

**Business Facilitation Advisory Committee
Wholesale and Retail Task Force**

The Mercury Control Ordinance

Purpose

This paper aims to brief members on the regulatory framework under the Mercury Control Ordinance (Cap. 640) (“the Ordinance”) which has come into effect to implement the Minamata Convention on Mercury (“the Convention”) in the Hong Kong Special Administrative Region (“the HKSAR”).

Background

2. Mercury is a naturally occurring heavy metal which is highly toxic. Owing to its unique physical and chemical properties, mercury has been used in various products and processes for a very long time. However, once released, mercury stays in the environment in various forms and can be transported in the atmosphere to places at a distance. It can be bioaccumulated in the ecosystems and can pose a serious threat to human health and the environment. Recognising its harmful effects, the United Nations Environment Programme developed the Convention which is an international treaty with the objective to control anthropogenic releases of mercury. The People’s Republic of China is one of the Parties to the Convention, and the Convention also applies to the HKSAR.

3. The Convention¹ contains provisions imposing restrictions and control on a range of activities, processes, industries and products where mercury is sourced, used, released or emitted. To implement the Convention in the HKSAR, the Government introduced in May 2021 the Mercury Control Bill which was passed by the Legislative Council (“LegCo”) in June 2021. The Ordinance came into effect on 1 December 2021.

¹ The text of the Convention can be downloaded from the website of the Minamata Convention on Mercury at the following link: <https://www.mercuryconvention.org/en/resources/minamata-convention-mercury-text-and-annexes>

The Regulatory Framework for the Ordinance

4. The Ordinance² ensures the HKSAR's full compliance with the obligations under the Convention, and protects public health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. The Ordinance has four main provisions, namely to introduce a permit system to control import and export of mercury and mercury mixtures; introduce a permit system to control the storage of mercury and mercury compounds; prohibit the manufacture, import, export and supply of mercury-added products (“MAPs”) listed in the Convention; and prohibit manufacturing processes listed in the Convention in which mercury or mercury compounds are used.

Permit System to Control Import/ Export of Mercury

5. The Ordinance introduces a permit system under which the import and export of mercury³ and mercury mixture⁴ require the issue of a permit by the Director of Environmental Protection (“DEP”). In Hong Kong, mercury or mercury mixtures are mainly used for laboratory-scale research or as reference standard materials. Before issuing the permit, the DEP will consider factors including the use of the mercury; whether the import/ export activities comply with the written consent requirements under the Convention and whether the mercury would be stored in an environmentally sound manner, etc. Details of these factors are listed in the application guidelines published on the Environmental Protection Department (“EPD”) website:-

https://www.epd.gov.hk/epd/sites/default/files/epd/english/international_conventions/MCO/MCO_Guidelines_IE_Permit_Eng_23_12_2021_W3C.pdf.

Permit System to Control the Storage of Mercury and Mercury Compounds

6. The Convention requires mercury, mercury mixtures and six mercury compounds at **Annex A** to be stored in an environmentally sound manner, e.g., provision of storage facilities equipped with intact and leak-proof containers as well as proper drainage and discharge collection system. Under the Ordinance, any person who keeps and uses the chemicals at **Annex A** should obtain a possession permit issued under the Ordinance. Guidelines for applying for possession permits can be found on EPD’s website:

https://www.epd.gov.hk/epd/sites/default/files/epd/english/international_conven

² The full text of the Ordinance can be downloaded from the following link: <https://www.elegislation.gov.hk/hk/cap640>

³ “Mercury” means elemental mercury (Hg(0), Chemical Abstracts Service registry number 7439-97-6).

⁴ “Mercury mixture” means a mixture, having a mercury concentration of at least 95% by weight, of mercury and other substances (including alloys of mercury).

[tions/files/MCO_Guidelines_Possession_Permit_Eng_22_10_W3C.pdf](#).

Prohibition of the Manufacture, Import, Export and Supply of Mercury-added Products listed in the Convention

7. The Ordinance prohibits the manufacture, import and export of MAPs listed on the Convention (**Annex B**). The Ordinance also prohibits the supply and sale of these MAPs with effect from 1 December 2024 to allow the trades to exhaust their existing stock of MAPs, such as mercury-containing compact fluorescent lamp and linear fluorescent lamp, within a reasonable period of time.

Control on the Use of Mercury or Mercury Compounds in Manufacturing Processes

8. The Ordinance prohibits the carrying out of five manufacturing processes involving the use of mercury or mercury compounds listed in the Convention. These manufacturing processes are at **Annex C**. Results of the survey conducted by EPD show that there is no manufacturing process using mercury or mercury compounds in Hong Kong.

Implications on the Business Sector

9. As most of the HKSAR's major trading partners have become Parties to the Convention, and that there are no industries or trades in the HKSAR that rely heavily on the use or trading of mercury, the Ordinance is not expected to impose significant burden on the business sector. Its impact on consumers is also minimal due to the availability of mercury-free substitutes in the market, such as LED light bulbs that can replace compact fluorescent lamps with mercury.

