

(22 - 8313)

4 November 2022

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Committee on Technical Barriers to Trade

Original: English

NOTIFICATION

The following notification is being circulated in accordance with Article 10.6

1. Notifying Member: <u>SINGAPORE</u>

If applicable, name of local government involved (Article 3.2 and 7.2):

2. Agency responsible:

National Environment Agency (NEA)

Name and address (including telephone and fax numbers, email and website addresses, if available) of agency or authority designated to handle comments regarding the notification shall be indicated if different from above:

3. Notified under Article 2.9.2 [X], 2.10.1 [], 5.6.2 [], 5.7.1 [], 3.2 [], 7.2 [], other:

4. Products covered (HS or CCCN where applicable, otherwise national tariff heading. ICS numbers may be provided in addition, where applicable):

S/N	HS codes	Chemical Name	Chemicals (non-exhaustive)
1	29315990	O-Alkyl(≤C10, including cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr)-phosphonofluoridates e.g. : Sarin Soman	O-ALKYL (<= C10, INCL. CYCLOALKYL) ALKYL (ME, ET, N-PR OR I-PR)- PHOSPHONOFLUORIDATES E.G SARIN: O- ISOPROPYL METHYLPHOSPHONOFLUORIDATE, - SOMAN: O-PINACOLYL METHYLPHOSPHONOFLUORIDATE
			O-ISOPROPYL METHYLPHOSPHONOFLUORIDATE (SARIN)
			O-PINACOLYL METHYLPHOSPHONOFLUORIDATE (SOMAN)
			O-ETHYL METHYLPHOSPHONO FLUORIDATE
			O-CYCLOHEXYL METHYLPHOSPHONO FLUORIDATE (CYCLOSARIN)
			O-n-BUTYL METHYLPHOSPHONO FLUORIDATE
			O-CYCLOHEXYL ETHYLPHOSPHONOFLUORIDATE
			O-ISOPROPYL-D7 METHYLPHOSPHONOFLUORIDATE
			O-PINACOLYL-D13 METHYLPHOSPHONOFLUORIDATE
			O-ISOPROPYL ETHYLPHOSPHONOFLUORIDATE
			O-ISOBUTYL METHYLPHOSPHONOFLUORIDATE
2	29309090	O-Alkyl (H or ≤C10, incl. Cycloalkyl) S-2-dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl (Me, Et, n- Pr or i-Pr) phosphonothiolates and corresponding alkylated or protonated salts e.g. VX	O-ALKYL (H OR <= C10, INCL. CYCLOALKYL) S-2- DIALKYL (ME, ET, N-PR OR I-PR)-AMINOETHYL ALKYL (ME, ET, N-PR OR I-PR) PHOSPHONOTHIOLATES AND CORRESPONDING ALKYLATED OR PROTONATED SALTS E.G VX: O- ETHYL S-2-DIISOPROPYLAMINOETHYL METHYL PHOSPHONOTHIOLATE
			O-ETHYL S-2- DIISOPROPYLAMINOETHYL METHYLPHOSPHONOTHIOLATE (VX)
			O-(2-METHYLPROPYL) S-2-DIETHYLAMINOETHYL METHYLPHOSPHONOTHIOLATE (RUSSIAN VX)

