2025 FULL REPORTS OF THE MINAMATA CONVENTION ON MERCURY

Report submitted on 23 December 2025

REPORTING PERIOD:
1 January 2021 to 31 December 2024

▼ INFORMATION ON THE PARTY

1. Information on the party

Name of party
Singapore

Date on which its instrument of ratification, accession, approval or acceptance was deposited
22 September 2017

Date of entry into force of the Convention for the party
21 December 2017

2. Information on the national focal point

Full name of the institution
Ministry of Sustainability and the Environment, and National Environment Agency

Title of Contact Officer
Mr.

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Focal Point is submitting the national report

- (●) Information is submitted by the national focal point
- ( ) Information is submitted through the national focal point by the contact officer

▼ ART. 3: MERCURY SUPPLY SOURCES AND TRADE

3.1: Does the party have any primary mercury mines that were operating within its territory at the date of entry into force of the Convention for the party?

- ○ Yes – primary mercury mining with available data
- ○ Yes – primary mercury mining with no available data
- ◉ No

3.2: Does the party have any primary mercury mines that are now in operation that were not in operation at the time of entry into force of the Convention for the party?

- ○ Yes – primary mercury mining with available data
- ○ Yes – primary mercury mining with no available data
- ◉ No

3.3: (A) Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons that are located within its territory?

3.3: (A) Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons that are located within its territory?

- ○ Yes – with new data* (also to be selected by parties reporting for the first time)
- ◉ Yes – endeavoured and indicates same stocks as reported in the previous report
- ○ No

3.3: (B) Has the party endeavoured to identify individual sources of mercury-supply-generating stocks exceeding 10 metric tons per year that are located within its territory?

3.3:(B) Has the party endeavoured to identify individual sources of mercury-supply-generating stocks exceeding 10 metric tons per year that are located within its territory?

- ○ Yes – with new data* (also to be selected by parties reporting for the first time)
- ◉ Yes – endeavoured and indicates same stocks as reported in the previous report
- ○ No

3.4: Has the party determined that it has excess mercury available from the decommissioning of chlor-alkali facilities?

- ○ Yes
- ◉ No – has determined it has no excess mercury
- ○ No – has not made a determination

3.5: *Has the party received consent, or relied on a general notification of consent, in accordance with article 3, including any required certification from importing non-parties, for all exports of mercury from the party's territory in the reporting period?

- ☐ Yes – exports to parties
- ☐ Yes – exports to non-parties
- ☑ No – no export took place
- ☐ No – consent was not given

3.6: Has the party allowed the import of mercury from a non-party?

- ◉ No

Yes

The importing party has relied on paragraph 7 of article 3

Part E - Additional comments on this article

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▼ ART. 4: MERCURY-ADDED PRODUCTS

4.1. Has the party taken any appropriate measures to not allow the manufacture, import or export of mercury-added products listed in Part I of Annex A of the Convention after the phase-out date specified for those products?

Yes

No

Yes (implementing paragraph 2 of article 4)

If yes, please provide information on the measures.
Mercury-added products are controlled as hazardous substances under the Environmental Protection and Management Act (EPMA). A hazardous substances license is required for the importation, exportation, manufacture, storage, and sale of such hazardous substances. EPMA could be viewed at the link below.

https://sso.agc.gov.sg/Act/EPMA1999#legis

If yes, has the party registered for an exemption pursuant to article 6?

Yes

No

4.3: (A) Has the party taken two or more measures listed in subparagraphs (i) to (ix) of part II of annex A for the mercury-added products listed in part II of annex A in accordance with the provisions set out therein?

4.3:(A) Has the party taken two or more measures listed in subparagraphs (i) to (ix) of part II of annex A for the mercury-added products listed in part II of annex A in accordance with the provisions set out therein?

Yes

No

If yes, please provide information on the measures.
The implemented measures include:
• Setting national objectives aiming at dental caries prevention and health promotion, thereby minimizing the need for dental restoration;
• Setting national objectives aiming at minimizing its use;
• Encouraging representative professional organizations and dental schools to educate and train dental professionals and students on the use of mercury-free dental restoration alternatives and on promoting best management practices;
• Discouraging insurance policies and programmes that favour dental amalgam over mercury-free dental restoration;
• Restricting the use of dental amalgam to its encapsulated form;
• Promoting the use of best environmental practices in dental facilities to reduce releases of mercury and mercury compounds to water and land.

