

# FIRST FULL NATIONAL REPORTS OF THE MINAMATA CONVENTION ON MERCURY 2021



\* Part E of Article 8 and question 13.1 amended by Japan on 28 June 2022

## REPORTING PERIOD:

16 August 2017 to 31 December 2020

*Attachments can be found on the website*

### ▼ INFORMATION ON THE PARTY

#### 1. Information on the party

**Name of party**

Japan

**Date on which its instrument of ratification, accession, approval or acceptance was deposited**

2 February 2016

**Date of entry into force of the Convention for the party**

16 August 2017

#### 2. Information on the national focal point

**Full name of the institution**

Ministry of Foreign Affairs

**Title of National Focal Point**

Ms.

**Name of National Focal Point**

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#### 3. Information about the contact officer submitting the reporting format if different from the above

**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  
☒ No

**Additional information on this question if needed**

There have been no primary mercury mines in Japan since 1974 after the closure of the Itomuka mine. By amending the Mining Act, the government of Japan made rights for the mining of mercury ore ceased on the day before the entry into force of the Convention (15 August 2017).

**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  
☒ No

**3.3. Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons and sources of mercury supply generating stocks exceeding 10 metric tons per year that are located within its territory?**

- ☒ Yes  
☐ No

**ba34\_subsection**

\*If the party answered Yes to Question 3 above:

**i. Please attach the results of your endeavor or indicate where it is available on the internet, unless unchanged from a previous reporting round.**

The government of Japan requires any business operator with storage of mercury or mercury compounds of 30 kg or more during the relevant fiscal year to report annually the purpose of the storage and a breakdown of the annual balance, including the amount used for each purpose and the amount that has become waste. In the fiscal year 2019 (April 2019 to March 2020), 79 business establishments had stocks of 30 kg or more of mercury or mercury compounds, and the reported amount of storage at the end of the fiscal year 2019 was 47.915 t.

The amount of mercury or mercury compounds stored at the end of the fiscal year 2019 by business operators for the purposes of using mercury (58 business establishments) and selling/wholesaling mercury (22 business establishments) was 7.046 t and 40.869 t, respectively. Among the business establishments using mercury, one was engaged in refining and processing of mercury or mercury compounds. No stocks of exceeding 50 t of mercury or mercury compounds were identified.

**Summary of reporting on the storage of mercury or mercury compounds**

Fiscal Year 2017 (April 2017 – March 2018):

[https://www.meti.go.jp/english/press/2018/1225\\_005.html](https://www.meti.go.jp/english/press/2018/1225_005.html)

Fiscal Year 2018 (April 2018 – March 2019):

[https://www.meti.go.jp/english/press/2020/0214\\_002.html](https://www.meti.go.jp/english/press/2020/0214_002.html)

Fiscal Year 2019 (April 2019 – March 2020):

[https://www.meti.go.jp/english/press/2021/0330\\_003.html](https://www.meti.go.jp/english/press/2021/0330_003.html)

Sources of mercury supply generating stocks exceeding 10 t can be identified in the material flow for mercury. In FY2016 (April 2016–March 2017), a total of 65 t of mercury was recovered from mercury wastes, at a mercury waste treatment facility.

**i. Please attach the results of your endeavor or indicate where it is available on the internet, unless unchanged from a previous reporting round.**

- [JPN\\_3.3.pdf](#)

ii. **Supplemental: Please provide any related information, for example on the use or disposal of mercury from such stocks and sources.**

According to reports for FY 2019 (April 2019–March 2020), mercury or mercury compounds were stored to be used for lighthouses (3.208 t in 32 cases), research and investigation (1.817 t in 6 cases), environmental analysis (0.353 t in 4 cases), product manufacturing (1.321 t in 14 cases) and others (0.347 t in 2 cases).

### **3.4. Does the party have excess mercury available from the decommissioning of chlor-alkali facilities?**

☐ Yes

☒ No

### **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

#### **ba35\_subsection**

If yes, a. and the party has submitted copies of the consent forms to the secretariat, then no further information is needed. If the party has not previously provided such copies, it is recommended that it do so.

**a. and the party has submitted copies of the consent forms to the secretariat, then no further information is needed.**

{Empty}

**Otherwise, please provide other suitable information showing that the relevant requirements of paragraph 6 of article 3 have been met.**

To ensure that mercury and mercury compounds exported from Japan do not cause environmental pollution or impose adverse effects on human health due to improper use at destination, the government of Japan amended the Export Trade Control Order, which came into effect on August 16, 2017. The Export Trade Control Order, in principle, prohibits exports of certain mercury compounds (mercury compounds subject to the Export Trade Control Order are called as "specific mercury compounds"), in addition to mercury which is subject to the regulation under the Minamata Convention. Exports of mercury or specific mercury compounds are approved only for the uses allowed under the Convention. In addition, Japan prohibits exports of mercury or specific mercury compounds for the purpose of artisanal small-scale gold mining and interim storage although not prohibited under the Convention. In particular, the following conditions should be met to allow the export: a written consent has been provided (Article 3.6(a) for Parties and Article 3.6(b) for non-Parties); for non-Parties, whether it can be confirmed that measures are taken to comply with the provisions of Articles 10 and 11 of the Convention; whether the uses allowed under the Convention (other than ASGM and interim storage) are specified; and whether the end uses and end users are specified. In the case of exports to non-Parties, it should be further confirmed in writing that measures have been taken to protect human health and the environment. In addition to the above, measures based on the Rotterdam Convention are taken as appropriate.

