

# 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 (Hong Kong 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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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.**

In preparation for the implementation of the Minamata Convention on Mercury (the "Convention") in the Hong Kong Special Administrative Region (HKSAR), the HKSAR Government commissioned a consultancy study in 2015, including the identification of mercury stocks in the HKSAR; and in 2018 relevant stakeholders were consulted for the development of new legislation to meet the obligations of the Convention. Both the 2015 study results and the 2018 consultation results showed that there are no individual stocks of mercury or mercury compounds of more than 50 metric tons in the HKSAR and no mercury supply sources that generate stocks of more than 10 metric tons per year.

**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

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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.

Sections 13, 14 and 15 of the Mercury Control Ordinance (Cap. 640) prohibit the manufacture, import or export of mercury-added products listed in Part I of Annex A to the Convention, but the restrictions do not apply to pesticides regulated by the Pesticides Ordinance (Chapter 133). Chapter 133 prohibits the manufacture, import or export of mercury-containing pesticides through a licensing system.

#### **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.**

On October 18, 2018, the Department of Health of the Hong Kong Special Administrative Region Government, together with the Hong Kong Dental Council, the Faculty of Dentistry of the University of Hong Kong, the Faculty of Dentistry of Hong Kong and the Hong Kong Dental Association, issued the "Minamata Convention on Mercury and Consensus on the Phase-out of Dental Amalgam Plan statement". To gradually reduce the use of dental amalgam in Hong Kong SAR, the statement lists the following five recommendations:

1. The use of mercury-free fillings should be considered as far as possible. The use of dental amalgam should only be considered when the use of mercury-free fillings is not suitable, such as difficulty in controlling saliva;
  2. Only pre-measured and encapsulated dental amalgam should be used;
  3. Amalgam separators are strongly recommended to be installed to retrieve the amalgam debris and residues;
  4. Amalgam waste must be properly stored, handled and disposed of in accordance with the provisions of the Waste Disposal (Chemical Waste) (General) Regulation; and
  5. Without apparent clinical need, amalgam fillings should not be removed and replaced with other fillings. If a patient requests removal of amalgam fillings based on some unclear or self-perceived symptoms, the patient should be clearly informed of the possible impact of this decision.
- The full text of the statement (in English only) can be found on the website of the Dental Service of the Department of Health ([www.dh.gov.hk/english/main/main\\_ds/files/consensus\\_statement.pdf](http://www.dh.gov.hk/english/main/main_ds/files/consensus_statement.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.**

Section 15 of the Mercury Control Ordinance (Cap. 640) prohibits the incorporation of a Schedule 3 regulated mercury-added product (ie the mercury-added products listed in Part I of Annex A to the Convention) as an integral part of another thing.

#### **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.**

Regarding the commercial production of mercury-added products, the production process carried out in the Hong Kong SAR is subject to the regulation of the Water Pollution Control Ordinance (Cap. 358). Production processes involving the emission of pollutants into the air or the disposal of chemical waste are subject to the regulation of the Air Pollution Control Ordinance (Cap. 311) or the Waste Disposal Ordinance (Cap. 354) respectively. The Environmental Protection Department (EPD) can prevent any manufacturing process of any mercury-added products not covered by known uses by refusing to issue the relevant licenses.

In response to the distribution of mercury-added products not covered by known uses, the EPD conducts regular spot checks on mercury-added products in the market pursuant to section 16 of the Mercury Control Ordinance (Cap. 640), and works to prevent distribution activities of mercury-added products.

## **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)

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

Section 17 of the Mercury Control Ordinance (Cap. 640) prohibits any person from carrying out a Annex 2 regulated manufacturing process in the HKSAR, including the production of chlor-alkali using mercury or mercury compounds.

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

- ☒ Yes
- ☐ No

☐ Not applicable (do not have these facilities)

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

Section 17 of the Mercury Control Ordinance (Cap. 640) prohibits any person from carrying out a Annex 2 regulated manufacturing process in the HKSAR, including the production of acetaldehyde using mercury or a mercury compound as a catalyst.

### **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)

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

Section 17 of the Mercury Control Ordinance (Cap. 640) prohibits any person from carrying out a Annex 2 regulated manufacturing process in the HKSAR, including the production of vinyl chloride monomer using mercury or mercury compounds.

