chemicals possible by all possible combinations of alkyl groups listed in the parentheses are considered to be controlled goods, except those explicitly exempted in Annexure B;
 - (b) the toxic chemicals listed in Annexure D, whether in substantially pure form or in a mixture;

- (c) the harassing and riot control agents listed in Annexure E, whether in substantially pure form or in a mixture, except—
 - (i) goods containing capsaicin packaged for retail sale for personal use or packaged for individual use; and
 - (ii) goods containing harassing or riot control agents packaged for food production or medical purposes;
- (d) the antiplant agents listed in Annexure F, whether in substantially pure form or in a mixture;
- (e) any chemical facility that produces, acquires, consumes or stores any quantity of the toxic chemicals and precursors listed in Annexure A. As indicated in paragraph 8 of Part VI of the Verification Annex of the Chemical Weapons Convention, the production of the toxic chemicals and precursors listed in Annexure A shall only be carried out at a single small-scale facility. The toxic chemicals and precursors shall only be applied for research, medical, pharmaceutical or protective purposes, and the aggregate amount of such chemicals for such purposes at any given time should be less than or equal to one metric tonne;
- (f) any chemical facility that produced, processed or consumed during the previous calendar year or anticipates to produce, process or consume in the next calendar year 10 grams or more of the toxic chemical BZ listed in Annexure B, one kilogram or more of the toxic chemicals Amiton or PFIB listed in Annexure B or 10 kilograms or more of any precursor listed in Annexure B;
- (g) any chemical facility that produced during the previous calendar year or anticipates to produce in the next calendar year 100 kilograms or more of any toxic chemical listed in Annexure C;
- (h) any chemical facility that produced by chemical synthesis, including biochemical or biologically mediated processes, an aggregate quantity of 100 metric tonnes or more of any number of discrete organic chemicals

or their salts, or an aggregate quantity of 15 metric tonnes or more of any single PSF discrete organic chemical or its salts, during the previous calendar year. For the purposes of this paragraph, polymeric and oligomeric substances are not regarded as discrete organic chemicals. For the purposes of this paragraph, chemical facilities that—

- (i) produce explosives or hydrocarbons exclusively, are exempted;
- (ii) produce polymeric and oligomeric substances exclusively, are exempted;
- (iii) produce any discrete organic chemicals or PSF discrete organic chemicals, as well as hydrocarbons, explosives or polymeric and oligomeric substances, are not exempted; and
- (iv) process chemicals or blend or formulate chemicals into products such as insecticides, paints or detergents, where no chemical reactions take place, are exempted;
- (i) the technology required for the production of the controlled goods listed in Annexure A and the toxic chemicals listed in Annexure B; and
- (j) services with regard to the controlled goods listed in Annexure A.

Control thresholds

- 5. (1) The control thresholds of controlled goods shall be as follows:
 - (a) All quantities of the toxic chemicals and precursors listed in Annexure A, whether in substantially pure form or in a mixture with any other substance;
 - (b) an aggregate quantity per calendar year of—
 - (i) the toxic chemical BZ listed in Annexure B greater than or equal to10 grams, whether in substantially pure form or in a mixture with

- any other substance in a concentration greater than or equal to one per cent by weight;
- (ii) the toxic chemicals Amiton and PFIB listed in Annexure B greater than or equal to one kilogram, whether in substantially pure form or in a mixture with any other substance in a concentration greater than or equal to one per cent by weight; or
- (iii) the precursors listed in Annexure B greater than or equal to 10 kilograms, whether in substantially pure form or in a mixture with any other substance in a concentration greater than or equal to 30 per cent by weight;
- (c) an aggregate quantity per calendar year of the toxic chemicals and precursors listed in Annexure C greater than or equal to 100 kilograms, whether in substantially pure form or in a mixture with any other substance in a concentration greater than or equal to 30 per cent by weight;
- (d) an aggregate quantity per calendar year of all discrete organic chemicals or their salts produced within a chemical plant site greater than or equal to 100 metric tonnes in substantially pure form;
- (e) an aggregate quantity per calendar year of all PSF discrete organic chemicals or their salts produced within a chemical facility greater than or equal to 15 metric tonnes in substantially pure form;
- (f) an aggregate quantity per calendar year of the toxic chemicals listed in Annexure D greater than or equal to one metric tonne, whether in substantially pure form or in a mixture with any other substance in a concentration greater than or equal to 30 per cent by weight;
- (g) an aggregate quantity per calendar year of the riot control agents listed in Part A of Annexure E greater than or equal to 100 kilograms, whether in substantially pure form or in a mixture with any other substance;