With regard to exported goods (mercury and specific mercury compounds), the name and location of the end user, the date of acceptance and the quantity accepted by the end user, the end use of the goods accepted by the end user (the type and mercury content of products if used for the manufacturing of products), the quantity used and the remaining quantity of the goods shall be reported to the Ministry of Economy, Trade and Industry (METI) every six months from the date of approval until the entire amount of the exported goods is used. Applications of mercury or specific mercury compounds at the export destination so far include chlor-alkali production and manufacturing of lamps.

**Supplemental: please provide information on the use of the exported mercury.**

{Empty}

**Kindly attach all relevant information**

{Empty}

**b. If exports were based on a general notification in accordance with article 3, paragraph 7, please indicate, if**

available, the total amount exported and any relevant terms or conditions in the general notification related to use.

{Empty}

Relevant terms or conditions in the general notification related to use

{Empty}

### 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 the article in free text if the party chooses to do so

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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.**

Under the Act on Preventing Environmental Pollution of Mercury and the Foreign Exchange and Foreign Trade Act, the manufacture, import and export of mercury-added products listed in Annex A are, in principle, prohibited. In addition, the deadline for phasing-out batteries\*, fluorescent lamps, cosmetics, and pharmaceuticals other than merbromin solution was the end of 2017, earlier than the end of 2020 specified in the Convention. The mercury content standards for silver oxide batteries and cosmetics have been set as less than 1% and 0%, respectively, stricter than required by the Convention.

\*Note: phase-out date of button alkaline manganese batteries was the end of 2020.

The import of mercury-containing pesticides is restricted by the Import Trade Control Order.

Act on Preventing Environmental Pollution of Mercury

<http://www.japaneselawtranslation.go.jp/law/detail/?id=3232&vm=04&re=02>

Overview of the Act on Preventing Environmental Pollution of Mercury

[https://www.env.go.jp/chemi/tmms/suigin\\_leaflet\\_law\\_en.pdf](https://www.env.go.jp/chemi/tmms/suigin_leaflet_law_en.pdf)

Foreign Exchange and Foreign Trade Act

<http://www.japaneselawtranslation.go.jp/law/detail/?id=3267&vm=&re=>

### 4.3. Has the party taken two or more measures 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.**

Based on the Act concerning the Promotion of Dental and Oral Health, the targets and plans for the prevention of dental caries to be treated with dental amalgam are stipulated. Furthermore, based on the National Health Insurance Act and other medical insurance acts, Japan has taken measures such as not giving preferential treatment to mercury-based dental amalgam for the calculation of expenses claimed by insured medical institutions.

Since April 2016, the use of mercury-based dental amalgam has been out of the recuperation payment by insured medical institutions. Even before the introduction of such measure, the number of times that dental amalgam was accounted and its percentage in total treatment were 8,210 times (0.11%) in FY2014 (April 2014 to March 2015), and 3,539 times (0.05%) in FY2015 (April 2015 to March 2016).

Japan's submission on measures on dental amalgam

[http://www.mercuryconvention.org/Portals/11/documents/meetings/COP4/submissions/Japan\\_DentalAmalgam.pdf](http://www.mercuryconvention.org/Portals/11/documents/meetings/COP4/submissions/Japan_DentalAmalgam.pdf)

#### **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 under article 4?**

☒ Yes

☐ No

**If yes, please provide information on the measures.**

The Act on Preventing Environmental Pollution of Mercury and the Foreign Exchange and Foreign Trade Act, in principle, prohibit the manufacture, import and export of assembled products that incorporate mercury-added products listed in Annex A.

Act on Preventing Environmental Pollution of Mercury

<http://www.japaneselawtranslation.go.jp/law/detail/?id=3232&vm=04&re=02>

Overview of the Act on Preventing Environmental Pollution of Mercury

[https://www.env.go.jp/chemi/tmms/suigin/leaflet\\_law\\_en.pdf](https://www.env.go.jp/chemi/tmms/suigin/leaflet_law_en.pdf)

Foreign Exchange and Foreign Trade Act

<http://www.japaneselawtranslation.go.jp/law/detail/?id=3267&vm=&re=>

#### **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

**If yes, please provide information on the measures.**

From the date of entry into force of the Convention, the Act on Preventing Environmental Pollution of Mercury requires business operators to notify the competent Minister for their intention to manufacture mercury-added products not covered by any known use at least 45 days before the manufacturing. In notifying the competent Minister, business operators shall also submit a result of self-assessment which demonstrates that the use of such products will contribute to the protection of the human health and living environment.

There have been no submissions or authorizations from the date of entry into force of the Convention until the end of December 2020, for the manufacture and the distribution in commerce of mercury-added products not covered by any known use.

#### **Part E – Additional comments on the article in free text if the party chooses to do so**

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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
- ☐ I 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. Is there any facility that has been developed 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

**Part E – Additional comments on the article in free text if the party chooses to do so**

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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

**Part E – Additional comments on the article in free text if the party chooses to do so**

{Empty}

#### ▼ 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 power plants

From April 2018, new sources (three facilities as of the end of March 2020) are subject to the mercury emission limit value (8 µg/Nm<sup>3</sup>) established based on BAT/BEP.