4.3: (B) If the amendment to annex A adopted in decision MC-4/3 has entered into force for the party, has the party (please check the

appropriate box below) taken relevant measures:

4.3:(B) If the amendment to annex A adopted in decision MC-4/3 has entered into force for the party, has the party (please check the appropriate box below) taken relevant measures:

- (●) Yes
- ( ) No
- ( ) Not applicable

If the party answered yes please select from the bellow checkboxes

- [x] Excluded or not allowed, by taking measures as appropriate, the use of mercury in bulk form by dental practitioners
- [x] Excluded or not allowed, by taking measures as appropriate, or recommended against, the use of dental amalgam for the dental treatment of deciduous teeth of patients under 15 years of age and of pregnant and breastfeeding women, except when such use is considered necessary by the dental practitioner based on the needs of the patient

If the party answered yes to either option above, please provide information on the measures.
Yes - Excluded or not allowed, by taking measures as appropriate, the use of mercury in bulk form by dental practitioners:
Dental amalgam is currently listed as a Class B medical device on the Singapore Medical Device Register. The use of mercury in bulk form by dental practitioners is excluded from use in clinical practice as dental amalgam must be used in pre-dosed encapsulated form.

Yes - Excluded or not allowed, by taking measures as appropriate, or recommended against, the use of dental amalgam for the dental treatment of deciduous teeth of patients under 15 years of age and of pregnant and breastfeeding women, except when such use is considered necessary by the dental practitioner based on the needs of the patient:
Regarding special populations, the current policy takes a recommendatory rather than prohibitory approach. Dental amalgam may continue to be used while ensuring treatment decisions are based on best available scientific evidence and patient interests. However, it would be prudent to use alternative, non-mercury materials for dental restorations in special populations, where clinically reasonable. This requirement applies to all patient populations, including special populations.

4.4: Has the party taken measures to prevent the incorporation into assembled products of mercury-added products whose manufacture, import and export are not allowed for it under article 4?

- (●) Yes
- ( ) No
- ( ) No - not applicable (do not have facilities assembling products using mercury-added products)

If yes, please provide information on the measures.
Mercury-added products are controlled as hazardous substances under the Environmental Protection and Management Act (EPMA). A hazardous substances licence is required for the importation, exportation, manufacture, storage and sale of such hazardous substances.
The licensing requirement is applicable for assembled goods containing mercury-added components/products. Companies importing/exporting such assembled products that may contain mercury-added products must submit relevant documentation (such as technical specifications, manufacturer declarations, or test reports) upon request to verify that the assembled goods do not contain mercury-added products that are disallowed under the Convention. Any import and/or export of assembled goods containing such mercury-added products would be rejected.

4.5: Has the party discouraged the manufacture and the distribution in commerce of mercury-added products not covered by any known use in accordance with article 4, paragraph 6?

- (●) Yes
- ( ) No - no action taken

No – an assessment of the risks and benefits of the product demonstrates benefits to human health or the environment

If yes, please provide information on the measures.
Mercury and mercury compounds are controlled as hazardous substances under the Environmental Protection and Management Act (EPMA) and Environmental Protection and Management (Hazardous Substances) Regulations (EPM(HS) Regs). Companies must obtain a hazardous substances licence/permit to store and use mercury and mercury compounds prior to the manufacturing and distribution of mercury-added products. Through the licence/permit application evaluation process, NEA discourages the manufacturing and distribution of mercury-added products, regardless of intended uses, unless no mercury-free alternatives are available.

Part E – Additional comments on this article

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▼ ART. 5: MANUFACTURING PROCESSES IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED

5.1: Are there facilities within the territory of the party that use mercury or mercury compounds for the processes listed in Annex B of the Minamata Convention in accordance with paragraph 5 of article 5 of the Convention?

Yes

No

Do not know

5.2: Are measures in place to not allow the use of mercury or mercury compounds in manufacturing processes listed in Part I of Annex B after the phase-out date specified in that Annex for the individual process?

CHLOR-ALKALI PRODUCTION

Yes

No

Not applicable (do not have these facilities)

ACETALDEHYDE PRODUCTION IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED AS A CATALYST

Yes

No

Not applicable (do not have these facilities)

5.3: Are measures in place to restrict the use of mercury or mercury compounds in the processes listed in Part II of Annex B in accordance with the provisions set out therein?

