

FIRST FULL NATIONAL REPORTS OF THE MINAMATA CONVENTION ON MERCURY 2021



DISCLAIMER

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REPORTING PERIOD:

16 August 2017 to 31 December 2020

UNOFFICIAL ENGLISH TRANSLATION

▼ INFORMATION ON THE PARTY

1. Information on the party

Name of party

China (Macao SAR)

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

{Empty}

Date of entry into force of the Convention for the party

{Empty}

2. Information on the national focal point

Full name of the institution

Ministry of Ecology and Environment of the People's Republic of China

Title of National Focal Point

Director

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

{Empty}

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.

There were no operating mercury stocks or mercury supply sources in the Macau Special Administrative Region during the reporting period.

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

{Empty}

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

{Empty}

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

Additional information if needed

{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

Regarding the sixth question of Article 3, the supplementary information is as follows:
According to the Chief Executive Order No. 231/2020, the Macao Special Administrative Region has prohibited the import, transshipment and export of mercury and amalgam from December 24, 2020.

▼ 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 no, has the party registered for an exemption pursuant to article 6?

- ☒ Yes
- ☐ No

If yes, for which products (please list)?

- ☒ Batteries, except for button zinc silver oxide batteries with a mercury content < 2% and button zinc air batteries with a mercury content < 2%
- ☒ Switches and relays, except very high accuracy capacitance and loss measurement bridges and high frequency radio frequency switches and relays in monitoring and control instruments with a maximum mercury content of 20 mg per bridge, switch or relay.
- ☒ Compact fluorescent lamps (CFLs) for general lighting purposes that are ≤ 30 watts with a mercury content exceeding 5 mg per lamp burner
- ☒ Linear fluorescent lamps (LFLs) for general lighting purposes: (a) Triband phosphor < 60 watts with a mercury content exceeding 5 mg per lamp; (b) Halophosphate phosphor ≤ 40 watts with a mercury content exceeding 10 mg per lamp
- ☒ High pressure mercury vapour lamps (HPMV) for general lighting purposes
- ☒ Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays
- ☒ Cosmetics (with mercury content above 1 ppm), including skin lightening soaps and creams, and not including eye area cosmetics where mercury is used as a preservative and no effective and safe substitute preservatives are available
- ☒ Pesticides, biocides and topical antiseptics
- ☒ The following non-electronic measuring devices except non-electronic measuring devices installed in large-scale equipment or those used for high precision measurement: (a) barometers; (b) hygrometers; (c) manometers; (d) thermometers; (e) sphygmomanometers

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

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

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 no, has there been an assessment of the risks and benefits of the product that demonstrates environmental or health benefits? Has the party provided to the secretariat, as appropriate, information on any such product?

- ☐ Yes

☒ No

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

Regarding the first question of Article 4, the supplementary measures that have been taken are as follows:

In accordance with the requirements of the Convention and the provisions of Decree-Law No. 11/99/M "The Legal System for Issuing Industrial Licenses" from January 1 2021, the industrial license for the production of mercury-added products listed in Part I of Annex A is not approved.

In terms of import and export, in accordance with the requirements of the Convention, the Government of the Macao Special Administrative Region does not approve the import applications of mercury-containing pesticides, biological insecticides and topical antibacterial agents listed in Part I of Annex A from January 1, 2021.

The import and export of other mercury-added products listed in Part I of Annex A have been registered for exceptions according to Article 6.

▼ 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

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▼ 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
- ☐ 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

There are no new emission sources in any of the source categories listed in Annex D.

Attach relevant documentation

{Empty}

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

{Empty}

Progress

{Empty}

▼ 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

{Empty}

Progress

{Empty}

▼ 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

{Empty}

Progress

{Empty}

▼ 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

Since September 2016, the Government of the Macao Special Administrative Region has implemented a phased-in recycling program for waste batteries, waste electrical appliances and waste light sources. The recycling of wastes that may contain mercury will help reduce the amount of mercury-containing waste entering waste incineration facilities, which will reduce mercury emissions of the facilities from the source.

Progress

{Empty}

▼ 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

{Empty}

Progress

{Empty}

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

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

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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
- ☒ I do not know

Please explain

The sewage in the Macao Special Administrative Region is collected and sent to various sewage treatment facilities for treatment. Further assessments will be made in the future in accordance with the methodological guidance for the preparation of mercury release inventories adopted by the Conference of the Parties.

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

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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
- ☐ 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 Government of the Macao Special Administrative Region conducted a survey on the use and storage of mercury and mercury compounds in 2019. The results showed that 14 groups of educational institutions responded that there were a small amount of substances covered by Article 10 of the Convention for the purposes permitted by the Convention, and no large amount of storage of applicable substances was found. Since then, the Environmental Protection Department has compiled the "Guidelines for the Storage of Mercury and Mercury Compounds" with reference to the "Guidelines for the Environmentally Sound Temporary Storage of Mercury Other than Mercury Wastes" for the above-mentioned institutions for reference, as well as for those operators who apply for importing suitable substances as laboratory reagents in the future.

