NOTIFICATION

The following notification is being circulated in accordance with Article 10.6

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| **1.** | **Notifying Member:** SINGAPORE**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):**

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| **S/N** | **HS codes** | **Chemical Name** | **Chemicals (non-exhaustive)** |
| 1 | 29315990 | O-Alkyl(≤C10, including cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr)-phosphonofluoridatese.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 saltse.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; 29319049 | Lewisites:Lewisite 1: 2-Chlorovinyldichloroarsine Lewisite 2: Bis(2-chlorovinyl)chloroarsine Lewisite 3: Tris(2-chlorovinyl)arsine | LEWISITE 1: 2-CHLOROVINYLDICHLOROARSINE |
| LEWISITE 2: BIS(2-CHLOROVINYL)CHLOROARSINE |
| LEWISITE 3: TRIS(2-CHLOROVINYL)ARSINE |
| 4 | 29211900 | Nitrogen mustards:HN1: Bis(2-chloroethyl)ethylamine HN2: Bis(2-chloroethyl)methylamine HN3: Tris(2-chloroethyl)amine | HN1: BIS(2-CHLOROETHYL)ETHYLAMINE |
| HN2: BIS(2-CHLOROETHYL)METHYLAMINE |
| HN3: TRIS(2-CHLOROETHYL)AMINE |
| 5 | 30029000 | Saxitoxin | SAXITOXIN |
| 6 | 30029000 | Ricin | RICIN |
| 7 | 29315990 | Р-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 saltse.g. N-(1-(di-n-decylamino)-n-decylidene)-P-decylphosphonamidic fluoridee.g. Methyl-(1-(diethylamino)ethylidene)phosphonamidofluoridate | 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) phosphoramidofluoridatee.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 | 29315990 | Methyl-(bis(diethylamino)methylene) phosphonamidofluoridate | METHYL-(BIS(DIETHYLAMINO)METHYLENE) PHOSPHONAMIDOFLUORIDATE |
| 10 | 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-α-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-α-picolinyl)-N,N dimethylammonio]decane dibromide Bisquaternaries of dimethylcarbamoyloxypyridines:1,n-Bis[N-(3-dimethylcarbamoxy-α-picolyl) N,N-dialkyl(≤C10) ammonio]-alkane-(2,(n-1) dione) dibromide (n=2-12)e.g. 1,10-Bis[N-(3-dimethylcarbamoxy-α picolyl)-N-ethyl-N-methylammonio] decane-2,9-dione dibromide | 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-DIMETHYLAMMONIO]DECANE DIBROMIDE |
| 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-ETHYL-N-METHYLAMMONIO]DECANE-2,9-DIONE DIBROMIDE |
| 1-[N,N-DIMETHYL-N-(2-HYDROXY)ETHYLAMMONIO]-10 [N- (3-DIMETHYLCARBAMOXY-α-PICOLINYL)-N,N DIMETHYLAMMONIO]DECANE DIBROMIDE |
| 1,10-BIS[N-(3-DIMETHYLCARBAMOXY-α PICOLYL)-N-ETHYL-N-METHYLAMMONIO] DECANE-2,9-DIONE DIBROMIDE |
| 11 | 29315990 | Alkyl (Me, Et, n-Pr or i-Pr) phosphonyl difluoridese.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 |
| 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 ATOM 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 | DIMETHYL PROPYLPHOSPHONATE |
| 29314300 | DIETHYL ETHYLPHOSPHONATE |
| 29314400 | METHYLPHOSPHONIC ACID |
| 29314500 | SALT OF METHYLPHOSPHONIC ACID & 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 |
| 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 | 2-(N,N-DIMETHYLAMINO) ETHANETHIOL |
| 29306000 | 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 |

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| **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 [https://sso.agc.gov.sg//Act/EPMA1999](https://sso.agc.gov.sg/Act/EPMA1999))Environmental Protection and Management (Hazardous Substances) Regulations, 24 pages, in English (available online at [https://sso.agc.gov.sg//SL/94A-RG4](https://sso.agc.gov.sg/SL/94A-RG4) |
| **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 FooEngineerChemical Control and Management Department, Pollution Control 1 DivisionNational Environment Agency40 Scotts Road, Environment Building, #17-00Singapore 228231Email: lester\_foo@nea.gov.sg |