

LEGISLATIVE COUNCIL BRIEF

Merchant Shipping (Prevention and Control of Pollution) Ordinance
(Cap. 413)

**Legislative Amendments to Implement the Latest Requirements under
the International Convention for the Prevention of Pollution from
Ships of the International Maritime Organization**

INTRODUCTION

To implement the latest requirements under the International Convention for the Prevention of Pollution from Ships (“MARPOL”) of the International Maritime Organization (“IMO”) relating to the use of electronic record books on board ships and the fuel efficiency requirement for certain ships navigating in Polar Waters, the Secretary for Transport and Housing (“STH”) has, under sections 3 and 3A of the Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413) (“the Ordinance”), made the following regulations —

- (a) the Merchant Shipping (Prevention of Oil Pollution) (Amendment) (No.2) Regulation 2020, at **Annex A**,
- (b) the Merchant Shipping (Prevention of Pollution by Garbage) (Amendment) Regulation 2020, at **Annex B**; and
- (c) the Merchant Shipping (Prevention of Air Pollution) (Amendment) (No.2) Regulation 2020, at **Annex C**.

BACKGROUND

2. MARPOL seeks to protect the marine environment and minimise pollution arising from ship operations. It was adopted in 1973 and came into force internationally in 1983. Its six Annexes regulate the discharge of different pollutants¹ from ships. In Hong Kong, the requirements of MARPOL are implemented through the Ordinance and its subsidiary legislation.

LEGISLATIVE PROPOSALS

(I) *Use of electronic record books on board ships*

3. Annexes I, V and VI to the MARPOL respectively set out the requirements to prevent pollution by oil, garbage and air pollutants from ships. Under these Annexes, ships are required to keep on board record books² to record various ship operations³. In Hong Kong, the requirements under Annexes I, V and VI to the MARPOL are implemented through the

¹ Annexes to MARPOL govern various substances as follows:

- Annex I: Regulations for the prevention of pollution by oil;
- Annex II: Regulations for the control of pollution by noxious liquid substances in bulk;
- Annex III: Regulations for the prevention of pollution by harmful substances carried by sea in packaged form;
- Annex IV: Regulations for the prevention of pollution by sewage from ships;
- Annex V: Regulations for the prevention of pollution by garbage from ships; and
- Annex VI: Regulations for the prevention of air pollution from ships.

² Various types of ships are required to keep the respective record books on board under MARPOL —

- Annex I — ships of 400 gross tonnage or above and oil tankers of 150 gross tonnage or above are required to keep an Oil Record Book;
- Annex V — ships of 400 gross tonnage or above, all ships engaged in international voyages which are certified to carry 15 or more persons, and all fixed or floating platforms are required to keep a Garbage Record Book; and
- Annex VI — ships of 400 gross tonnage or above are required to keep an Ozone Depleting Substances Record Book.

All ships are required to keep records of engine status when entering or exiting MARPOL-designated nitrogen oxides emission control areas (“ECAs”), and of fuel oil change-overs when entering and exiting MARPOL-designated sulphur oxides ECAs.

³ The precise entries to be made in record books vary from Annex to Annex. In general, whenever ships load or unload cargo, discharge pollutants into the sea, or encounter abnormalities, they are required to record the relevant details (such as the date and time of the occurrence, the quantity and type of cargo/pollutants) in the record books.

Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A) (“the Oil Pollution Regulations”), the Merchant Shipping (Prevention of Pollution by Garbage) Regulation (Cap. 413O) (“the Garbage Pollution Regulation”) and the Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P) (“the Air Pollution Regulation”).

4. This legislative exercise seeks to implement the latest requirement under Annexes I, V and VI relating to the use of electronic record books on board ships. With the advent of transacting shipping business via electronic means, the IMO adopted two resolutions⁴ to amend Annexes I, V and VI to allow the use of electronic record books as an alternative to traditional hard copy record books. The resolutions also allow administrations⁵ to accept electronic record books, which are deemed to have same status as those in paper form. The amendments will come into force globally on 1 October 2020. Amendments to the relevant provisions of the Oil Pollution Regulations, the Garbage Pollution Regulation and the Air Pollution Regulation under the Ordinance are required to make it explicit that the use of electronic record books would be allowed after approval.