No new coal-fired power plants were identified that exceeded the above emission limit value between April 2019 and March 2020.

☒ Coal-fired industrial boilers

#### Coal-fired industrial boilers

From April 2018, new sources (one facility as of the end of March 2020) are subject to the mercury emission limit value (10 µg/Nm<sup>3</sup>) established based on BAT/BEP.

No new coal-fired industrial boilers were identified that exceeded the above emission limit value between April 2019 and March 2020.

☒ Smelting and roasting processes used in the production of non-ferrous metals

#### Smelting and roasting processes used in the production of non-ferrous metals

From April 2018, new sources (three facilities as of the end of March 2020) are subject to the mercury emission limit values established based on BAT/BEP as shown below.

Primary metal facilities:

- Copper or industrial gold: 15 µg/Nm<sup>3</sup>
- Lead or zinc facilities: 30 µg/Nm<sup>3</sup>

Secondary metal facilities:

- Copper, lead or zinc: 100 µg/Nm<sup>3</sup>
- Industrial gold: 30 µg/Nm<sup>3</sup>

No new non-ferrous metal smelting and roasting facilities were identified that exceeded the above emission standards between April 2019 and March 2020.

☒ Waste incineration facilities

#### Waste incineration facilities

From April 2018, new sources (46 facilities as of the end of March 2020) are subject to the mercury emission limit values established based on BAT/BEP as shown below.

- Waste incinerators (municipal and industrial waste/sewage sludge incinerators): 30 µg/Nm<sup>3</sup>
- Incinerators for sludge contaminated with mercury: 50 µg/Nm<sup>3</sup>

No new waste incineration facilities were identified that exceeded above emission limit values between April 2019 and March 2020.

☐ 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

Attach relevant documentation

[JPN\\_8.1.pdf](#)

## 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

Emission limit value:

From April 2018, existing sources are subject to the mercury emission limit value (10 µg/Nm<sup>3</sup>).

Multi-pollutant strategy:

Soot and smoke-related regulations (Order to Change Plans, restrictions on soot and smoke emissions, Order for Improvement, etc.) based on the Air Pollution Control Act are considered to have contributed partially to the control of mercury emissions.

#### Progress

Of the 137 existing sources, no coal-fired power plants were identified that exceeded the above emission limit value between April 2019 and March 2020.

### ▼ 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

Emission limit value:

From April 2018, existing sources are subject to the mercury emission limit value (15 µg/Nm<sup>3</sup>).

Multi-pollutant strategy:

Soot and smoke-related regulations (Order to Change Plans, restrictions on soot and smoke emissions, Order for Improvement, etc.) based on the Air Pollution Control Act are considered to have contributed partially to the control of mercury emissions.

#### Progress

Of the 49 existing sources, no coal-fired industrial boilers were identified that exceeded the above emission limit value between April 2019 and March 2020.

### ▼ 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

Emission limit value:

From April 2018, existing sources are subject to the following mercury emission limit values.

Primary metal facilities:

- Copper or industrial gold: 30 µg/Nm<sup>3</sup>
- Lead or zinc facilities: 50 µg/Nm<sup>3</sup>

Secondary metal facilities:

- Copper, lead or zinc: 400 µg/Nm<sup>3</sup>
- Industrial gold: 50 µg/Nm<sup>3</sup>

Multi-pollutant strategy:

Soot and smoke-related regulations (Order to Change Plans, restrictions on soot and smoke emissions, Order for Improvement, etc.) based on the Air Pollution Control Act are considered to have contributed partially to the control of mercury emissions.

#### Progress

Of the 147 existing sources, no non-ferrous metal smelting and roasting facilities were identified that exceeded the above emission limit values between April 2019 and March 2020.

#### ▼ WASTE INCINERATION 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

Emission limit values:

From April 2018, existing sources are subject to the following mercury emission limit values.

- Waste incinerators (municipal and industrial waste/sewage sludge incinerators): 50 µg/Nm<sup>3</sup>
- Incinerators for sludge containing mercury: 100 µg/Nm<sup>3</sup>

Multi-pollutant strategy:

Soot and smoke-related regulations (Order to Change Plans, restrictions on soot and smoke emissions, Order for Improvement, etc.) based on the Air Pollution Control Act are considered to have contributed partially to the control of mercury emissions.

Alternative measures to reduce emissions from relevant sources

Measures for the environmentally sound management of mercury wastes under the Waste Management and Public Cleansing Act are considered to have contributed partially to the control of mercury emissions.

#### Progress

Of the 4,060 existing sources, 97 waste incineration facilities were found to have exceeded the above emission limit values between April 2019 and March 2020. Among those 97 facilities, 83 facilities out of 90 facilities satisfied the emission limit values after the re-measurement required under the Air Pollution Control Act. Administrative guidance was provided with facilities which exceeded the emission limit values even after the re-measurement (seven facilities) and where the re-measurement was not conducted (seven facilities). Recurrence prevention measures were implemented by business establishments of those facilities.

#### ▼ 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

Emission limit values:

From April 2018, existing sources are subject to the mercury emission limit value (80 µg/Nm<sup>3</sup> (140 µg/Nm<sup>3</sup> for those with a mercury content of 0.05 mg/kg or more in the raw limestone)).