			O-PROPYL S-2- DIISOPROPYLAMINOETHYL METHYL PHOSPHONOTHIOLATE
			O-n-BUTYL S-2- DIETHYLAMINOETHYL METHYLPHOSPHONO THIOLATE (CHINESE VX)
			O-ETHYL S-2- DIETHYLAMINOETHYL ETHYLPHOSPHONO THIOLATE (VE)
			O-ETHYL-D5 S-2- DIISOPROPYLAMINOETHYL METHYLPHOSPHONO THIOLATE
			O-ETHYL S-2- DIETHYLAMINOETHYL METHYLPHOSPHONOTHIOLATE (VM)
			S-2-DIISOPROPYLAMINOETHYL METHYLPHOSPHONOTHIOLATE
3	29319041;	Lewisites:	LEWISITE 1: 2-CHLOROVINYLDICHLOROARSINE
	29319049	Lewisite 1: 2-Chlorovinyldichloroarsine Lewisite 2: Bis(2-chlorovinyl)chloroarsine Lewisite 3: Tris(2-chlorovinyl)arsine	LEWISITE 2: BIS(2- CHLOROVINYL)CHLOROARSINE
			LEWISITE 3: TRIS(2-CHLOROVINYL)ARSINE
4	29211900	Nitrogen mustards:	HN1: BIS(2-CHLOROETHYL)ETHYLAMINE
		HN1: Bis(2-chloroethyl)ethylamine HN2: Bis(2-chloroethyl)methylamine	HN2: BIS(2-CHLOROETHYL)METHYLAMINE
		HN3: Tris(2-chloroethyl)amine	HN3: TRIS(2-CHLOROETHYL)AMINE
5	30029000	Saxitoxin	SAXITOXIN
6	30029000	Ricin	RICIN
7	29315990	P-alkyl (H or ≤C10, incl. cycloalkyl) N-(1- (dialkyl(≤C10, incl. cycloalkyl)amino))alkylidene(H or ≤C10, incl. cycloalkyl) phosphonamidic fluorides and corresponding alkylated or protonated salts e.g. N-(1-(di-n-decylamino)-n-decylidene)-P- decylphosphonamidic fluoride e.g. Methyl-(1- (diethylamino)ethylidene)phosphonamidofluoridat e	P-ALKYL (H OR <=C10, INCL. CYCLOALKYL) N-(1- (DIALKYL(<=C10, INCL. CYCLOALKYL)AMINO))ALKYLIDENE(H OR <=C10, INCL. CYCLOALKYL) PHOSPHONAMIDIC FLUORIDES AND CORRESPONDING ALKYLATED OR PROTONATED SALTS E.G. N-(1-(DI-N- DECYLAMINO)-N-DECYLIDENE)-P- DECYLPHOSPHONAMIDIC FLUORIDE E.G. METHYL-(1-(DIETHYLAMINO)ETHYLIDENE) PHOSPHONAMIDOFLUORIDATE
			N-(1-(DI-n-DECYLAMINO)-n-DECYLIDENE)-P- DECYLPHOSPHONAMIDIC FLUORIDE
			METHYL-(1-(DIETHYLAMINO)ETHYLIDENE)
8	29299090	O-alkyl (H or ≤C10, incl. cycloalkyl) N-(1- ((dialkyl(≤C10, incl. cycloalkyl)amino))alkylidene(H or ≤C10, incl. cycloalkyl) phosphoramidofluoridates and corresponding alkylated or protonated salts e.g: O-n-Decyl N-(1-(di-n-decylamino)-n- decylidene)phosphoramidofluoridate e.g: Methyl (1-(diethylamino)ethylidene) phosphoramidofluoridate e.g: Ethyl (1-(diethylamino)ethylidene) phosphoramidofluoridate	O-ALKYL (H OR <=C10, INCL. CYCLOALKYL) N-(1- (DIALKYL(<=C10, INCL. CYCLOALKYL)AMINO))ALKYLIDENE(H OR <=C10, INCL. CYCLOALKYL) PHOSPHORAMIDOFLUORIDATES AND CORRESPONDING ALKYLATED OR PROTONATED SALTS E.G. O-N-DECYL N-(1-(DI-N- DECYLAMINO)-N- DECYLIDENE)PHOSPHORAMIDOFLUORIDATE E.G. METHYL (1-(DIETHYLAMINO)ETHYLIDENE) PHOSPHORAMIDOFLUORIDATE E.G. ETHYL (1- (DIETHYLAMINO)ETHYLIDENE) PHOSPHORAMIDOFLUORIDATE
			O-n-DECYL N-(1-(DI-n-DECYLAMINO)- nDECYLIDENE) PHOSPHORAMIDOFLUORIDATE
			METHYL (1-(DIETHYLAMINO)ETHYLIDENE) PHOSPHORAMIDOFLUORIDATE
			ETHYL (1-(DIETHYLAMINO)ETHYLIDENE) PHOSPHORAMIDOFLUORIDATE
			O-BUTYL N-(1- (DIBUTYLAMINO)BUTYLIDENE) PHOSPHORAMIDOFLUORIDATE
9		Methyl-(bis(diethylamino)methylene) phosphonamidofluoridate	METHYL-(BIS(DIETHYLAMINO)METHYLENE) PHOSPHONAMIDOFLUORIDATE
10	0 29333990	Carbamates (quaternaries and bisquaternaries of dimethylcarbamoyloxypyridines) Quaternaries of dimethylcarbamoyloxypyridines: 1-[N,N-dialkyl(≤C10)-N-(n-(hydroxyl, cyano, acetoxy)alkyl(≤C10)) ammonio]-n-[N-(3- dimethylcarbamoxy-a-picolinyl)-N,N- dialkyl(≤C10) ammonio]decane dibromide (n=1- 8) e.g: 1-[N,N-dimethyl-N-(2- hydroxy)ethylammonio]-10 [N- (3-	CARBAMATES (QUATERNARIES OF DIMETHYLCARBAMOYLOXYPYRIDINES): 1-[N,N- DIALKYL(<=C10)-N-(N-(HYDROXYL, CYANO, ACETOXY)ALKYL(<=C10)) AMMONIO]-N-[N-(3- DIMETHYLCARBAMOXY-ALPHA-PICOLINYL)-N,N- DIALKYL(<=C10) AMMONIO]DECANE DIBROMIDE (N=1-8) E.G. 1-[N,N-DIMETHYL-N-(2- HYDROXY)ETHYLAMMONIO]-10-[N-(3- DIMETHYLCARBAMOXY-ALPHA-PICOLINYL)-N,N- DIMETHYLCARBAMOXY-ALPHA-PICOLINYL
		dimethylcarbamoxy-a-picolinyl)-N,N dimethylcarbamoxy-a-picolinyl)-N,N dimethylammonio]decane dibromide Bisquaternaries of dimethylcarbamoyloxypyridines: 1,n-Bis[N-(3-dimethylcarbamoxy-a-picolyl) N,N- dialkyl(≤C10) ammonio]-alkane-(2,(n-1) dione) dibromide (n=2-12)	CARBAMATES (BISQUATERNARIES OF DIMETHYLCARBAMOYLOXYPYRIDINES): 1,N- BIS[N-(3-DIMETHYLCARBAMOXY-ALPHA- PICOLYL)-N,N-DIALKYL(<=C10) AMMONIO]- ALKANE-(2,(N-1)-DIONE) DIBROMIDE (N=2-12) E.G. 1,10-BIS[N-(3-DIMETHYLCARBAMOXY- ALPHA-PICOLYL)-N-ETHYLCN- METHYLAMMONIO]DECANE-2,9-DIONE DIBROMIDE