- (h) any quantity per calendar year of the harassing agents listed in Part B of Annexure E, whether in substantially pure form or in a mixture with any other substance, except in products identified as consumer goods packaged for retail sale for personal use or packaged for individual use; and
- (i) any quantity per calendar year of the antiplant agents listed in Annexure F, whether in substantially pure form or in a mixture with any other substance.
- (2) For the purposes of subparagraphs (1)(a), (b) and (c), all threshold quantities shall include quantities of controlled chemicals generated as by-products or as components of waste or effluent streams in a chemical production process.
- (3) Products containing chemicals listed in Annexure B may be exported to countries that are not States Parties to the Chemical Weapons Convention: Provided that the said products contain—
 - (a) one per cent or less of the toxic chemicals listed in Annexure B; or
 - (b) 10 per cent or less of the precursors listed in Annexure B; and

are identified as consumer goods packaged for retail sale for personal use or packaged for individual use.

(4) Products containing chemicals listed in Annexure C may be exported without a permit to countries that are not States Parties to the Chemical Weapons Convention: Provided that the said products contain less than 30 per cent of a chemical listed in Annexure C and are identified as consumer goods packaged for retail sale for personal use or packaged for individual use.

Application forms

6. Application forms for permits contemplated in paragraph 2 of this notice may be obtained from any of the following addresses:

(a) Postal address:

The Secretariat

South African Council for the Non-Proliferation of Weapons of Mass

Destruction

Private Bag X84

PRETORIA

0001; or

(b) physical address:

The Secretariat

South African Council for the Non-Proliferation of Weapons of Mass

Destruction

77 Meintjies Street

Sunnyside

PRETORIA.

Repeal

7. Government Notice No. 152 of 29 January 2003 is hereby repealed.

DR ROB DAVIES, MP

MINISTER OF TRADE AND INDUSTRY

ANNEXURE A

Schedule 1 of the Chemical Weapons Convention

(Chemical Abstracts Service Registry Number)

A. Toxic chemicals:

(1) O-Alkyl (equal to or less than C₁₀, including cycloalkyl) alkyl (Methyl, Ethyl, n-Propyl or Isopropyl)-phosphono-fluoridates, such as

Sarin: O-Isopropyl methylphosphono-

fluoridate (107-44-8)

Soman: O-Pinacolyl methylphosphono-

fluoridate (96-64-0)

(2) O-Alkyl (equal to or less than C₁₀, including cycloalkyl) N,N-Dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphor-amidocyanidates, such as

Tabun: O-Ethyl N,N-dimethylphosphor-

amidocyanidate (77-81-6)

(3) O-Alkyl (H or equal to or less than C₁₀, including cycloalkyl) S-2-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl)-aminoethyl alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonothiolates and corresponding alkylated or protonated salts, such as

VX: O-Ethyl S-2-diisopropylaminoethyl

methyl phosphonothiolate (50782-69-9)

(4) Sulphur mustards:

2-Chloroethylchloromethylsulphide (2625-76-5)

	Mustard gas: Bis(2-chloroethyl)sulphide	(505-60-2)
	Bis(2-chloroethylthio)methane	(63869-13-6)
	Sesquimustard: 1,2-Bis(2-chloroethylthio)ethane	(3563-36-8)
	1,3-Bis(2-chloroethylthio)-n-propane	(63905-10-2)
	1,4-Bis(2-chloroethylthio)-n-butane	(142868-93-7)
	1,5-Bis(2-chloroethylthio)-n-pentane	(142868-94-8)
	Bis(2-chloroethylthiomethyl)ether	(63918-90-1)
	O-Mustard: Bis(2-chloroethylthioethyl)ether	(63918-89-8)
(5)	Lewisites:	
	Lewisite 1: 2-Chlorovinyldichloroarsine	(541-25-3)
	Lewisite 2: Bis(2-chlorovinyl)chloroarsine	(40334-69-8)
	Lewisite 3: Tris(2-chlorovinyl)arsine	(40334-70-1)
(6)	Nitrogen mustards:	
(-)	HN1: Bis(2-chloroethyl)ethylamine	(538-07-8)
	HN2: Bis(2-chloroethyl)methylamine	(51-75-2)
	HN3: Tris(2-chloroethyl)amine	(555-77-1)
(7)	Saxitoxin	(35523-89-8)
(8)	Ricin	(9009-86-3)
В.	Precursors:	
(9)	Alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonyl-difluorides, such as	
	DF: Methylphosphonyldifluoride	(676-99-3)
	Ethylphosphonyl difluoride	(753-98-0)
(10)	O-Alkyl (H or equal to or less than C ₁₀ , including cycloalkyl) O-2-dialkyl (Methyl, Ethyl, n-Propyl	

or Isopropyl)-aminoethyl alkyl (Methyl, Ethyl,

n-Propyl or Isopropyl) phosphonites and corresponding alkylated or protonated salts, such as