**Use of BAT/BEP:**

The Japan Cement Association has requested its member companies to utilize waste data sheets to identify mercury concentrations of waste input to cement kilns in relation to the measure of selecting raw materials and fuels with less mercury content. This measure is listed as a BAT in the BAT/BEP guidance document developed under Article 8 of the Convention.

**Multi-pollutant strategy:**

Soot and smoke-related regulations (Order to Change Plans, restrictions on soot and smoke emissions, Order for Improvement, etc.) based on the Air Pollution Control Act are considered to have contributed partially to the control of mercury emissions.

**Progress**

Of the 65 existing sources, four cement clinker production facilities were found to have exceed the above emission limit value between April 2019 and March 2020. However, it was confirmed that those four facilities satisfied the emission limit values after the re-measurement required under the Air Pollution Control Act.

**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?**

Tue, 03/31/2020 – 00:00

**Please indicate where this inventory is available**

<http://www.env.go.jp/air/%28FY%202018%29%20Japan%E2%80%99s%20Mercury%20Emission%20Inventory.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

**If yes, please explain how the criteria for any category include at least 75 percent of the emissions from that category and explain how the party took into account guidance adopted by the Conference of the Parties.**

The scale criteria for soot and smoke emitting facilities under the Air Pollution Control Act are applied mutatis mutandis to relevant sources under Annex D. It was confirmed from a mercury inventory that almost 100% of the total mercury emissions from relevant sources in Annex D would be covered when applying the draft (at that time) scale criteria for soot and smoke emitting facilities.

**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

If yes, has the party submitted its national plan to the Conference of the Parties under this article no later than 4 years after the date of entry into force of the Convention for the party?

☒ Yes

☐ No

### **Part E – Additional comments on the article in free text if the party chooses to do so**

From April 2018, sintering furnaces used for iron making, including pellet sintering furnaces, and electronic furnaces for steel making, which are not listed in Annex D of the Convention but emit mercury in considerably large quantities in Japan, are required to take voluntary measures to control mercury emissions. Such measures include the establishment of voluntary emission limit values, measurement of mercury concentration in flue gas and disclosure of measures to reduce mercury emissions.

The national expert committee evaluated the voluntary efforts made by entities subject to the above measures, such as the status of setting voluntary emission limit values and the method for evaluating and publishing the achievement of such values, and confirmed that appropriate measures were taken overall.

Japan considers that the national plan to control mercury emissions is a part of the Implementation Plan under the Article 21, which is already available on the Minamata website.

#### **▼ 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

☐ I do not know

##### **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

### **Part E – Additional comments on the article in free text if the party chooses to do so**

For the inventory of releases, the amount of mercury released to public waters and land is estimated in the "Mercury Material Flow" that Japan developed in the past. The amount of mercury released to public waters and land is estimated to be 0.2 t and 0.58 t, respectively, in the material flow calculated for FY2016 (April 2016–March 2017)

#### **▼ 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

☐ I do not know

**Please indicate the measures taken to ensure that such interim storage is undertaken in an environmentally sound manner and the effectiveness of those measures.**

The Act on Preventing Environmental Pollution of Mercury requires that, if business operators store mercury or mercury compounds (concentration greater than 95% by weight) intended for sale, manufacture of products, testing and research after the date the Minamata Convention enters into force, they shall store mercury or mercury compounds in an environmentally sound manner in accordance with the "Technical Guidelines for Measures to be Taken to Prevent Environmental Pollution from Stored Mercury or Mercury Compounds". Those measures include storage in containers that prevent scattering or leaking of mercury or mercury compounds, labeling of the chemical form of mercury or mercury compounds on the container, indication of the type of mercury or mercury compounds at the storage site, storage in a place that can be locked (or fenced) and providing proper information when outsourcing the storage.

Any business operator storing 30 kg or more of mercury in a fiscal year is required to report the purpose of storage and annual balance, including the amount of mercury used for each purpose and the amount that has become waste within the year. As a result, it has been confirmed that almost all business operators that have submitted reports so far have been storing mercury in an environmentally sound manner in accordance with the technical guidelines.

Reference: Summary of the reports on storage of mercury or mercury compounds

Fiscal Year 2017 (April 2017 – March 2018):

[https://www.meti.go.jp/english/press/2018/1225\\_005.html](https://www.meti.go.jp/english/press/2018/1225_005.html)

Fiscal Year 2018 (April 2018 – March 2019):

[https://www.meti.go.jp/english/press/2020/0214\\_002.html](https://www.meti.go.jp/english/press/2020/0214_002.html)

Fiscal Year 2019 (April 2019 – March 2020):

[https://www.meti.go.jp/english/press/2021/0330\\_003.html](https://www.meti.go.jp/english/press/2021/0330_003.html)

## **Part E – Additional comments on the article in free text if the party chooses to do so**

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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

**Please describe the measures implemented pursuant to paragraph 3, and please also describe the effectiveness of those measures.**

Wastes consisting of mercury or mercury compounds:

Specific collection and transport standards have been set according to properties of wastes consisting of mercury. Sulfurization and solidification are required prior to final disposal at landfills.