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		e.g. 1,10-Bis[N-(3-dimethylcarbamoxy-a picolyl)- N-ethyl-N-methylammonio] decane-2,9-dione dibromide	1-[N,N-DIMETHYL-N-(2- HYDROXY)ETHYLAMMONIO]-10 [N- (3- DIMETHYLCARBAMOXY-a-PICOLINYL)-N,N DIMETHYLAMMONIO]DECANE DIBROMIDE 1,10-BIS[N-(3-DIMETHYLCARBAMOXY-a
			PICOLYL)-N-ETHYL-N-METHYLAMMONIO] DECANE-2,9-DIONE DIBROMIDE
11	29315990	Alkyl (Me, Et, n-Pr or i-Pr) phosphonyl difluorides e.g. DF: Methylphosphonyldifluoride	ALKYL (ME, ET, N-PR OR I-PR) PHOSPHONYLDIFLUORIDES E.G DF: METHYLPHOSPHONYLDIFLUORIDE
			DF: METHYLPHOSPHONYLDIFLUORIDE
12	29314990	O-Alkyl (H or ≤C10, incl. Cycloalkyl) O-2- dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl (Me, Et, n- Pr or i-Pr) phosphonites and corresponding alkylated or protonated salts e.g. QL: O-Ethyl O-2-diisopropylaminoethyl methylphosphonite	O-ALKYL (H OR <= C10, INCL. CYCLOALKYL) O-2 DIALKYL (ME, ET, N-PR OR I-PR)-AMINOETHYL ALKYL (ME, ET, N-PR OR I-PR) PHOSPHONITES AND CORRESPONDING ALKYLATED OR PROTONATED SALTS E.G QL: O-ETHYL O-2- DIISOPROPYLAMINOETHYL METHYLPHOSPHONITE
		neuryphospholite	QL: O-ETHYL O-2-DIISOPROPYLAMINOETHYL METHYLPHOSPHONITE
13	29315990	Chlorosarin: O-Isopropyl methylphosphonochloridate	CHLOROSARIN: O-ISOPROPYL METHYLPHOSPHONOCHLORIDATE
14	29315990	Chlorosoman: O-Pinacolyl methylphosphonochloridate	CHLOROSOMAN: O-PINACOLYL METHYLPHOSPHONOCHLORIDATE
15	29035900	PFIB: 1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)- 1-propene	PFIB: 1,1,3,3,3-PENTAFLUORO-2- (TRIFLUOROMETHYL)-1-PROPENE
16	29333990	BZ: 3-Quinuclidinyl benzilate	BZ: 3-QUINUCLIDINYL BENZILATE
17	29315990	Chemicals, except for those listed in Schedule 1 of the Annex on Chemicals of the Chemical Weapons Convention, containing a phosphorus atom to which is bonded one methyl, ethyl or propyl (normal or iso) group but not further carbon atoms e.g.: Methylphosphonyl dichloride Dimethyl methylphosphonate	CHEMICALS, EXCEPT FOR THOSE LISTED IN SCHEDULE 1, CONTAINING A PHOSPHORUS ATO TO WHICH IS BONDED ONE METHYL, ETHYL OR PROPYL (NORMAL OR ISO) GROUP BUT NOT FURTHER CARBONS ATOMS, E.G METHYLPHOSPHONYL DICHLORIDE - DIMETHYL METHYLPHOSPHONATE EXEMPTION: - FONOFOS: O-ETHYL S-PHENYL ETHYLPHOSPHONOTHIOLOTHIONATE
			DICHLOROMETHYL PHOSPHINE
			DIETHYL METHYLPHOSPHONATE
			ETHYL METHYLPHOSPHONATE
			ETHYLPHOSPHONIC DICHLORIDE
			PINACOLYL METHYLPHOSPHONATE
			PROPYLPHOSPHONIC ACID
			DIETHYL METHYLPHOSPHONITE
	29314100		DIMETHYL METHYLPHOSPHONATE
	29314200		
	29314300 29314400		DIETHYL ETHYLPHOSPHONATE METHYLPHOSPHONIC ACID
	29314400		SALT OF METHYLPHOSPHONIC ACID &
	25511500		AMINOIMINOMETHYL UREA (1:1)
	29314600		2,4,6-TRIPROPYL-1,3,5,2,4,6- TRIOXATRIPHOSPHINANE 2,4,6-TRIOXIDE
	29314700		(5-ETHYL-2-METHYL-2-OXIDO-1,3,2- DIOXAPHOSPHINAN-5-YL)METHYL METHYL METHYLPHOSPHONATE
	29314800		3,9-DIMETHYL-2,4,8,10-TETRAOXA-3,9- DIPHOSPHASPIRO (5.5) UNDECANE 3,9-DIOXIDE
	29314990		SODIUM 3-(TRIHYDROXYSILYL)PROPYL METHYLPHOSPHONATE
	29315100		METHYLPHOSPHONIC DICHLORIDE
	29315200		PROPYLPHOSPHONIC DICHLORIDE
	29315300		O-(3-CHLOROPROPYL) O-(4-NITRO-3- (TRIFLUOROMETHYL) PHENYL) METHYLPHOSPHONOTHIONATE
18	29299090	Dialkyl (Me, Et, n-Pr or i-Pr) N,N-dialkyl (Me, Et, n-Pr or i-Pr)-phosphoramidates	DIALKYL (ME, ET, N-PR OR I-PR) N,N-DIALKYL (ME, ET, N-PR OR I-PR)-PHOSPHORAMIDATES
19	29181700	2,2-Diphenyl-2-hydroxyacetic acid: Benzilic acid	2,2-DIPHENYL-2-HYDROXYACETIC ACID: BENZILIC ACID
20	29333500	Quinuclidin-3-ol	QUINUCLIDIN-3-OL
21	29211900	N,N-Dialkyl (Me,Et,n-Pr or i-Pr) aminoethyl- 2- chlorides and corresponding protonated salts	N,N-DIALKYL (ME, ET, N-PR OR I-PR) AMINOETHYL-2-CHLORIDE AND CORRESPONDING PROTONATED SALTS