QL: O-Ethyl O-2-diisopropylaminoethyl

Methylphosphonite (57856-11-8)

(11) Chlorosarin:

O-Isopropyl methylphosphono-chloridate (1445-76-7)

(12) Chlorosoman:

O-Pinacolyl methylphosphono-chloridate (7040-57-5)

ANNEXURE B

Schedule 2 of the Chemical Weapons Convention

(Chemical Abstracts Service Registry Number)

Toxic chemicals: A.

(1) Amiton:

> O,O-Diethyl S-[2-(diethylamino) ethyl] phosphorothiolate and corresponding alkylated or protonated salts (78-53-5)

(2) PFIB:

> 1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)-1-propene (382-21-8)

(3) BZ:

> 3-Quinuclidinyl benzilate (6581-06-2)

B. Precursors:

(4) Chemicals, except for those listed in Schedule 1, containing a phosphorus atom to which is bonded one methyl, ethyl or propyl (normal or iso) group but not further carbon atoms, such as

Methylphosphonyl dichloride	(676-97-1)
Dimethyl methylphosphonate	(756-79-6)
Diethyl ethylphosphonate	(78-38-6)
Ethylphosphinyl dichloride	(1498-40-4)
Ethylphosphonyl dichloride	(1066-50-8)
Methylphosphinyl dichloride	(676-83-5)
Ethylphosphinyl difluoride	(430-78-4)
Methylphosphinyl difluoride	(753-59-3)
Methylphosphonic acid	(993-13-5)
Methylphosphonothioic dichloride	(676-98-2)

	Diethyl methylphosphonite Dimethyl ethylphosphonate	(15715-41-0) (6163-75-3)
	Exemption: Fonofos:	
	O-Ethyl S-phenyl ethylphosphonothiolothionate	(944-22-9)
(5)	N,N-Dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphoramidic dihalides	
(6)	Dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl N,N-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl)-phosphoramidates, such as	
	Diethyl N,N-dimethylphosphoramidate	(2404-03-7)
(7)	Arsenic trichloride	(7784-34-1)
(8)	2,2-Diphenyl-2-hydroxyacetic acid (Benzilic acid)	(76-93-7)
(9)	Quinuclidin-3-ol	(1619-34-7)
(10)	N,N-Dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) aminoethyl-2-chlorides and corresponding protonated salts, such as	
	N,N-Diisopropyl-(beta)-aminoethyl chloride N,N-Diisopropyl-2-aminoethyl chloride hydrochloride N,N-Dimethylaminophosphoryl dichloride	(96-79-7) (4261-68-1) (676-98-2)
(11)	N,N-Dialkyl (Methyl, Ethyl, n-Propyl or isopropyl) aminoethane-2-ols and corresponding protonated salts, such as	
	N,N-Diisopropyl-(beta)-aminoethanol	(96-80-0)

(464-07-3)

	Exemptions:	
	N,N-Dimethylaminoethanol	(108-01-0)
	and corresponding protonated salts	
	Protonated salts of N,N-Diethylaminoethanol	(100-37-8)
(12)	N,N-Dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) aminoethane-2-thiols and corresponding protonated salts, such as	
	N,N-Diisopropyl-(beta)-aminoethane thiol	(5842-07-9)
(13)	Thiodiglycol: Bis(2-hydroxyethyl)sulphide	(111-48-8)
(14)	Pinacolyl alcohol:	

3,3-Dimethylbutan-2-ol

ANNEXURE C

Schedule 3 of the Chemical Weapons Convention

(Chemical Abstracts Service Registry Number)