Wastes containing mercury or mercury compounds:

For industrial wastes containing mercury, additional measures other than those required for other types of industrial wastes have been imposed for the storage, collection, transportation, disposal and reclamation. In addition, mercury recovery has been made obligatory for wastes containing mercury with a risk of scattering mercury.

The Act on Preventing Environmental Pollution of Mercury promotes efforts to properly collect wastes containing mercury. Specifically, the government of Japan must endeavor to provide technical advice necessary for municipalities to collect municipal wastes containing mercury in an environmentally sound manner. Municipalities must endeavor to take measures necessary for proper collection of wastes containing mercury in their jurisdiction in line with the socioeconomic condition of the region. Business operators who manufacture or import mercury-added products must endeavor to provide information that contributes to proper segregation and discharge of such products by consumers, including displaying the use of mercury on the product.

Based on the above, in order to enhance the effectiveness of the measures for environmentally sound management, the Ministry of the Environment, Japan (MOEJ) has prepared the guidelines for municipalities on segregation and collection of wastes containing mercury and the case study on collection of such wastes undertaken by municipalities.

In addition, the MOEJ has been implementing a project to intensively collect mercury-added products which

are no longer used at households and medical institutions, within a certain period of time in cooperation with municipalities and Japan Pharmaceutical Association and Japan Medical Association.

Wastes contaminated with mercury or mercury compounds:

Out of those falling under specially-controlled industrial wastes under Waste Management and Public Cleansing Act, soot and dust, cinders, sludge, slag, waste acid and waste alkali with the concentration of more than 15 ppm of mercury were designated as “dust and others contaminated with mercury”, and additional measures other than those required for other types of industrial wastes have been imposed for treatment, reclamation, etc. In addition, mercury recovery became obligatory for specially-controlled industrial wastes and soot and others contaminated with mercury if the mercury concentration is 1,000ppm or more.

The Act on Preventing Environmental Pollution of Mercury designates recyclable resources contaminated with 1,000 ppm or more of mercury as “mercury-containing recyclable resource”. Business operators who manage mercury-containing recyclable resources shall take measures to manage them in an environmentally sound manner in accordance with the “Technical Guidelines for Measures to be Taken to Prevent Pollution of the Environment Concerning the Management of Mercury-containing Recyclable Resources”. They shall submit an annual report on the purpose of management and the annual balance of mercury-containing recyclable resources, including the amount that has become waste. Based on the report, it is confirmed that almost all the business operators have been managing mercury-containing recyclable resources in an environmentally sound manner in accordance with the technical guidelines.

Reference: Summary of the report on management of recyclable resources containing Mercury

- Fiscal Year 2017 (April 2017 – March 2018): [https://www.meti.go.jp/english/press/2018/1225\\_005.html](https://www.meti.go.jp/english/press/2018/1225_005.html)
- Fiscal Year 2018 (April 2018 – March 2019): [https://www.meti.go.jp/english/press/2020/0214\\_002.html](https://www.meti.go.jp/english/press/2020/0214_002.html)
- Fiscal Year 2019 (April 2019 – March 2020): [https://www.meti.go.jp/english/press/2021/0330\\_003.html](https://www.meti.go.jp/english/press/2021/0330_003.html)

Border control of mercury wastes:

Transboundary movement of mercury wastes under the Minamata Convention is properly managed through national laws and regulation to implement the Basel Convention, such as the Waste Management and Public Cleansing Act and the Act on the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes.

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

- ☐ Yes
- ☒ No
- ☐ I do not know

### Part E – Additional comments on the article in free text if the party chooses to do so

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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

Prior to the Convention entering into force, the Soil Contamination Countermeasures Act obliges landowners, managers or occupiers to conduct soil contamination investigations and report to prefectural governors on the sites of plants and workplaces that have used the specified hazardous substances in the past, and on land that has risks of causing any harm to human health due to contamination by the specified hazardous substances. The prefectural governor evaluates the contamination status after receiving the report and

designates the land whose contamination by the specified hazardous substances does not conform to the standards stipulated in the Act as an "Area which Requires Measures" or an "Area for which Changes to Form or Nature Require Notification". In an Area which Requires Measures, the prefectural governor indicates to the landowner of the contamination removal measures that should be taken, the reasons therefore and the deadline for taking these measures, and requires the owner to prepare and submit a plan for contamination removal. For an Area for which Changes to Form or Nature Require Notification, it is mandatory to submit a notification to the prefectural governor when a person intends to change the form or nature of that land. According to the survey on the enforcement of the Soil Contamination Countermeasures Act in FY 2019 (April 2019 to March 2020), the number of areas that did not conform to standards for mercury and mercury compounds and were designated as an Area which Requires Measures or an Area for which Changes to Form or Nature Require Notification was four and 46, respectively, for that fiscal year.

Based on the Water Pollution Prevention Act, prefectural governments are required to continuously monitor the state of water pollution in public waters and groundwater and report the results to the Minister of the Environment. When a well that exceeds the environmental standard for groundwater is found, the water quality of the surrounding wells, etc. is measured to identify and estimate the source and extent of contamination, and if necessary, the prefectural governor can order the person causing the contamination to take measures to remediate the contaminated groundwater.

Since April 1989, the national and local governments have been measuring groundwater quality in accordance with the water quality measurement plan that is prepared annually by prefectural governors. In the continuous monitoring survey, the number of wells exceeding the environmental standard for total mercury has decreased from 19 in FY 2017 to 17 in FY 2019.