VINYL CHLORIDE MONOMER PRODUCTION

Yes

No

◉ Not applicable (do not have these facilities)

SODIUM OR POTASSIUM METHYLATE OR ETHYLATE

○ Yes

○ No

◉ Not applicable (do not have these facilities)

PRODUCTION OF POLYURETHANE USING MERCURY-CONTAINING CATALYSTS

○ Yes

○ No

◉ Not applicable (do not have these facilities)

5.4: Is there any use of mercury or mercury compounds in a facility using the manufacturing processes listed in Annex B that did not exist prior to the date of entry into force of the Convention for the party?

○ Yes

◉ No

5.5: Has the party discouraged the development of any facility using any other manufacturing process in which mercury or mercury compounds are intentionally used that did not exist prior to the date of entry into force of the Convention?

◉ Yes

○ No - no action taken

○ No - the party demonstrated to the Conference of the Parties the significant environmental and health benefits of the manufacturing process and that there are no technically and economically feasible mercury-free alternatives available providing such benefits.

If yes, please provide information on the measures taken.

Mercury and mercury compounds are controlled as hazardous substances under the Environmental Protection and Management Act (EPMA) and Environmental Protection and Management (Hazardous Substances) Regulations (EPM(HS) Regs).

Companies must obtain a hazardous substance licence/permit to store and use mercury and mercury compounds. This hazardous substance licence/permit must be issued before companies can legally commerce manufacturing process involving mercury and mercury compounds. Through the licence/permit application evaluation process, the National Environment Agency assesses the necessity of any proposed adoption of mercury-based manufacturing process and/or technology, and will disallow/impose restricted use of such technology if feasible non-mercury alternatives are available.

Part E - Additional comments on this article

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▼ ART. 7: ARTISANAL AND SMALL-SCALE GOLD MINING

7.1: Have steps been taken to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, artisanal and small-scale

gold mining and processing subject to article 7 within your territory?

- ○ Yes
- ○ No
- ◉ There is no artisanal and small-scale gold mining and processing subject to article 7 in which mercury amalgamation is used in the territory

7.2: Has the party determined, and notified the secretariat, that artisanal and small-scale gold mining and processing within its territory is more than insignificant?

- ○ Yes
- ◉ No

7.5: Supplemental: Has the party cooperated with other countries or relevant intergovernmental organizations or other entities to achieve the objective of this article?

- ○ Yes
- ◉ No

Please provide information
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Part E - Additional comments on this article

Singapore has no input for the supplemental question 7.5.

▼ ART. 8: EMISSIONS

8.1: Identify any Annex D source categories for which there are new sources of emissions of mercury or mercury compounds as defined in paragraph 2 (c) of article 8.

For each of those source categories describe the measures in place, including the effectiveness of such measures, to implement the requirements of paragraph 4 of article 8.

- ☐ Coal-fired power plants
- ☐ Coal-fired industrial boilers
- ☐ Smelting and roasting processes used in the production of non-ferrous metals
- ☑ Waste incineration facilities

Waste incineration facilities
The concentration of mercury and mercury compounds are controlled under the Environmental Protection and Management (Air Impurities) Regulations. Any mercury and mercury compounds emitted from any operation in any trade, industry, process, fuel burning equipment or industrial plant shall not at any point before admixture with air, smoke or other gases, exceed the limit of 0.05 mg/Nm3 expressed as mercury.
As per Annex D, Singapore has identified two new sources of private waste incineration facilities that has been operational since Singapore's entry into force for the Minamata Convention (i.e., 21 Dec 2017). These two new sources, Tuas One and Sembcorp Energy from Waste plants, have demonstrated compliance through source emission test reports, showing mercury emissions consistently below the regulatory threshold of 0.05 mg/Nm3. Singapore does not have operational coal-fired power plants, coal-fired industrial boilers, smelting and roasting processes used in the production of non-ferrous metals and cement clinker production facilities operational from 21 Dec 2017.

- ☐ Cement clinker production facilities

Has the party required the use of best available techniques or best environmental practices (BAT/BEP) to control and where feasible reduce emissions for new sources no later than 5 years after the date of entry into force of the Convention for the party?

- (●) Yes
- ( ) No (please explain)

If Yes, please explain
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8.2: Identify any Annex D source categories for which there are existing sources of emissions of mercury or mercury compounds as defined in paragraph 2 (e) of article 8.