A.	Toxic chemicals:	
(1)	Phosgene: Carbonyl dichloride	(75-44-5)
(2)	Cyanogen chloride	(506-77-4)
(3)	Hydrogen cyanide	(74-90-8)
(4)	Chloropicrin: Trichloronitromethane	(76-06-2)
В.	Precursors:	
(5)	Phosphorus oxychloride	(10025-87-3)
(6)	Phosphorus trichloride	(7719-12-2)
(7)	Phosphorus pentachloride	(10026-13-8)
(8)	Trimethyl phosphite	(121-45-9)
(9)	Triethyl phosphate	(122-52-1)
(10)	Dimethyl phosphite	(868-85-9)
(11)	Diethyl phosphite	(762-04-9)
(12)	Sulphur monochloride	(10025-67-9)
(13)	Sulphur dichloride	(10545-99-0)

(14)	Thionyl chloride	(7719-09-7)
(15)	Ethyldiethanolamine	(139-87-7)
(16)	Methyldiethanolamine	(105-59-9)
(17)	Triethanolamine	(102-71-6)

ANNEXURE D

(Chemical Abstracts Service Registry Number)

Toxic chemicals:

(1)	3-Hydroxy-1-methylpiperidine	(3554-74-3)
(2)	Potassium fluoride	(7789-23-3)
(3)	2-Chloroethanol	(107-07-3)
(4)	Dimethylamine	(124-40-3)
(5)	Dimethylamine hydrochloride	(506-59-2)
(6)	Hydrogen fluoride	(7664-39-3)
(7)	Methyl benzilate	(76-89-1)
(8)	3-Quinuclidone	(3731-38-2)
(9)	Pinacolone	(75-97-8)
(10)	Potassium cyanide	(151-50-8)
(11)	Potassium bifluoride	(7789-29-9)
(12)	Ammonium bifluoride	(1341-49-7)
(13)	Sodium bifluoride	(1333-83-1)
(14)	Sodium fluoride	(7681-49-4)
(15)	Sodium cyanide	(143-33-9)

(16)	Phosphorus pentasulphide	(1314-80-3)
(17)	Di-isopropylamine	(108-18-9)
(18)	Diethylaminoethanol	(100-37-8)
(19)	Sodium sulphide	(1313-82-2)
(20)	Triethanolamine hydrochloride	(637-39-8)
(21)	Triisopropyl phosphite	(116-17-6)
(22)	O,O-Diethyl phosphorothioate	(2465-65-8)
(23)	O,O-Diethyl phosphorodithioate	(298-06-6)
(24)	Sodium hexafluorosilicate	(16893-85-9)

ANNEXURE E

(Chemical Abstracts Service Registry Number)

A. Riot Control Agents

Riot control agents including the following:

(1) α-Bromobenzeneacetonitrile,(Bromobenzyl cyanide), (CA) (5798-79-8)

(2) 2-Chloro-1-phenyl-ethanone, (Phenylacyl chloride),(ω-chloroacetophenone), (CN) (532-27-4)

(3) [(2-chlorophenyl)-methylene] propanedinitrile, (o-Chlorobenzylidenemalonitrile), (CS) (2698-41-1)

(4) Dibenz(b,f)-1,4-oxazephine, (CR) (257-07-8)

B. Harassing Agents

Harassing agents including the following:

- (1) Diphenylaminochloroarsine, (10-Chloro-5,10-dihydrophen-arsazine), (Phenarsazine chloride), (Adamsite), (DM) (578-94-9)
- (2) N-nonanylmorpholine, (MPA) (5299-64-9)
- (3) trans-8-Methyl-N-vanillyl-6-nonenamide, (Capsaicin), (Pepper Spray), [N-(4-hydroxy-3-methoxy benzyl)-8-methyl-non-trans-6-enamide], (OC) (404-86-4)
- (4) Ethyl bromoacetate, (EBA) (105-36-2)

- (5) Pelargonic acid vanillylamide (2444-46-4)(6) Phenyl chloride (108-90-7)
- (7) Mixture of OC and CS

ANNEXURE F

(Chemical Abstracts Service Registry Number)

(75-60-5)

Anti-plant agents:

(4)

Anti-plant agents as follows:

(1)	Butyl 2-chloro-4-fluorophenoxyacetate (LNF)	(1692-85-9)
(2)	Mixtures of 2,4,5-T and 2,4-D where:	
	2,4,5-T: 2,4,5-Trichlorophenoxyacetic acid	(93-76-5)
	2,4-D: 2,4-Dichlorophenoxyacetic acid	(94-75-7)
(3)	Mixtures of Picloram where:	
	Picloram: 4-Amino-3,5,6-trichloropicolinic acid	(1918-02-1)

Dimethylarsinic acid (Cacodylic acid)