(II) Application of Energy Efficiency Design Index requirements to ships having ice-breaking capabilities

5. To reduce pollution caused by fuel combustion emissions from ships, the IMO established a technical measure known as the Energy Efficiency Design Index (“EEDI”) under Annex VI to MARPOL. The EEDI requires a minimum energy efficiency level for different ship type and size. As long as the required energy efficiency level is attained, ship designers and builders are free to use the most cost-efficient solutions for the ship to comply with the requirements. Ships delivered on or after 1 July 2015 are required to attain a minimum EEDI, the level of which is determined based on their types and sizes. Cargo ships having ice-breaking capabilities are currently exempted from EEDI requirements in view of the extra engine power they need to navigate through icy waters, which makes compliance with EEDI requirements infeasible. In Hong Kong, the EEDI

⁴ The two resolutions are MEPC. 314(74) and MEPC. 316(74).

⁵ For the purpose of subsidiary legislation under Cap. 413, the Director of Marine is the administration for Hong Kong ship, and the government of any place outside Hong Kong whose flag the ship is entitled to fly is the administration for non-Hong Kong ships, and, with respect to fixed or floating platforms engaged in the exploration, exploitation or associated offshore processing of sea-bed mineral resources adjacent to the coast over which the coastal state exercises its rights for the purposes of those activities—the government of that state is the administration.

requirements have already been incorporated into the Air Pollution Regulation.

6. This legislative exercise seeks to incorporate the IMO's latest requirements with regard to the scope of application of the EEDI requirements. To offer an objective set of criteria to ascertain which ships are having ice-breaking capabilities and are thus to be exempted from the EEDI requirements, the IMO exempts the application of EEDI to ships operating in the most severe ice conditions in Polar Waters (i.e. Category A ships as defined in the International Code for Ships Operating in Polar Waters ("Polar Code"))⁶. The amendments will come into force globally on 1 October 2020. We will incorporate these new requirements into the Air Pollution Regulation and make direct references such that the Air Pollution Regulation could be kept up-to-date with the relevant IMO requirements as far as practicable without further legislative amendments.

THE REGULATIONS

Merchant Shipping (Prevention of Oil Pollution) (Amendment) (No.2) Regulation 2020

7. The Merchant Shipping (Prevention of Oil Pollution) (Amendment) (No.2) Regulation 2020 gives effect to the requirements under the amended Annex I to MARPOL on the use of electronic record books on board ships.

Merchant Shipping (Prevention of Pollution by Garbage) (Amendment) Regulation 2020

8. The Merchant Shipping (Prevention of Pollution by Garbage) (Amendment) Regulation 2020 gives effect to the requirements under the amended Annex V to MARPOL on the use of electronic record books on board ships and fixed or floating platforms.

⁶ The Polar Code governs ships navigating in polar waters and its requirements relate to the safety of ship operations, the protection of marine environment and seafarers' training, having regard to the challenging navigational conditions within the waters surrounding the two Poles. Under the Polar Code, ships are classified into one of three categories (Category A, Category B and Category C), depending on factors including where in the polar waters the ship is intended to operate and the seasons in which it will operate there. Category A ships operate in the most severe ice conditions where Category C ships operate in the least severe ice conditions.

Merchant Shipping (Prevention of Air Pollution) (Amendment) (No.2) Regulation 2020

9. The Merchant Shipping (Prevention of Air Pollution) (Amendment) (No.2) Regulation 2020 gives effect to the revised requirements under the amended Annex VI to MARPOL on the use of electronic record books on board ships and the application of EEDI requirements to ships having ice-breaking capabilities.

Application of the Direct Reference Approach

10. The requirements of MARPOL are technical in nature and are updated from time to time by the IMO. In line with the established practice in incorporating the requirements of other marine-related international conventions into our local legislation, we have adopted a direct reference approach where appropriate to allow our local legislation to remain up-to-date as far as practicable⁷.

LEGISLATIVE TIMETABLE

11. The regulations will be published in the Gazette on 12 June 2020 and tabled in the Legislative Council on 17 June 2020 for negative vetting.

IMPLICATIONS OF THE PROPOSAL

12. The implementation of the latest requirements under MARPOL to allow the use of electronic record books as an alternative to hard copy record books is expected to benefit the shipping industry by saving time and costs in the processing and transmission of paper documents in ship operations. It is also in line with the broader trend of transacting shipping business by electronic means. Operators, masters and owners engaged in international voyages are well-informed of the revised requirements and should already be in compliance with these requirements wherever applicable.

⁷ Section 3A of the Ordinance empowers STH to make regulations to give effect to provisions of any international agreements applicable to Hong Kong as in force from time to time, either by setting out or referring to those provisions in the regulations.

13. The proposal will contribute to environmental protection and sustainable development. It is in conformity with the Basic Law, including provisions concerning human rights. It will not affect the current binding effect of the Ordinance and the existing regulations. The proposal has no economic, financial, civil service, productivity, gender or family implications

PUBLIC CONSULTATION

14. We consulted the Hong Kong Fleet Operation Advisory Committee of the Marine Department in October 2019 and the Legislative Council Panel on Economic Development in December 2019. Members supported the proposal.