#### **SODIUM OR POTASSIUM METHYLATE OR ETHYLATE**

☒ Yes

☐ No

☐ Not applicable (do not have these facilities)

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

Section 17 of the Mercury Control Ordinance (Cap. 640) prohibits any person from carrying out a Annex 2 regulated manufacturing process in the HKSAR, including sodium or potassium methyate or ethylate production in which mercury or mercury compounds are used.

#### **PRODUCTION OF POLYURETHANE USING MERCURY-CONTAINING CATALYSTS**

☒ Yes

☐ No

☐ Not applicable (do not have these facilities)

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

Section 17 of the Mercury Control Ordinance (Cap. 640) prohibits any person from carrying out a Annex 2 regulated manufacturing process in the HKSAR, including the production of

polyurethane using mercury-containing catalysts.

**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

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

The Mines Ordinance (Cap. 285) regulates all prospecting and mining activities in the Hong Kong SAR. According to sections 13 and 20 of the Mines Ordinance, any person who intends to engage in mining or prospecting activities must obtain a mining or prospecting licence from the Director of Mines. According to the mineral resource records, there is no reasonable opportunity for gold mining in the HKSAR.

**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

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

Since the entry into force of the Convention, a new emission source of mercury or mercury compounds has been added to the territory of the Hong Kong SAR, and its category is the smelting and roasting process used in the production of non-ferrous metals. Section 14 of the Air Pollution Control Ordinance (Cap. 311) requires any person to apply for a licence from the Environmental Protection Department to carry out specified processes on premises. The Director of Environmental Protection Department issued a Specified Process Licence under Cap 311 in March 2021 for the new emission source.

The new emission source is a specified process (i.e. "lead work") under the Air Pollution Control Ordinance (Cap. 311), the law of the Hong Kong Special Administrative Region, and is regulated by the licensing system under Section 14 of the law. In order to fulfill the requirements of Article 8(4) of the Convention, the relevant clauses in the license require the licensee to adopt the "best practicable approach" to control the emission of air pollutants (including mercury), and to set emission limits and monitoring requirements. The mercury emission limit for this new source is 0.00525 mg/m<sup>3</sup> (averaged over the sampling period).

The EPD has issued a "Best Practical Approach" guideline on the specified process, which sets out the technical, management and monitoring requirements for emission control, assists the industry in planning the process flow and assessing its needs for anti-pollution equipment, and is in line with the requirements of the Convention. The guideline is similar to best available techniques and best environmental practices. The EPD regularly reviews the relevant emission standards adopted by other advanced environmental protection countries, as well as the best emission reduction technologies in the market, and reviews and revises relevant guidelines in a timely manner.

The new emission source has complied with the relevant licensing requirements and "Best Practicable Approach" guideline, installed wet scrubbers to control and reduce emissions of mercury or mercury compounds, and regularly monitor mercury and mercury compound emissions to ensure compliance with statutory emission limits.

- ☐ 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

Attach relevant documentation

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

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

### ▼ COAL-FIRED POWER PLANTS

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

### Measures

According to the Air Pollution Control Ordinance (Cap. 311), any person must apply to the Environmental Protection Department for a licence before carrying out the specified processes listed in the Ordinance on premises.

Number of sources of coal-fired power plants in the Hong Kong SAR: 2; Specified process in the Air Pollution Control Ordinance: Electrical Engineering; Mercury Emission Limit for Specified Processes: 0.01 mg/m<sup>3</sup> (hourly average ); adopted multi-pollutant control strategies: selective catalytic reducer, wet flue gas desulfurization system and electrostatic precipitator.

The existing emission sources are all specified processes under the Air Pollution Control Ordinance and are regulated by the EPD's licence. The licence stipulates a series of clauses, including the mercury emission cap for the relevant process, and requires the licensee to adopt the "best practicable approach" to control the emission of air pollutants (including mercury), and to set monitoring requirements .

The Environmental Protection Department of the Hong Kong Special Administrative Region has issued the "Best Practical Approach" guideline for the relevant specified processes, setting out the technical, management and monitoring requirements for emission control, to assist the industry in planning the process flow and assessing their needs for anti-pollution equipment, in order to achieve prevention and Reduce emissions of air pollutants such as mercury. The guideline is similar to the best available technology and best environmental practice required by the Convention. The EPD regularly refers to the best available technologies and emission standards of air pollutants including mercury adopted by other advanced countries in environmental protection, and reviews the most advanced air pollutant emission reduction technologies in the market, and reviews and revises relevant guidelines in a timely manner.