For each of those source categories, select and provide details on the measures implemented under paragraph 5 of article 8 and explain the progress that these applied measures have achieved in reducing emissions over time in your territory:

▼ COAL-FIRED POWER PLANTS

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources
- [ ] Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- [ ] Alternative measures to reduce emissions from relevant sources

Measures
Singapore does not have operational coal-fired power plants, coal-fired industrial boilers, smelting and roasting processes used in the production of non-ferrous metals and cement clinker production facilities operational from 21 Dec 2017.

Progress
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▼ COAL-FIRED INDUSTRIAL BOILERS

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources
- [ ] Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- [ ] Alternative measures to reduce emissions from relevant sources

Measures
Singapore does not have operational coal-fired power plants, coal-fired industrial boilers, smelting and roasting processes used in the production of non-ferrous metals and cement clinker production facilities operational from 21 Dec 2017.

Progress

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▼ SMELTING AND ROASTING PROCESSES USED IN THE PRODUCTION OF NON-FERROUS METALS

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources
- [ ] Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- [ ] Alternative measures to reduce emissions from relevant sources

Measures
Singapore does not have operational coal-fired power plants, coal-fired industrial boilers, smelting and roasting processes used in the production of non-ferrous metals and cement clinker production facilities operational from 21 Dec 2017.

Progress
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▼ WASTE INCINERATION FACILITIES

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [x] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources
- [ ] Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- [ ] Alternative measures to reduce emissions from relevant sources

Measures
Emissions of mercury and its compounds are controlled under the Environmental Protection and Management (Air Impurities) Regulations. The standards of concentration of mercury and its compounds must be complied with in the conduct of any trade, industry or process or the operation of any fuel burning equipment or industrial plant. Any non-compliance will be subject to enforcement actions taken by the National Environment Agency. EPM(Air Impurities) Regs could be viewed at the link below.
https://sso.agc.gov.sg/sl/epma1999-rg8

Progress
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▼ CEMENT CLINKER PRODUCTION FACILITIES

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources

☐ Use of BAT/BEP to control emissions from relevant sources

☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions

☐ Alternative measures to reduce emissions from relevant sources

Measures
Singapore does not have operational coal-fired power plants, coal-fired industrial boilers, smelting and roasting processes used in the production of non-ferrous metals and cement clinker production facilities operational from 21 Dec 2017.

Progress
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Have the measures for existing sources under paragraph 5 of article 8 been implemented no later than 10 years after the date of entry into force of the Convention for the party?

◉ Yes

○ No

8.3: Has the party prepared an inventory of emissions from relevant sources within 5 years of entry into force of the Convention for it?

◉ Yes

○ No

○ Have not been a party for 5 years

If yes, when was the inventory last updated?
1 December 2022

Please indicate where this inventory is available
https://www.nea.gov.sg/docs/default-source/default-document-library/mercury-inventory-(singapore)_2021.pdf

Attach
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8.4: Has the party chosen to establish criteria to identify relevant sources covered within a source category?

○ Yes

◉ No

8.5: Has the party chosen to prepare a national plan setting out the measures to be taken to control emissions from relevant sources and its expected targets, goals and outcomes?

○ Yes

◉ No

Part E - Additional comments on this article

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▼ ART. 9: RELEASES

9.1: Are there, within the party's territory, relevant sources of releases as defined in paragraph 2 (b) of article 9?

○ Yes

◉ No

○ Do not know (please explain)

9.2: Has the party established an inventory of releases from relevant sources within 5 years of entry into force of the convention for it?

◉ Yes

○ Relevant sources do not exist in the territory

○ Have not been a party for 5 years

○ No (please explain)

When was the inventory last updated?
1 December 2022

Please indicate where this inventory is available.
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Please explain
https://www.nea.gov.sg/docs/default-source/default-document-library/mercury-inventory-(singapore)_2021.pdf

Part E - Additional comments on this article

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▼ ART. 10: ENVIRONMENTALLY SOUND INTERIM STORAGE OF MERCURY, OTHER THAN WASTE MERCURY

10.1: Has the party taken measures to ensure that the interim storage of non-waste mercury and mercury compounds intended for a use allowed to a party under the Convention is undertaken in an environmentally sound manner?

◉ Yes

○ No (please explain)

○ Do not know (please explain)

If yes, please indicate the measures taken to ensure that such interim storage is undertaken in an environmentally sound manner, and the effectiveness of those measures.
Mercury and its compounds are controlled as hazardous substances under the Environmental Protection and Management Act (EPMA) and Environmental Protection and Management (Hazardous Substances) Regulations. A hazardous substances licence/permit is required for the importation, exportation, manufacture, storage and sale of such hazardous substances. To obtain a licence/permit, licensees must demonstrate adoption of measures to ensure environmentally sound storage of mercury and its compounds in accordance with relevant codes of practice.