Implementation of the Ordinance

10. To inform the public of the new regulatory requirements to control the harmful effects of mercury, the EPD issued in September 2021 a press release to publicise the enactment of the Ordinance. Publicity materials, including posters and leaflets, have also been posted or distributed at border control points, Territorial Control Office of EPD and EPD website⁵.

11. The EPD has been communicating closely the trades and stakeholders since 2018 on the implementation of the Convention. Following the enactment

⁵ The publicity materials can be downloaded from the EPD website at the following link: https://www.epd.gov.hk/epd/english/international_conventions/mercury/mco/poster_and_leaflet.html

of the Ordinance, the EPD issued letters to the trades to explain to them the regulatory requirements under the Ordinance. The EPD has also published relevant guidelines to assist the trades in applying for the import, export and possession permits under the Ordinance.

12. Members are invited to note the content of this paper.

Environmental Protection Department
May 2022

Annex A

Chemicals Specified in Part 2 of Schedule 1 to the Ordinance

1.	Mercury
2.	Mercury mixture
3.	Mercury(I) chloride (Hg_2Cl_2 , Chemical Abstracts Service registry number 10112-91-1)
4.	Mercury(II) oxide (HgO , Chemical Abstracts Service registry number 21908-53-2)
5.	Mercury(II) sulphate (HgSO_4 , Chemical Abstracts Service registry number 7783-35-9)
6.	Mercury(II) nitrate ($\text{Hg}(\text{NO}_3)_2$, Chemical Abstracts Service registry number 10045-94-0 or 7783-34-8)
7.	Mercury sulphide (HgS , Chemical Abstracts Service registry number 1344-48-5)
8.	Cinnabar

Regulated Mercury-added Products in Schedule 3 to the Ordinance

1.	<p>Battery, other than—</p> <p>(a) button zinc silver oxide battery having a mercury content of less than 2% by weight; or</p> <p>(b) button zinc air battery having a mercury content of less than 2% by weight.</p>
2.	<p>Switch and relay, other than—</p> <p>(a) very high accuracy capacitance and loss measurement bridge having a mercury content not exceeding 20 mg per bridge; or</p> <p>(b) high frequency radio frequency switch and relay, having a mercury content not exceeding 20 mg per switch or relay, in a monitoring and control instrument.</p>
3.	<p>Compact fluorescent lamp for general lighting that—</p> <p>(a) has a power output not exceeding 30 W; and</p> <p>(b) has a mercury content exceeding 5 mg per lamp.</p>
4.	<p>Linear fluorescent lamp for general lighting—</p> <p>(a) that—</p> <p>(i) is made of triband phosphor;</p> <p>(ii) has a power output of less than 60 W; and</p> <p>(iii) has a mercury content exceeding 5 mg per lamp; or</p> <p>(b) that—</p> <p>(i) is made of halophosphate phosphor;</p> <p>(ii) has a power output not exceeding 40 W; and</p> <p>(iii) has a mercury content exceeding 10 mg per lamp.</p>
5.	<p>High pressure mercury vapour lamp for general lighting.</p>
6.	<p>Cold cathode fluorescent lamp, and external electrode fluorescent lamp, for electronic display—</p> <p>(a) that—</p> <p>(i) has a length not exceeding 500 mm; and</p> <p>(ii) has a mercury content exceeding 3.5 mg per lamp;</p> <p>(b) that—</p> <p>(i) has a length exceeding 500 mm but not exceeding 1 500 mm; and</p> <p>(ii) has a mercury content exceeding 5 mg per lamp; or</p>

	<p>(c) that—</p> <ul style="list-style-type: none"> (i) has a length exceeding 1 500 mm; and (ii) has a mercury content exceeding 13 mg per lamp.
7.	<p>Cosmetics having a mercury content exceeding 1 ppm—</p> <ul style="list-style-type: none"> (a) including skin lightening soap and cream; and (b) excluding a cosmetic product that is intended by its manufacturer to be applied only in the vicinity of the eyes and— <ul style="list-style-type: none"> (i) that contains mercury as preservative; (ii) for which no effective and safe substitute for preservative is available; and (iii) that has a mercury content not exceeding 70 ppm.
8.	<p>Biocide and topical antiseptic.</p>
9.	<p>The following non-electronic measuring devices—</p> <ul style="list-style-type: none"> (a) barometer; (b) hygrometer; (c) manometer; (d) thermometer; (e) sphygmomanometer, <p>other than one that is installed in large-scale equipment, or used for high precision measurement, and for which no suitable mercury-free alternative is available in the market.</p>

Regulated Manufacturing Processes in Schedule 2 to the Ordinance

1.	Acetaldehyde production in which mercury or mercury compounds are used as a catalyst.
2.	Polyurethane production in which catalysts that contain mercury are used.
3.	Sodium or potassium methylate or ethylate production in which mercury or mercury compounds are used.
4.	Vinyl chloride monomer production in which mercury or mercury compounds are used.
5.	Chlor-alkali production in which mercury or mercury compounds are used.