Two emission sources were identified. The existing emission sources have adopted Best Available Technology and Best Environmental Practice to control its emissions of mercury or mercury compounds.

These existing sources have all adopted multi-pollutant control strategies that provide co-benefits for mercury or mercury compound emission control. Taking coal-fired power plants as an example, power companies have installed selective catalytic reduction devices, flue gas desulfurization systems and electrostatic precipitators for their main coal-fired generating units. Such equipment can effectively control the emission of sulphur dioxide, nitrogen oxides and respirable suspended particles, and also has the function of removing mercury and its

compounds in flue gas. Similar multi-pollutant control strategies have been adopted at waste incineration facilities and cement clinker production facilities.

Electricity generation is a specified process under the Air Pollution Control Ordinance (Cap. 311), under which a licence is required from the EPD. The EPD has issued Specified Process Licences to coal-fired power plants, setting out the mercury emission caps. In addition, the Hong Kong SAR Government requires power companies to gradually reduce the use of coal-fired power generation through the following measures, in order to reduce the emission of air pollutants (including mercury and its compounds) from the public power generation industry.

Since 1997, the construction of new coal-fired generating units has been prohibited, and power companies have to replace retired coal-fired generating units with new gas-fired generating units. In addition, the government has set emission caps on the three main air pollutants (ie sulphur dioxide, nitrogen oxides and respirable suspended particles) emitted by power plants by formulating statutory technical memorandums, and has gradually tightened the emission caps through regular review of technical memorandums, prompting power plants to reduce the use of coal-fired power generation. In addition, the government encourages power companies to use renewable energy to generate electricity, and promotes energy conservation measures and energy efficiency.

#### **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

According to the Air Pollution Control Ordinance (Cap. 311), any person must apply to the Environmental Protection Department for a licence before carrying out the specified processes listed in the Ordinance on premises.

Number of sources of waste incineration facilities in the HKSAR: 2; Specified processes under the Air Pollution Control Ordinance: (i) chemical waste incineration works; (ii) incinerators; mercury emission caps for specified processes : 0.05 mg/m<sup>3</sup> (averaged over the sampling period); Multipollutant control strategies implemented: (i) selective non-catalytic reducers, spray drying absorbers and bag dust filters; (ii) selective Non-catalytic reducer, sodium bicarbonate/activated carbon injection system and bag dust filter.

The existing emission sources are all specified processes under the Air Pollution Control Ordinance and are regulated by the EPD's licence. The licence stipulates a series of clauses, including the mercury emission cap for the relevant process, and requires the licensee to adopt the "best practicable approach" to control the emission of air pollutants (including mercury), and to set monitoring requirements .

The Environmental Protection Department of the Hong Kong Special Administrative Region has issued the "Best Practical Approach" guidelines for the relevant specified processes, setting out the technical, management and monitoring requirements for emission control, to assist the industry in planning the process flow and assessing their needs for anti-pollution equipment, in order to achieve prevention and Reduce emissions of air pollutants such as mercury. The guidance is similar to the best available technology and best environmental practice required by the Convention. The EPD will regularly refer to the best available technologies and emission standards of air pollutants including mercury adopted by other advanced countries in environmental protection, and review the most advanced air pollutant emission reduction technologies in the market, and review and revise relevant guidelines in a timely manner. Two sources were identified. The existing emission sources have adopted Best Available Technology and Best Environmental Practice to control its emissions of mercury or mercury compounds.

These existing sources have all adopted multi-pollutant control strategies that provide co-benefits for mercury or mercury compound emission control. Taking coal-fired power plants as an example, power companies have installed selective catalytic reduction devices, flue gas desulfurization systems and electrostatic precipitators for their main coal-fired generating units. Such equipment can effectively control the emission of sulphur dioxide, nitrogen oxides and respirable suspended particles, and also has the function of removing mercury and its compounds in flue gas. Similar multi-pollutant control strategies have been adopted at waste incineration facilities and cement clinker production facilities.