PUBLICITY

15. A press release will be issued on 12 June 2020. A spokesperson will be available to answer enquiries.

ENQUIRIES

16. Any enquiries on this brief can be addressed to Ms Louisa YAN, Principal Assistant Secretary for Transport and Housing (Transport) (Tel: 3509 8162), or Mr CHOI Chi Chuen, Assistant Director of Marine (Multi-lateral Policy) (Tel: 2852 4408).

Transport and Housing Bureau
Marine Department
June 2020

Merchant Shipping (Prevention of Oil Pollution) (Amendment) (No. 2) Regulation
2020

Section 1

1

**Merchant Shipping (Prevention of Oil Pollution)
(Amendment) (No. 2) Regulation 2020**

(Made by the Secretary for Transport and Housing under sections 3 and 3A
of the Merchant Shipping (Prevention and Control of Pollution) Ordinance
(Cap. 413))

1. Commencement

This Regulation comes into operation on 1 October 2020.

2. Merchant Shipping (Prevention of Oil Pollution) Regulations amended

The Merchant Shipping (Prevention of Oil Pollution) Regulations
(Cap. 413 sub. leg. A) are amended as set out in section 3.

3. Regulation 10 amended (Oil Record Book)

(1) After regulation 10(1)—

Add

“(1A) An electronic record book may be used for recording
matters to be recorded in the Oil Record Book only if the
electronic record book is approved by the following
authority after taking into account the guidelines
developed by IMO—

- (a) for a Hong Kong ship—the Director; or
- (b) for a non-Hong Kong ship—an Administration.”.

(2) Regulation 10(4), after “each completed page”—

Add

“or group of electronic entries”.

Merchant Shipping (Prevention of Oil Pollution) (Amendment) (No. 2) Regulation
2020

Section 3

2

(3) After regulation 10(6)—

Add

“(7) In this regulation—

electronic record book (電子紀錄簿) means a device or
system used for recording in electronic form the matters
required to be recorded in an Oil Record Book under these
Regulations.”


Secretary for Transport and Housing

9 June 2020

Explanatory Note

This Regulation amends the Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413 sub. leg. A) to give effect to the revisions made to Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, by the International Maritime Organization Resolution MEPC.314(74). The revisions relate to the use of electronic record books on ships.

Merchant Shipping (Prevention of Pollution by Garbage) (Amendment) Regulation
2020

Section 1

1

**Merchant Shipping (Prevention of Pollution by
Garbage) (Amendment) Regulation 2020**

(Made by the Secretary for Transport and Housing under sections 3 and 3A
of the Merchant Shipping (Prevention and Control of Pollution) Ordinance
(Cap. 413))

1. Commencement

This Regulation comes into operation on 1 October 2020.

**2. Merchant Shipping (Prevention of Pollution by Garbage)
Regulation amended**

The Merchant Shipping (Prevention of Pollution by Garbage)
Regulation (Cap. 413 sub. leg. O) is amended as set out in sections
3, 4 and 5.

3. Section 2 amended (interpretation)

Section 2(1)—

Add in alphabetical order

“*electronic record book* (電子紀錄簿) means a device or
system used for recording in electronic form the matters
required to be recorded in a Garbage Record Book under
this Regulation;”.

4. Section 11 amended (Garbage Record Books)

(1) After section 11(3)(b)—

Add

Merchant Shipping (Prevention of Pollution by Garbage) (Amendment) Regulation
2020

Section 5

2

“(ba) the Book must be signed in compliance with the
applicable requirements in Regulation 10.3.1 of Annex
V;”.

(2) After section 11(3)—

Add

“(3A) An electronic record book may be used for recording
matters to be recorded in the Book only if the electronic
record book is approved by the following authority after
taking into account the guidelines developed by IMO—

- (a) for a Hong Kong ship—the Director;
- (b) for a non-Hong Kong ship—the government of a
place outside Hong Kong whose flag the ship is
entitled to fly; or
- (c) for a fixed or floating platform engaged in the
exploration, exploitation or associated offshore
processing of sea-bed mineral resources adjacent to
the coast over which the coastal state exercises its
rights for the purposes of those activities—the
government of that state.”.

5. Section 15A added


After section 15—

Add

“**15A. Director may recognize organizations to approve electronic
record books**

- (1) The Director may recognize an organization for
approving an electronic record book for a Hong Kong
ship, after taking into account the guidelines developed by
IMO.

- (2) For section 11(3A), an electronic record book approved by the organization is regarded as having been approved under that section.”.