## Part E – Additional comments on the article in free text if the party chooses to do so

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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

The budget for national activities to implement the Convention is set aside every year mainly for the control of mercury emissions, environmentally sound management of mercury wastes and products control. The average amount of budget execution for FY2017–2020 was about 400 million yen (Nevertheless this includes project costs to support developing countries).

The amount of budget execution (unit: Million Japanese yen "M"):

- Projects to promote measures for the control of mercury emissions: FY2017: 32M; FY2018: 25M; FY2019: 34M; FY2020: 41M
- Projects to promote the environmentally sound management of mercury wastes under the Minamata Convention: FY2017: 110M; FY2018: 62M; FY2019: 58M; FY2020: 62M
- Projects to promote the implementation of the Minamata Convention: FY2017: 295M; FY2018: 287M; FY2019: 307M; FY2020: 297M
- Projects for domestic and international surveys on the management of mercury-added products: FY2017: –; FY2018: –; FY2019: 24M; FY2020: 18M
- Total: FY2017: 437M; FY2018: 376M; FY2019: 423M; FY2020: 418M

\*The total figure in the above table is the simple sum of each row and may be different from the actual figure due to rounding

Please provide comments, if any.

{Empty}

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

☒ Yes

☐ No

##### Please specify

Japan has contributed around \$575 million to the Global Environmental Facility (GEF) from April 2017 to March 2021. Breakdown

FY2017 (April 2017 – March 2018): about \$151M

FY2019 (April 2019 – March 2020): about \$212M

FY2020 (April 2020 – March 2021): about \$212M

Please provide comments, if any.

{Empty}

### 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

Japan has voluntarily contributed about \$3 million to the project entitled as "Project for promoting the Minamata Convention by making the most of Japan's knowledge and experiences" implemented by the UNEP Regional Office for Asia and the Pacific from FY2018 to FY2020. This project especially addresses information exchange, awareness and education, research development and monitoring to assist UN member states to improve their national mercury-related information and its platform to promote mercury management in relation to the Convention. Additionally, it will establish a region-wide network of analytical institutions with mercury monitoring capabilities around Asia and the Pacific to bring their capacities to international standards.

Japan supported project formulation on "Development of Capacity for the Substitution and the Environmentally Sound Management of Mercury-containing Medical Measuring Devices" under Japan-ASEAN Integration Fund. This project has been implemented in Indonesia and the Philippines since 2019 and supported those countries in developing situation assessment reports on mercury-containing medical measuring devices in health-care facilities and the guidelines for the environmentally sound management of such products once they became wastes.

Please provide comments, if any.

{Empty}

### Part E – Additional comments on the article in free text if the party chooses to do so

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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

At the Diplomatic Conference of the Minamata Convention in October 2013, Japan expressed its intention to support developing countries and promote voices and messages from Minamata, through the project titled "MOYAI Initiative." As part of this initiative, Japan has promoted the MINAS (MOYAI Initiative for Networking, Assessment and Strengthening), which was designed to support developing countries' efforts in mercury management by providing measures in close collaboration with partners such as Japan International Cooperation Agency (JICA) and relevant international organizations. Examples of these activities are as follows.

Establishment of mercury monitoring network in Asia and Pacific region:

Based on the joint statement by the U.S. Environmental Protection Agency and the MOEJ in August 2015, Japan has contributed to the establishment of a mercury monitoring network in the Asia-Pacific region through the dispatch of experts to periodical meetings of the APMMN (Asia Pacific Mercury Monitoring Network). In addition, Japan held a technical workshop on mercury monitoring in Minamata city to discuss harmonization and quality control for automatic monitoring of mercury in the air.

Since 2016, the MOEJ has been assisting the establishment of a network for mercury monitoring in developing countries. Examples of assistance include: (a) inviting technical staff from developing countries to mercury monitoring laboratories in Japan; (b) sending a team of experts to three developing countries to demonstrate

mercury monitoring for air, water and hair; (c) distributing manual atmospheric mercury sampling toolkits to monitoring institutions in 12 developing countries; and (d) workshops concerning research and monitoring of mercury.

In March 2019, Japan invited relevant governments and research institutes in other countries to Japan and held workshops on atmospheric mercury emission inventories and material flows, multi-media mercury monitoring, long-term mercury modeling and science-policy interaction.

Assistance towards survey/assessment of mercury uses, emissions, and situations in developing countries:  
See answer to Q14.3.

Needs assessment and capacity building in developing countries:

From 2018 to 2020, the MOEJ developed and shared a tool for raising awareness on mercury for Mongolian citizens and organized a workshop in Mongolia on how to use the tool effectively.

In 2017, the MOEJ invited eight government and industry officials from Indonesia associated with ASGM using mercury to Japan, to share Japanese know-how and knowledge to address issues of ASGM. Experts have been dispatched to Indonesia on an ongoing basis to take stock of progress and provide technical advice.

Since 2017, the MOEJ has conducted surveys in Brazil and Iran on mercury countermeasures in the chlor-alkali manufacturing industry (e.g., conversion of manufacturing process from the mercury method to the ion-exchange membrane method, environmentally sound management of surplus mercury and mercury wastes, prevention of mercury leakage and strengthening monitoring).