Electricity generation is a specified process under the Air Pollution Control Ordinance (Cap. 311),

under which a licence is required from the EPD. The EPD has issued Specified Process Licences to coal-fired power plants, setting out the mercury emission caps. In addition, the Hong Kong SAR Government requires power companies to gradually reduce the use of coal-fired power generation through the following measures, in order to reduce the emission of air pollutants (including mercury and its compounds) from the public power generation industry. Since 1997, the construction of new coal-fired generating units has been prohibited, and power companies have to replace retired coal-fired generating units with new gas-fired generating units. In addition, the government has set emission caps on the three main air pollutants (ie sulphur dioxide, nitrogen oxides and respirable suspended particles) emitted by power plants by formulating statutory technical memorandums, and has gradually tightened the emission caps through regular review of technical memorandums, prompting power plants to reduce the use of coal-fired power generation. In addition, the government encourages power companies to use renewable energy to generate electricity, and promotes energy conservation measures and energy efficiency.

### Progress

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### ▼ CEMENT CLINKER PRODUCTION FACILITIES

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

### Measures

According to the Air Pollution Control Ordinance (Cap. 311), any person must apply to the Environmental Protection Department for a licence before carrying out the specified processes listed in the Ordinance on premises.

Number of sources of waste incineration facilities in the Hong Kong SAR: 1; Specified process in the Air Pollution Control Ordinance: Cement works; Mercury emission limit set for the specified process: 0.05 mg/m<sup>3</sup> (according to the sampling period average); multi-pollutant control strategies adopted: limit mercury in fuels and electrostatic precipitators.

The existing emission source is a specified process under the Air Pollution Control Ordinance and is regulated by the EPD's licence. The licence stipulates a series of clauses, including the mercury emission cap for the relevant process, and requires the licensee to adopt the "best practicable approach" to control the emission of air pollutants (including mercury), and to set monitoring requirements.

The Environmental Protection Department of the Hong Kong Special Administrative Region has issued the "Best Practical Approach" guideline for the relevant specified processes, setting out the technical, management and monitoring requirements for emission control, to assist the industry in planning the process flow and assessing their needs for anti-pollution equipment, in order to achieve prevention and reduce emissions of air pollutants such as mercury. The guideline is similar to the best available technology and best environmental practice required by the Convention. The EPD regularly refers to the best available technologies and emission standards of air pollutants including mercury adopted by other advanced countries in environmental protection, and reviews the most advanced air pollutant emission reduction technologies in the market, and reviews and revises relevant guidelines in a timely manner.

This existing source has adopted best available technology and best environmental practices to control its emissions of mercury or mercury compounds.

This existing source has implemented a multi-pollutant control strategy that can provide co-benefits for mercury or mercury compound emissions control. Taking coal-fired power plants as an example, power companies have installed selective catalytic reduction devices, flue gas desulfurization systems and electrostatic precipitators for their main coal-fired generating units. Such equipment can effectively control the emission of sulphur dioxide, nitrogen oxides and respirable suspended particles, and also has the function of removing mercury and its compounds in flue gas. Similar multi-pollutant control strategies have been adopted at waste incineration facilities and cement clinker production facilities.

Electricity generation is a specified process under the Air Pollution Control Ordinance (Cap. 311), under which a licence is required from the EPD. The EPD has issued Specified Process Licences to coal-fired power plants, setting out the mercury emission caps. In addition, the Hong Kong SAR Government requires power companies to gradually reduce the use of coal-fired power generation through the following measures, in order to reduce the emission of air pollutants (including mercury and its compounds) from the public power generation industry.

Since 1997, the construction of new coal-fired generating units has been prohibited, and power companies have to replace retired coal-fired generating units with new gas-fired generating units. In addition, the government has set emission caps on the three main air pollutants (ie sulphur dioxide, nitrogen oxides and respirable suspended particles) emitted by power plants by formulating statutory technical memorandums, and has gradually tightened the emission caps through regular review of technical memorandums, prompting power plants to reduce the use of coal-fired power generation. In addition, the government encourages power companies to use renewable energy to generate electricity, and promotes energy conservation measures and energy efficiency.