Part E - Additional comments on this article

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▼ ART. 11: MERCURY WASTES

11.1: Have measures outlined in article 11, paragraph 3, been implemented for the party's mercury waste?

◉ Yes

○ No

☑ Yes - the party has taken measures so that mercury waste is managed in an environmentally sound manner

Please describe measure and effectiveness of measures
{Empty}

☑ Yes - the party has taken measures so that mercury waste is recovered, recycled, reclaimed or directly re-used for a use allowed to a party under the Convention or for environmentally sound disposal pursuant to paragraph 3 (a)

Please describe measure and effectiveness of measures
{Empty}

☑ Yes - the party has taken measures so that mercury waste is not transported across international boundaries except for the purpose of environmentally sound disposal

Please describe measure and effectiveness of measures
{Empty}

If the party answered yes to any measures above, please describe the measures implemented pursuant to paragraph 3, and please also describe the effectiveness of those measures.
Mercury waste is classified as Toxic Industrial Waste (TIW) under the Environmental Public Health (Toxic Industrial Waste) Regulations ("EPH(TIW) Regs"). Under the Regulations, mercury waste is required to be collected and managed by licensed Toxic Industrial Waste Collectors (TIWCs) who are approved to collect, handle and treat the waste stream at their waste disposal facilities. At the treatment facilities of the TIWCs, mercury waste is treated to ensure any emission and residues comply with the prevailing environmental limits. Any non-compliance will be subject to enforcement action. EPH(TIW) Regs could be viewed at the link (https://sso.agc.gov.sg/sl/epha1987-rg11). As a signatory to the Basel Convention, Singapore classifies Mercury waste as hazardous waste under the Hazardous Waste (Control of Export, Import and Transit Act)(:HWA"). Any export, import or transit of hazardous waste shall adhere to the Prior Informed Consent ("PIC") procedure under the Basel Convention and a Basel Permit from NEA is required prior to shipment. The HWA could be viewed at the link ("https://sso.agc.gov.sg/Act/HWCEITA1997").

11.2: *Are there facilities for final disposal of waste consisting of mercury or mercury compounds in the party's territory?

◉ Yes

○ No

○ Do not know (please explain)

If the party answered yes to any measures above, please select from the following

☑ Yes - there are facilities in the party's territory

☐ Yes - there are facilities outside the party's territory accessible to the party (in accordance with paragraph 5 of article 11)

If there are facilities in the party's territory and if the information is available, how much waste consisting of mercury or mercury compounds has been subject to final disposal under the reporting period? Please specify the method of the final disposal operation/operations. If the party does not have specific data on waste consisting of mercury or mercury compounds, the party may report on the data including other mercury waste, with an explanatory note.
Wastes consisting of mercury or mercury compounds are classified as Toxic Industrial Waste (TIW) in Singapore. Such wastes are required to be collected, handled and treated by licensed toxic industrial waste collectors to meet the landfill acceptance criteria (i.e. Toxicity Characteristics Leaching Procedure limits) before final disposal at Semakau Landfill which is an off-shore sanitary landfill site in Singapore.

Kindly attach any additional relevant information
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Part E - Additional comments on this article

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▼ ART. 12: CONTAMINATED SITES

12.1: Has the party endeavoured to develop strategies for identifying and assessing sites contaminated by mercury or mercury compounds in its territory?

◉ Yes

○ No

Please elaborate
Under the Singapore Standard SS 593:2013 – Code of Practice for Pollution Control, when a site that is used for polluting activities is to be (i) redeveloped, rezoned or reused for a non-polluting activity, or (ii) leased, transferred or sold to another party for the same or other polluting activities, a study should be conducted on the site to assess the extent of land contamination. If the site assessment study shows that the site is contaminated, the site needs to be remediated to comply with the Authority's requirements. Mercury and mercury compounds are considered contaminants in SS 593:2013.

Part E – Additional comments on this article

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▼ ART. 13: FINANCIAL RESOURCES AND MECHANISM

13.1: Has the party undertaken to provide, within its capabilities, resources in respect of those national activities that are intended to implement the Convention in accordance with its national policies, priorities, plans and programmes?