		29211400		2-DIISOPROPYLAMINOETHYL CHLORIDE HYDROCHLORIDE
		29211300		2-(N,N-DIETHYLAMINO)ETHYLCHLORIDE HYDROCHLORIDE
1		29211200		2-(N,N-DIMETHYLAMINO)ETHYLCHLORIDE HYDROCHLORIDE
	22	29309090	N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2- thiols and corresponding protonated salts	N,N-DIALKYL (ME, ET, N-PR OR I-PR) AMINOETHANE-2-THIOLS AND CORRESPONDING PROTONATED SALTS
				2-(DIMETHYLAMINO)ETHANETHIOL HYDROCHLORIDE
		'		2-DIETHYLAMINOETHANETHIOL HYDROCHLORIDE
		29301000	1	2-(N,N-DIMETHYLAMINO) ETHANETHIOL
		29306000	1	2-(N,N-DIETHYLAMINO)ETHANETHIOL
	23	29307000	Thiodiglycol: Bis(2-hydroxyethyl)sulfide	THIODIGLYCOL: BIS(2-HYDROXYETHYL)SULFIDE
	24	29202200	Diethyl phosphite	DIETHYL PHOSPHITE
	25	28121700	Thionyl chloride	THIONYL CHLORIDE
	26	29221500	Triethanolamine	TRIETHANOLAMINE