#### Progress

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

☒ Yes

☐ No

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

☐ Yes

☐ No

☒ Have not been a party for 5 years

**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 indicate the measures taken to address releases from relevant sources and the effectiveness of those measures.**

The Convention requires Parties to take one or more of the measures listed in Article 9, paragraph 5, to control the release of mercury or mercury compounds to land or water from relevant sources. The Hong Kong SAR Government has taken the following measures in accordance with paragraph 5 of Article 9: (1) Adopt release limits to control and, where practicable, reduce releases from relevant sources: The Hong Kong SAR Government has mainly adopted the Water Pollution Control Ordinance (Cap. 358) to regulate sewage discharge. The Technical Memorandum: Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (Cap. 358AK) under the Water Pollution Control Ordinance has established discharge standards for different areas and types of receiving water bodies. According to the "Technical Memorandum", mercury is a toxic metal. Depending on the type of receiving water bodies, the upper limit of the discharge standard for mercury-containing sewage is 0.001 to 0.2 mg per liter. The relevant regulatory measures can effectively control the release of mercury and mercury compounds in water bodies.

In addition, according to the Waste Disposal (Chemical Waste) (General) Regulations (Cap. 354 C), substances or things released into land that contain mercury or mercury compounds sufficient to cause pollution or harm to health or are likely to cause pollution to the environment will be considered to be regulated as chemical waste. Chemical waste generators, collectors and disposal facilities are required to register with the EPD or apply for a licence.

(2) Adopt various best available techniques and best environmental practices to control releases from various relevant sources: the discharge of mercury-containing sewage is regulated by the Water Pollution Control Ordinance, and the discharger should apply for a license, and comply with the discharge standards and terms in the license, and treat and discharge mercury-containing sewage.

(3) Develop strategies for simultaneous control of multiple pollutants with a view to achieving synergistic benefits in controlled release:

technical memorandum under the Environmental Impact Assessment Ordinance (Cap. 499) as the guideline for the development of water pollution and waste management impact assessments for designated projects and its mitigation measures to control the release of various pollutants, including toxic substances, into water bodies and land at the planning level. In addition, effluent dischargers should apply for a license in accordance with the Water Pollution Control Ordinance, and abide by the discharge standards and terms in the license to treat and discharge mercury-containing effluent. The Government also collects sewage from each sewage collection area in Hong Kong through the "Master Sewage Collection Plan", diverts it to sewage treatment works for treatment, and finally discharges it to the harbour. These measures can effectively control the release of mercury and mercury compounds in water bodies.

(4) Take other measures aimed at reducing releases from relevant sources:

Mercury or mercury compounds are not unrestricted substances under the 1996 Protocol to the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, so no permit will be issued by EPD for mercury or mercury compounds under the Dumping at Sea Ordinance

(Cap. 466) to restrict the dumping of mercury or mercury compounds into the sea and below the seabed from vessels, aircraft or marine structures etc. If the project proponent applies for the dumping of materials not restricted by the 1996 Protocol (e.g. dredging excavations) containing trace amounts of mercury (0.5 mg/kg dry weight) following the Dumping at Sea Ordinance, such materials must be dumped under the permit requirements, properly dredged and transported, and effectively isolated from the environment upon final disposal.

## 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.**

Pursuant to Sections 11 and 12 of the Mercury Control Ordinance (Cap. 640), except in specific circumstances, any person shall store or use Part 2 chemicals (i.e. mercury, mercury mixtures, mercurous (I) chloride, mercury oxide (II), mercury (II) sulfate, mercury (II) nitrate, mercury sulfide and cinnabar) are required to apply for a possession permit. Before issuing the permit, the Director of Environmental Protection Department of the Hong Kong Special Administrative Region will consider whether the applicant has the ability to store the batch of Part 2 chemicals in an environmentally sound manner in accordance with Article 10 of the Convention. In addition, the "Code of Practice" issued by the EPD adopts the applicable guidelines of the "Guidelines for the Environmentally Sound Temporary Storage of Mercury other than Mercury Wastes" adopted by the Conference of the Parties to the Convention, which provided guidelines for applicants for possession licenses or holders for the environmentally sound use and storage of Part 2 chemicals.

## 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.**

The Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354 C) can effectively fulfill the requirements of Article 11(3) of the Convention on the disposal of mercury wastes. Except for household wastes exempted, wastes containing mercury or mercury compounds sufficient to cause pollution or harm to health or potentially pollute the environment, are subject to chemical waste regulations. Chemical waste generators, collectors and disposal facilities are required to register with the EPD or apply for a licence.