◉ Yes

○ No

Please specify
Singapore has, within its capabilities, allocated the required resources (i.e. manpower) to implement its obligations under the Minamata Convention.

13.2: Supplemental: Has the party, within its capabilities, contributed to the mechanism referred to in paragraph 5 of article 13?

○ Yes

◉ No

Please provide comments, if any.
Singapore has no input for this supplemental question.

13.3: Supplemental: Has the party provided financial resources to assist developing-country parties and/or parties with economies in transition in the implementation of the Convention through other bilateral, regional and multilateral sources or channels?

○ Yes

◉ No

Please specify
Singapore has no input for this supplemental question.

Please provide comments, if any.
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Part E - Additional comments on this article

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▼ ART. 14: CAPACITY-BUILDING, TECHNICAL ASSISTANCE AND TECHNOLOGY TRANSFER

14.1: Has the party cooperated to provide capacity-building or technical assistance, pursuant to article 14, to another party to the Convention?

- (●) Yes
- ( ) No

Please specify

Singapore is part of the ASEAN Working Group on Chemicals and Waste (AWGCW), where the ASEAN Member States (AMS) share their experience and learning points on the implementation of Minamata Convention as part of capability building exchanges in the ASEAN region. Singapore has also attended some of the virtual capacity building sessions organised by Indonesia's Ministry of Foreign Affairs and Ministry of Environment and Forestry to share our experience on our control measures to comply with the obligations under the Minamata Convention.

14.2: Supplemental: Has the party received capacity-building or technical assistance pursuant to article 14?

- (●) Yes
- ( ) No

Please specify

Singapore has attended some of the virtual capacity building sessions organised by Minamata Secretariat to better understand the obligations imposed on the Parties by Minamata Convention.

Please provide comments, if any.

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14.3: Has the party promoted and facilitated the development, transfer and diffusion of and access to, up-to-date environmentally sound alternative technologies?

- ( ) Yes
- ( ) No
- (●) Other

Please provide information

Singapore does not have the relevant expertise to promote the development, transfer and diffusion of and access to, up-to-date environmentally sound alternative technologies to other Parties, though we are open to facilitate the sharing of information if opportunity arises.

Part E - Additional comments on this article

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▼ ART. 16: HEALTH ASPECTS

16.1: Have measures been taken to provide information to the public on exposure to mercury in accordance with paragraph 1 of article 16?

- ( ) Yes
- (●) No

16.2: Have any measures been taken to protect human health in accordance with article 16 beyond the provision of information to the public on exposure to mercury (referred to in question 16.1)?

- ○ Yes
- ◉ No

Part E - Additional comments on this article

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▼ ART. 17: INFORMATION EXCHANGE

17.1: Has the party facilitated the exchange of information referred to in article 17, paragraph 1?

- ◉ Yes
- ○ No

If yes, the Party may wish to indicate in the space provided below the exchange of information it has facilitated, such as:

- ☐ Scientific, technical, economic and legal information concerning mercury and mercury compounds, including toxicological, ecotoxicological and safety information
- ☐ Information on the reduction or elimination of the production, use, trade, emissions and releases of mercury and mercury compounds
- ☐ Information on technically and economically viable alternatives to:
- ☐ Epidemiological information concerning health impacts associated with exposure to mercury and mercury compounds, in close cooperation with the World Health Organization and other relevant organizations, as appropriate. (Art. 17.1 (a)-(d))

Part E - Additional comments on this article

Singapore has been appointed national focal points to facilitate information exchange. Notwithstanding this, Singapore does not have suitable expertise to contribute to the information exchange and will mainly be a recipient of such information.

▼ ART. 18: PUBLIC INFORMATION, AWARENESS AND EDUCATION

18.1: Have measures been taken to promote and facilitate the provision to the public of the kinds of information listed in article 18, paragraph 1?

- ◉ Yes
- ○ No

If yes, the party may wish to indicate in the space provided below, the measures it has taken to promote and facilitate information to the public, such as:
(a) Provision to the public of available information on:

- ☐ The effects of mercury and mercury compounds on human health and the environment
- ☐ Alternatives to mercury and mercury compounds
- ☐ The topics identified in paragraph 1 of article 17
- ☐ The results of its research, development and monitoring activities under article 19
- ☐ Activities to meet its obligations under the Convention

(b) Education, training and public awareness related to the effects of exposure to mercury and mercury compounds on human health and the environment in collaboration with relevant intergovernmental and non-governmental organizations and vulnerable populations, as appropriate.