Secretary for Transport and Housing

9 June 2020

Explanatory Note

This Regulation amends the Merchant Shipping (Prevention of Pollution by Garbage) Regulation (Cap. 413 sub. leg. O) to give effect to the revisions made to Annex V to the International Convention for the Prevention of Pollution from Ships, 1973, by the International Maritime Organization Resolution MEPC.314(74). The revisions relate to the use of electronic record books on ships and fixed or floating platforms.

Merchant Shipping (Prevention of Air Pollution) (Amendment) (No. 2) Regulation 2020

(Made by the Secretary for Transport and Housing under sections 3 and 3A of the Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413))

1. Commencement

This Regulation comes into operation on 1 October 2020.

2. Merchant Shipping (Prevention of Air Pollution) Regulation amended

The Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413 sub. leg. P) is amended as set out in sections 3 to 8.

3. Section 2 amended (interpretation)

(1) Section 2(1), definition of *special ship*—

Repeal paragraph (b)

Substitute

“(b) a Category A ship as defined by section 2 of the Introduction of the Polar Code;”.

(2) Section 2(1)—

Add in alphabetical order

“*electronic record book* (電子紀錄簿) means a device or system used for recording in electronic form the matters required to be recorded in an Ozone Depleting Substances Record Book, or in other records kept on board a ship, under this Regulation;

Polar Code (《極地規則》) means the International Code for Ships Operating in Polar Waters, adopted by IMO Resolutions MSC.385(94) and MEPC.264(68), as from time to time revised or amended by any revision or amendment to any provision of the Code that applies to Hong Kong;”.

4. Section 11 amended (duty to maintain Record Book)

Section 11—

Repeal subsection (2)

Substitute

“(2) An electronic record book may be used for recording matters to be recorded in the Record Book only if the electronic record book is approved by the following authority after taking into account the guidelines developed by IMO—

(a) for a Hong Kong ship—the Director; or

(b) for a non-Hong Kong ship—an Administration.

(3) If the Record Book forms part of the electronic recording system of the ship mentioned in the pre-existing subsection (2) (*pre-existing system*), the provisions in Regulation 12.6 of Annex VI concerning an electronic recording system apply to the pre-existing system.

(4) In subsection (3)—

pre-existing subsection (2) (原有第(2)款) means subsection (2) as in force immediately before 1 October 2020.”.

5. Section 14A amended (duty to keep records for certain diesel engines)

After section 14A(2)—

Add

- “(2A) An electronic record book may be used for recording matters to be recorded in the record mentioned in subsection (2) only if the electronic record book is approved by the following authority after taking into account the guidelines developed by IMO—
- (a) for a Hong Kong ship—the Director; or
 - (b) for a non-Hong Kong ship—an Administration.”.

6. Section 18 amended (change-over of fuel oil on entering or leaving SO_x Emission Control Area)

After section 18(4)—

Add

- “(4A) An electronic record book may be used for recording matters to be recorded in the record mentioned in subsection (4) only if the electronic record book is approved by the following authority after taking into account the guidelines developed by IMO—
- (a) for a Hong Kong ship—the Director; or
 - (b) for a non-Hong Kong ship—an Administration.”.

7. Section 31 amended (offences and penalties)

Section 31(2), after “11(2)”—

Add

“, 14A(2A), 18(4A)”.

8. Section 39 amended (duty to maintain Record Book)

Section 39—

Repeal subsection (2)

Substitute

- “(2) An electronic record book may be used for recording matters to be recorded in the Record Book only if the electronic record book is approved by the following authority after taking into account the guidelines developed by IMO—
- (a) for a Hong Kong ship—the Director; or
 - (b) for a non-Hong Kong ship—an Administration.
- (3) If the Record Book forms part of the electronic recording system of the ship mentioned in the pre-existing subsection (2) (*pre-existing system*), the provisions in Regulation 12.6 of Annex VI concerning an electronic recording system apply to the pre-existing system.
- (4) For subsection (3), the reference to an International Air Pollution Prevention Certificate in Regulation 12.6 of Annex VI is to be construed as a reference to such a certificate or a Hong Kong Air Pollution Prevention Certificate.
- (5) In subsection (3)—
- pre-existing subsection (2)* (原有第(2)款) means subsection (2) as in force immediately before 1 October 2020.”.


Secretary for Transport and Housing

9 June 2020

Explanatory Note

This Regulation amends the Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413 sub. leg. P) to give effect to the revisions made to Annex VI to the International Convention for the Prevention of Pollution from Ships, 1973, by the International Maritime Organization Resolution MEPC.316(74). The revisions relate to—

- (a) the exemption for certain ships designed for operation in polar waters from certain regulations on energy efficiency; and
- (b) the use of electronic record books on ships.