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.

According to Chief Executive Order No. 410/2016, the import and transshipment of hazardous wastes (including mercury wastes) listed in Annex I to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is prohibited from December 13, 2016. In addition, the export of wastes that may contain mercury (such as computer boards, batteries and waste light sources) collected through the "Recycling and Pretreatment of Electrical and Electronic Waste" service will follow the pre-notification processes in accordance with the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal to comply with relevant regulations.

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

Please explain

At present, the Conference of the Parties to the Convention has not yet established a threshold for mercury content and final disposal requirements for mercury wastes contaminated with mercury or mercury compounds. Therefore, it has not been able to assess whether the waste and sewage treatment facilities in the Macao SAR meet the requirements of the Convention.

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

The “Macao Environmental Quality Standards – Soil Control Standards for Commercial and Residential Lands, Industrial Lands and Parks and Green Spaces” (Trial) and “Guidelines for Land Pollution Assessment” (2019 Edition) were adopted on September 1, 2019. The above standards and guidelines provide criteria for assessing existing and potential mercury-contaminated sites and remediation goals for different land-use categories. Relevant documents can be accessed through the following links:
“Macao Environmental Quality Standards – Soil Control Standards for Commercial and Residential Land, Industrial Land and Park Green Space” (Chinese version)
https://www.dsqa.gov.mo/pdf/PO_20190614_DPAA_LandStandard_tc.pdf
Guidelines for Land Pollution Assessment (2019 Edition) (Chinese version)
https://www.dsqa.gov.mo/pdf/PO_20190614_DPAA_LandGuide_tc.pdf

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

By formulating a series of policy planning, etc., China has incorporated mercury compliance tasks into national planning, plans or programs, actively promoted the implementation of relevant work, and gave priority to providing various resources for compliance. National and local governments at all levels and industries and enterprises have invested a lot of capital and resources to actively implement the requirements of the Convention. In addition, the state finance has given financial support to ensure the routine work of compliance. For example, from 2019 to 2021, the departmental budget of the Ministry of Ecology and Environment has allocated 2.84 million yuan for mercury pollution prevention and control to support the daily work of compliance.

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

China has actively contributed to the Global Environment Facility (GEF), the financial mechanism of the Minamata Convention on Mercury. Among others, USD 20 million was donated to the sixth replenishment period and USD 22 million was donated to the seventh replenishment period.

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

In June 2019, Basel Convention Regional Centre for Asia and the Pacific (BCRC), Tsinghua University hosted an international training course on mercury pollution prevention and disposal technologies for countries along the "Belt and Road", which was fully funded by the International Cooperation Department of the Ministry of Science and Technology, with a total funding of about 410,000 yuan.

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

(I) Provide relevant policies as follows:

(1) In 2017, the General Office of the State Council forwarded the Notice of the National Development and Reform Commission, the Ministry of Commerce, the People's Bank of China, and the Ministry of Foreign Affairs on Further Guiding and Regulating the Direction of Overseas Investment (Guoban Fa [2017] 74 No.), in which "overseas investment using outdated production equipment that does not meet the technical standards of the investment destination country" and "overseas investment that does not meet the investment destination country's environmental protection, energy consumption, and safety standards" are listed as restricted overseas investments.

(2) In 2020, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the "Guiding Opinions on Building a Modern Environmental Governance System" to encourage enterprises to participate in the green "Belt and Road" construction and drive advanced environmental protection technologies, equipment and production capacity to go global.

(II) Provide capacity building and technical assistance information as follows:

(1) In June 2019, Basel Convention Regional Centre for Asia and the Pacific (BCRC), Tsinghua University hosted an international training course on mercury pollution prevention and disposal technologies in countries along the "Belt and Road", and invited government officials of relevant departments of mercury management from 8 countries including Thailand and Vietnam, Mongolia, Cambodia, Indonesia, North Korea, Laos, Bangladesh, and representatives of the Basel Convention Iran Center and the

Basel Convention Indonesia Center. The training invited more than 20 experts from China and abroad to give lectures to representatives of regional countries. It included about 26 lessons on policy management of industrial mercury and atmospheric mercury, mercury pollution monitoring, mercury emission characteristics, current status and future development trends of mercury pollution, as well as theme courses on hazardous waste, electronic waste, Chinese traditional culture and others.

(2) From September 2019 to February 2021, Basel Convention Regional Centre for Asia and the Pacific (BCRC), Tsinghua University undertook the UNEP "Implementing Multilateral Environmental Agreement on Chemicals and Wastes in Asia through Enhancing Understanding and Capacity Building" project, which aims to help the Asia-Pacific gap analysis and capacity building activities for chemicals and waste compliance in selected countries in the region. Countries radiated by the project include: India, Indonesia, Mongolia, Sri Lanka, Thailand, Vietnam and other countries.

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

☒ Yes

☐ No

Please specify

This question is a supplementary question, and China has not answered it.