- 5. Title, number of pages and language(s) of the notified document: Draft Environmental Protection and Management Act 1999 (Amendment of Second Schedule) (No. 2) Order 2022 (10 pages, in English) and Draft Environmental Protection and Management (Hazardous Substances) (Amendment No. 2) Regulations 2022; (6 page(s), in English)
- **6. Description of content:** Singapore's National Environment Agency (NEA) is proposing to regulate 26 new chemicals and chemical groups (see Section 4 above) as hazardous substances under the Environmental Protection and Management Act (EPMA) and the Environmental Protection and Management (Hazardous Substances) Regulations (EPM (HS) Regs).

These 26 chemicals and chemical groups have been identified as toxic chemicals and precursors under the Chemical Weapons Convention (CWC), and are currently regulated by Singapore Customs, as the National Authority for the Chemical Weapons Convention (NA(CWC)), through the Chemical Weapons (Prohibition) Act (CWPA) and the Chemical Weapons (Prohibition) Regulations. Under the CWPA, depending on the CWC Schedule that the chemicals belong to, companies are required to apply for a NA(CWC) licence from Singapore Customs if they are engaged in activities including the import, export, production, processing, consumption and local sale and distribution of these chemicals.

From July 2023, NEA will also be regulating these 26 chemicals and chemical groups under the EPMA and EPM (HS) Regs. Once the regulations take effect, companies will be required to apply for a Hazardous Substances (HS) licence/permit from NEA for the import, export, manufacture, sale, transport, storage and/or use of these chemicals and of products containing these chemicals. Accordingly, companies engaged in activities involving any of these chemicals would have to comply with the requirements on the import, export, manufacture, offer for sale, transport, storage and/or use of hazardous substances, that are stipulated in the EPMA and EPM (HS) Regs. These include, *inter alia*, labelling and other requirements for the containers/tanks and vehicles that are used to store or transport the chemicals, as well as other specific safety and documentational requirements.

7. Objective and rationale, including the nature of urgent problems where applicable: While Singapore Customs currently regulates the 26 chemicals and chemical groups under the CWPA, the focus of the CWPA is on counter-proliferation measures in the fulfilment of Singapore's international obligations to the CWC and is limited in addressing the domestic security and safety risks posed by these chemicals.

The regulation of these chemicals under the EPMA and the EPM (HS) Regs will therefore fill this gap, through the stipulation of requirements on the import, export, manufacture, sale, transport, storage and/or use of hazardous substances. This will minimise the domestic security and safety risks posed by these chemicals and serve the objectives of safeguarding public health and safety and protecting the environment. ; Protection of human health or safety; Protection of the environment

8. Relevant documents:

Environmental Protection and Management Act (EPMA), 149 pages, in English (Available online at <u>https://sso.agc.gov.sg//Act/EPMA1999</u>)

Environmental Protection and Management (Hazardous Substances) Regulations, 24 pages, in English (available online at <u>https://sso.agc.gov.sg//SL/94A-RG4</u>

9. Proposed date of adoption: January 2023 – Notice will be published in the Republic of Singapore's Government Gazette when adopted.

Proposed date of entry into force: July 2023

10. Final date for comments: 60 days from notification

11. Texts available from: National enquiry point [] or address, telephone and fax numbers and email and website addresses, if available, of other body:

Mr Lester Foo Engineer Chemical Control and Management Department, Pollution Control 1 Division National Environment Agency 40 Scotts Road, Environment Building, #17-00 Singapore 228231 Email: <u>lester_foo@nea.gov.sg</u>