Activities to meet its obligations under the Convention
Singapore has within its capabilities, promoted and facilitated provision of information to the public, for example, relating to the reduction/ elimination of the production, use and trade of mercury and mercury compounds. This includes timely phrasing out of the use of mercury-added products through the controls under the Environmental Protection and Management Act (EPMA). Information on measures taken to meet the obligations of the Minamata Convention can be found on the National Environment Agency website, attached below.
https://www.nea.gov.sg/corporate-functions/resources/legislation-international-law/multilateral-environmental-agreements/chemical-safety/minamata-convention-on-mercury

(Art. 18 (1) (a) and (b))

Part E - Additional comments on this article

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▼ ART. 19: RESEARCH, DEVELOPMENT AND MONITORING

19.1: Has the party undertaken any research, development and monitoring in accordance with paragraph 1 of article 19?

- (●) Yes
- ( ) No

If yes, the party may wish to indicate in the space provided below, the research, development and monitoring it has undertaken, such as:

- [ ] Inventories of use, consumption, anthropogenic emissions to air and releases to water and land of mercury and mercury compounds
- [ ] Modelling and geographically representative monitoring of levels of mercury and mercury compounds in vulnerable populations and in environmental media, including biotic media such as fish, marine mammals, sea turtles and birds, as well as collaboration in the collection and exchange of relevant and appropriate samples
- [ ] Assessments of the impact of mercury and mercury compounds on human health and the environment, in addition to social, economic and cultural impacts, particularly in respect of vulnerable populations
- [ ] Harmonized methodologies for the activities undertaken under subparagraphs (a), (b) and (c) of paragraph 1 of article 19
- [ ] Information on the environmental cycle, transport (including long-range transport and deposition), transformation and fate of mercury and mercury compounds in a range of ecosystems, taking appropriate account of the distinction between anthropogenic and natural emissions and releases of mercury and of remobilization of mercury from historic deposition
- [ ] Information on commerce and trade in mercury and mercury compounds and mercury-added products
- [ ] Information and research on the technical and economic availability of mercury-free products and processes and on best available techniques and best environmental practices to reduce and monitor emissions and releases of mercury and mercury compounds

(Art. 19 (1) (a)-(g))

Part E - Additional comments on this article

Singapore has no domestic production or processing activities using elemental mercury. Nevertheless, Singapore maintains comprehensive monitoring systems for anthropogenic mercury emissions and releases across different environmental media. The following outlines the procedures

used by various government agencies to monitor mercury and mercury compounds in air, water, and food systems:
To monitor anthropogenic emissions of mercury and mercury compounds to air, pollution control equipment is required at incineration plants and industries. All air emissions must comply with the Environmental Protection and Management (Air Impurities) Regulations – overseen by the National Environment Agency (NEA), which stipulate that mercury and mercury compounds emitted from any operation in any trade, industry, process, fuel burning equipment or industrial plant shall not exceed the limit of 0.05 mg/Nm3 (expressed as mercury) to any point before admixture with air, smoke or other gases.
For water systems, Singapore's population is served by modern sanitation systems. Residential and industrial used water is collected via an extensive network of sewers and conveyed to Water Reclamation Plants for treatment. The used water is treated to meet the standards specified in the Environmental Protection and Management (Trade Effluent) Regulation before it is safely discharged into the sea. In addition, as part of the Singapore's water supply strategy, the treated used water is also further purified to produce NEWater which is used mainly for industrial, cooling and reservoir topping purposes. The discharges must comply with strict regulatory limits for mercury to meet the levels of 0.001 mg/L for controlled watercourses and 0.05 mg/L for non-controlled watercourses, as per the environmental regulation.
The Singapore Food Agency (SFA) adopts a science-based risk management approach to ensure food imported into Singapore is safe. This includes regular testing of food for various hazards, including incidental constituents such as mercury, to ensure compliance with the Food Regulations. Food that does not meet these requirements is not permitted for sale in Singapore.

▼ COMMENTS REGARDING POSSIBLE CHALLENGES IN MEETING THE OBJECTIVES OF THE CONVENTION

Part C: Comments regarding possible challenges in meeting the objectives of the Convention

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▼ COMMENTS REGARDING THE REPORTING FORMAT AND POSSIBLE IMPROVEMENTS, IF ANY

Comments regarding the reporting format and possible improvements, if any

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