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

(I) In terms of fostering and promoting the development of the latest environmentally sound alternative technologies

(1) Organized the implementation of key special projects such as "recycling of solid waste", "cause and control technology of site soil pollution", "clean and efficient utilization of coal and new energy-saving technology", developed technical equipment for collaborative purification and ultra-low emission of various pollutants such as flue gas dioxins, heavy metals, VOCs, and mercury. The porous carbon material and manganese ore sorbent developed can achieve efficient mercury removal.

(2) "Industrial Structure Adjustment Guidance Catalogue (2019 Version)" encourages mercury recovery and treatment technologies for mercury-containing wastes, and encourages various types of solid waste harmless treatment technology and equipment, as well as solid waste reduction, recycling, and harmless treatment and comprehensive utilization projects.

(II) In terms of promoting technology transfer and dissemination

(1) Established a professional website "Mercury Action in China" in Chinese and English <http://www.mercury.org.cn/>, and a platform website <http://mppc.basic.cas.cn/> to introduce and exchange mercury pollution prevention and control engineering technologies.

(2) Established the WeChat public account "Weiyen Mercury Compliance" for mercury-related compliance consultation and popularization of science.

(3) Promote the dissemination of green technologies such as pollution prevention and solid waste disposal through the "BRI Environmental Big Data Platform" (<http://www.greenbr.org.cn/>).

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

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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

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

The Government of the Macao Special Administrative Region has conducted training on "Hazards of Mercury and Emergency Response" to all staff of the Public Health Laboratory as early as 2012; and has given a total of about 93 lectures to school teachers and students about the health risks of exposure to mercury during the reporting period.

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.

In order to prevent and monitor the health risks related to exposure to mercury, the Government of the Macao Special Administrative Region collected various types of ready-to-eat food, beverages, cereals and oils, and snacks from the fourth quarter of 2017 to the third quarter of 2020 through the "Regular Food Market Inspection Program" A total of more than 9,000 samples were tested for various items including total mercury. The pass rate of test results on a quarterly basis ranges from 99.6% to 100%.

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

(1) Established a national compliance focal point and updated the focal point information in a timely manner.

- (2) Publicized China's implementation of the Convention through display boards during the first Conference of the Parties in 2017.
- (3) Set up a column of "Domestic Compliance Work" on the government website of the Ministry of Ecology and Environment to introduce compliance information.
- (4) In 2019, sent staff to participate in the Asia-Pacific Regional Workshop on the Reduction of Mercury Emissions from Coal Combustion under the Minamata Convention on Mercury organized by the United Nations Environment Programme (UNEP), and introduced the progress of China's implementation of the Convention and the measures taken for the control of mercury emissions from coal combustion.
- (5) In 2019, personnel were sent to Germany and Belgium to exchange experiences on permanent storage and harmless management of mercury waste.
- (6) In 2018, dispatched personnel to Japan to carry out exchanges on mercury waste treatment and disposal technologies and management.

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

During the reporting period, the Environmental Protection Bureau of the Government of the Macao Special Administrative Region has publicized the contents of the Convention to teachers, students and the general public through lectures and web pages.

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

In terms of research:

In order to understand the mercury emissions and releases in the Macao Special Administrative Region, the Macao Special Administrative Region Government took 2017 as the base year and investigated, identified and monitored the main emission sources (waste incineration, oil-fired power plants and

other fuel combustion) and potential release sources (sewage water treatment) accordingly, emission factors applicable to the Macao Special Administrative Region were drawn up. In order to phase out mercury-added products, the "Macao External Trade Goods Classification Table/Coordination System" has added new commodity codes for various mercury-added products since 2017, and investigated circulation of mercury-added products (including dental amalgam) in 2018–2019 and the corresponding substitutes. Subsequently, in 2020, random inspections of various products listed in Part I of Annex A were conducted, and no products with mercury content exceeding the requirements of the Convention were found.

In terms of monitoring:

The Government of the Macao Special Administrative Region has carried out mercury monitoring of environmental media (including biological media) such as seawater, sediments, aquatic organisms, surface water, soil and atmosphere from 2015 to 2018; and since July 2017, regularly monitored the mercury content in the tail water of each sewage treatment plant as the basic data for compliance.

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)

Regarding Question No. 4.3: The Government of the Macao Special Administrative Region conducted a survey on the use of dental amalgam in medical units providing dental services in 2018. The results showed that more than 80% of the effective respondents have not used dental amalgam between 2015 and 2017.

Regarding Question No. 4.4: The Macao Special Administrative Region does not have the production of mercury-added products listed in Annex A. According to the research, investigation and product sampling conducted before and after the entry into force of the Convention, as well as the measures mentioned in Question No. 4.1, currently, there are very few mercury-added products imported before 2021 circulating in Macao, and the possibility of being included in the assembly is very low. Regarding Question No. 4.5: After the entry into force of the Convention for the Macao Special Administrative Region, there has been no known commercial production and distribution of mercury-added products other than those listed in Part I of Annex A of the Convention.

▼ SUPPLEMENTAL – ADDITIONAL COMMENTS

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

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