Since 2019, studies on mercury countermeasures in coal-fired power plants (e.g. mercury mass balance analysis, application of a co-benefits approach and strengthening monitoring) have been conducted in Indonesia and Vietnam.

Following activities were undertaken by JICA;

- Capacity Building for Ratification and Implementation of the Minamata Convention (FY2014 to FY2019).
- Capacity strengthening for multi-media mercury monitoring (FY2017 to FY2019).
- Collaboration Program with the Private Sector for Disseminating Japanese Technology for Mercury Contained Waste Processing in Malaysia (FY2015 to FY2017).
- Feasibility Survey for the Mercury Waste (Oil Sludge) Treatment Technology in Indonesia (FY2017 to FY2019).
- SDGs Business Verification Survey with the Private Sector for the Mercury Stabilization Technology in Indonesia (FY2020 onwards).

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

☐ Yes

☒ No

**Please specify**

Japan is not in a situation where capacity-building support or technical assistance from other countries are needed for the implementation of the Convention.

**Please provide comments, if any.**

{Empty}

#### **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 specify**

From April 2014 to March 2017, the MOEJ compiled mercury countermeasure seeds (technologies, knowledge, etc.) available in Japan and conducted surveys on mercury countermeasure needs in 10 developing countries (Vietnam, Mongolia, Palau, the Philippines, Indonesia, Sri Lanka, Nepal, Iran, Kenya and Brazil). Based on the survey, the MOEJ has been continuously engaged in bilateral cooperation for strengthening regulations, private sector cooperation for technology transfer and various initiatives for project formulation. Japanese businesses who own mercury countermeasure technologies have been dispatched to discuss technology transfer with local governments and companies in Thailand, Vietnam, Myanmar, Malaysia, Brazil, and Iran.

From April 2014 to March 2017, the MOEJ compiled information on mercury countermeasure technologies available in Japan and developed flyers and video clips on potential technologies that could meet the needs of developing countries. These materials were released and distributed on the MOEJ website and at meetings of the Conference of the Parties to the Convention.

<https://www.env.go.jp/en/chemi/mercury/mcm.html>

From April 2016 to March 2020, experts were dispatched to nine countries to assess the capacity of mercury reference laboratories and identify the challenges faced by each country.

## **Part E – Additional comments on the article in free text if the party chooses to do so**

The MOEJ and Associate Professor Misuzu Asari of Kyoto University are co-leads of the Waste Management Area (WMA) of the UNEP–Global Mercury Partnership. The WMA has been undertaking various voluntary activities especially on capacity building, technical assistance and technology transfer in developing countries to promote the environmentally sound management of mercury wastes.

### **▼ 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

**Supplemental: If yes, describe the measures that have been taken.**

Para 1(a) development and implementation of strategies and programmes to identify and protect populations at risk:

Provisional regulation levels for mercury have been set for fish and shellfish distributed for consumption. In addition, the government has issued warnings particularly for pregnant women (fetuses) regarding the types of fish and shellfish that they should pay attention to and the amount they can consume. Furthermore, the Ministry of Health, Labour and Welfare (MHLW) has informed local governments that information on mercury in fish and shellfish should be included in the Maternal and Child Health Handbook.

Para 1(c) health-care services for prevention, treatment and care for populations affected by the exposure to mercury:

Regarding Certified Minamata Disease patients, compensation such as for consolation and medical expenses has been provided based on the compensation agreement with the responsible company, under the certification system based on the Act on Special Measures Concerning Relief for Health Damage by Pollution and the Act Concerning Compensation and Prevention of Pollution-Related Health Damage. In addition, a lump-sum payment by the responsible company and medical treatment expenses by the government were provided, based on the Act on Special Measures Concerning Remedies for the Sufferers of Minamata Disease and Solution to the Problem of Minamata Disease, after the verdict to a damage compensation suit by the Supreme Court in 2004, where the verdict recognized some responsibility of the government together with the responsible companies. The government has also enhanced medical and welfare measures in Minamata Disease-affected areas, including support for the livelihood of fetal Minamata Disease patients, and has taken measures for the regeneration and reconciliation of communities divided by discrimination and prejudice caused by Minamata Disease.

Para 1(d) establish and strengthen the institutional and health professional capacities for the prevention, diagnosis, treatment and monitoring:

The National Institute for Minamata Disease (NIMD), established in 1978, carries out many studies, research, information collection activities relevant to Minamata Disease and its cause, methylmercury, and made them publicly available. These activities contribute towards the prevention of pollution in Japan and other countries and the well-being of affected communities.

Annual Report published by the NIMD:.

[http://nimd.env.go.jp/english/kenkyu/annual\\_reports.html](http://nimd.env.go.jp/english/kenkyu/annual_reports.html)

#### **16.2. Have any other measures been taken to protect human health in accordance with article 16?**

☒ Yes

☐ No

**Supplemental: If yes, describe the measures that have been taken.**

Regarding education on the prevention of occupational exposure to mercury and measures to prevent adverse effects to human health, business operators are required to install equipment to prevent exposure, provide their workers with protective equipment and manage the working environment. In addition, to ensure a safe working environment, the Ministerial Ordinance under the Industrial Safety and Health Act requires that indoor workplaces where mercury vapor is emitted be equipped with instruments to seal the emission source and local exhaust ventilation, and that the concentration of mercury in the working environment be measured once every six months. The results shall be evaluated against the working environment standard (0.025 mg/m<sup>3</sup> for mercury and its inorganic compounds excluding mercury sulfide). Based on the results, the installation and maintenance of facilities or equipment as well as the health check would be required, as appropriate.