In addition, in order to implement the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, under the premise of environmentally sound and effective management of hazardous wastes, transboundary movements of hazardous wastes should be minimized. The Waste Disposal Ordinance (Cap. 354) effectively controls the import and export of mercury waste. Mercury waste is a hazardous waste, and a permit issued by the Environmental Protection Department is required under the Waste Disposal Ordinance before being imported into or exported from the HKSAR.

**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**

For new projects, according to the Environmental Impact Assessment Ordinance (Cap. 499), designated projects must first undergo land pollution assessment and remediation. The EPD has formulated



guidelines on land pollution assessment and remediation, including "Guidelines for Assessment and Remediation of Contaminated Land" which provides requirements for assessing and managing contaminated land, and "Guidelines for the Use of Risk-Based Land Pollution Remediation Standards" listed Risk-based soil and groundwater remediation standards for mercury under corresponding land uses, and the "Practical Guidelines for Survey and Remediation of Contaminated Land" provided guidance for soil and groundwater contamination surveys, assessments, and remediation. For existing projects or premises, the Water Pollution Control Ordinance (Cap. 358) regulates the discharge of mercury-containing sewage from projects or premises, while the Waste Disposal Ordinance (Cap. 354) regulates the disposal activities of mercury on premises waste to effectively identify and assess sites contaminated with mercury or mercury compounds.

## **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 relevant information is provided as follows:

China, by formulating a series of policy plannings, etc., incorporates the task of mercury compliance into its national planning, plans or programs, actively promotes the implementation of relevant work, and gives priority to providing various resources for compliance. National and local governments at all levels and industrial 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**

The relevant information is provided as follows:

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**

The relevant information is provided as follows:

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 RMB.

Please provide comments, if any.

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**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, the 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 has not been answered.

### 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

The explanations are provided as follows:

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

(1) Organized the implementation of "solid waste recycling", "cause and control technology of site soil pollution", "clean and efficient utilization of coal and new energy-saving technology" and other key special projects, and 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 Centre for Health Protection of the Hong Kong Special Administrative Region Department of Health provides health information on mercury poisoning to the public. For details, please visit the website <<https://www.chp.gov.hk/en/healthtopics/content/459/8949.html>> and the publication Poisoning Direct (Traditional Chinese version only) <[https://www.chp.gov.hk/files/pdf/vol\\_2\\_iss\\_2\\_20091217\\_eng.pdf](https://www.chp.gov.hk/files/pdf/vol_2_iss_2_20091217_eng.pdf)>.

#### 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.**

Medical Device Division, Department of Health, Hong Kong Special Administrative Region, through educational leaflets related to medical devices, such as "Use a Thermometer to Measure Body Temperature Correctly" (Traditional Chinese version only) ([https://www.mdd.gov.hk/filemanager/common/information-publication/thermometer\\_eng.pdf](https://www.mdd.gov.hk/filemanager/common/information-publication/thermometer_eng.pdf)) and lectures on the safe use of medical equipment, reminding the public about the hazards related to mercury and the use of medical equipment containing mercury should be avoided as much as possible. In addition, upon receipt of notification of suspected mercury poisoning cases from the use of mercury-containing products, the Department of Health will immediately launch an investigation and refer the products causing mercury poisoning to relevant law enforcement agencies for follow-up. It will also issue press releases in due course to remind the public to immediately stop using mercury-containing products and provide health information about mercury poisoning.

## 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**

In addition to providing health information on mercury poisoning to the public, the Hong Kong SAR Government also provides public information on the health and environmental effects of mercury and mercury compounds through publicity publications, websites, and during the public consultation period for the legislative proposal of the Mercury Control Ordinance. Information on the Hong Kong SAR's compliance with the requirements of the Convention and the control of the Mercury Control Ordinance.

**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**

The Hong Kong Special Administrative Region Government regularly monitors the mercury content of different environmental media, and the monitoring frequency is listed as below:

Environmental media type: river water monitoring frequency: once a month

Environmental media type: river bottom sediment monitoring frequency: once every six months

Environmental media type : Seawater monitoring frequency: Once a year

Environmental media category: Submarine sediment monitoring frequency: Once every six months

Environmental media category: Biological monitoring frequency: Once a year

Environmental media category: Air monitoring frequency: Once every six days

**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)**

none

**▼ SUPPLEMENTAL – ADDITIONAL COMMENTS**

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

none