**Part E – Additional comments on the article in free text if the party chooses to do so**

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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

**Please provide more information, if any**

Many pamphlets in English are available on the MOEJ website containing an overview of the Convention, basic information and the situation concerning mercury and Japan's efforts to implement the Convention.

English:

<https://www.env.go.jp/en/chemi/mercury/mcm.html>

**Part E – Additional comments on the article in free text if the party chooses to do so**

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▼ 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, please indicate the measures that have been taken and the effectiveness of those measures**

Para 1(a) Provision to the public of available information:

Various pamphlets are available on the MOEJ website containing an overview of the Convention, basic information and the situation surrounding mercury, and Japan's efforts to implement the Convention. At an exhibition for the general public on environmentally friendly products and services (Eco-Products 2020) held online in November 2020, MOEJ exhibited mercury-free and countermeasure technologies and publicized the phase-out of mercury-added products. In addition, MOEJ used Youtube and radio advertisements to publicize the start of regulations on the manufacture and trade of mercury-added products such as thermometers and lamps.

Regarding efforts by businesses, for example, the Battery Association of Japan and the Japan Lighting Manufacturers Association provide information on their websites on how to distinguish mercury-added products.

Para 1 (b) Education, training and public awareness related to the effects of exposure to mercury on human health and the environment:

In addition to relevant measures based on relevant acts and information provision noted above, other information such as "Data sheets on the Results of the Hazardous Substances in Food Products Survey" and "Precautions for Pregnant Women Concerning Mercury and the Consumption of Fish and Seafood" are provided to raise public awareness.

"The PRTR Information Plaza" associated with the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, provides data on chemical substances (including mercury) subject to the PRTR system. In addition, the air emission inventory and mercury material flow are being developed partly with these data. As of December 2021, the FY2018 atmospheric emission inventory and FY2016 material flow are publicly available.

## Part E – Additional comments on the article in free text if the party chooses to do so

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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, please describe these actions

Para 1(a) Inventories of use, consumption, and anthropogenic emissions to air and releases to water and land: MOEJ continues to refine, maintain and update the mercury emission inventory and material flow on an ongoing basis.

Para 1 (b) Modeling and geographically representative monitoring of mercury level:

Monitoring activities include: monitoring of hazardous air pollutants based on the Air Pollution Control Act, monitoring of water quality in public water bodies and groundwater based on the Water Pollution Prevention Act and monitoring of the marine environment based on the Basic Act on Ocean Policy.

In addition, background monitoring has been conducted at Cape Hedo in Okinawa Prefecture and the Oga Peninsula in Akita Prefecture, to understand the achievement status of environmental standards. The results are also published. According to the survey for FY2019 (April 2019 to March 2020), the annual average of the total concentration of mercury by form in the air is 1.7 ng/m<sup>3</sup> at Cape Hedo and 1.5 ng/m<sup>3</sup> at Oga Peninsula. These values are well below the guideline value (annual average of 40 ng /m<sup>3</sup>), which are for reducing health risks from hazardous air pollutants in the environment.

Para 1 (c) Assessments of the impact of mercury on human health and environment:

An analysis on the mercury concentration in the blood of about 20,000 pregnant women was conducted in the Japan Environment and Children's Study (JECS), which has been implemented by MOEJ since 2010. The results were published in the Journal of Exposure Science and Environment

(<https://www.nature.com/articles/s41370-019-0139-0>).

The National Institute for Minamata Disease continues to study and research, collect and organize information, and provide research results and information comprehensively on Minamata Disease and its cause, methylmercury

[http://nimd.env.go.jp/english/kenkyu/annual\\_reports.html](http://nimd.env.go.jp/english/kenkyu/annual_reports.html).

Para 1(e) information on the environmental cycle, transport, transformation and fate of mercury:

Japan conducts the following activities: research on the global dynamics of mercury by both observation and modeling, tests on the long-term stability of stabilized and solidified wastes consisting of mercury, and demonstration tests on the emission of mercury from landfill where stabilized and solidified wastes consisting of mercury is disposed of.

Para 1(f) Information on commerce of mercury-added products:

Para 1(g) Information and research on the technical and economic availability of mercury-free products and processes:

Regarding efforts by businesses, for example, member companies of the Battery Association of Japan do not manufacture mercury-added batteries, and they are promoting the supply of alternative mercury-free

products. In addition, the Japan Lighting Manufacturers Association has set a target in its "Lighting Vision 2030" that 100% of the market stock of lighting equipment should be SSL (semiconductor lighting such as LED, OLED, and laser) by 2030.

**Part E – Additional comments on the article in free text if the party chooses to do so**

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**▼ COMMENTS**

**Part C: Comments regarding possible challenges in meeting the objectives of the Convention (Art. 21, para. 1)**

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**▼ SUPPLEMENTAL – ADDITIONAL COMMENTS**

**Supplemental: Part D: Comments regarding the reporting format and possible improvements, if any**

{Empty}