

## **LOCAL VESSELS ADVISORY COMMITTEE**

### **Implementation of MARPOL Annex I Amendments on Local Vessels**

#### **Purpose**

1. The purpose of this paper is to seek members' views on the proposed amendments to the Hong Kong Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A) (the Regulations) to implement the latest requirements of Annex I to the International Convention for the Prevention of Pollution from Ships (MARPOL).

#### **Background**

2. MARPOL Annex I is devised for the prevention of pollution by oil from ships and is implemented through the Regulations in Hong Kong. Since MARPOL Annex I entered into force internationally in 1983, the Marine Environment Protection Committee (MEPC) of International Maritime Organization (IMO) has adopted a large number of revisions to it. The MARPOL Annex I was completely revised by IMO in 2004 and the revised provisions were adopted via the IMO resolution MEPC. 117(52). Further amendments to MARPOL Annex I since 2004 are listed in the Appendix 1.

3. The last major amendment to the Regulations in Hong Kong was made in 1994, as a result there is a gap between the Regulations and the latest provisions of MARPOL Annex I. The principal objective of the amendment exercise is to enable the Regulations to give effect to the updated requirements of MARPOL Annex I.

## **Proposal**

4. It is intended to incorporate the provisions adopted in the MEPC Resolutions listed in Appendix 1 with the exception of MEPC.164(56), MEPC.216(63), MEPC.235(65), MEPC.238(65) and MEPC.246(66) to the Regulations. The excluded MEPC resolutions are either obligations of authorities or amendments to the IOPP Certificate. No legal enactment is required for those provisions as obligations of authority could be implemented by administrative measures and format of certificate will not be included in the Regulations. The proposed amendments to the Regulations are set out in Appendix 2 for reference.

## **Consultation**

5. As the MARPOL Convention applies to all ships including local licensed vessels, consultation is made hereby to the Local Vessels Advisory Committee for implementing the relevant IMO resolutions and MARPOL Convention requirements. Due to the size of applicable ships for the MARPOL Annex I provisions, many of the local licensed vessels are not required to comply with these provisions. However, the followings are those provisions which may affect the local licensed vessels in this legislative amendment exercise:

- a. Tanks for oil residues (sludge)*  
*(Reg. 12 of MARPOL Annex I refers)*

Every ship of 400 gross tonnage and above shall be provided with a tank or tanks of adequate capacity to receive the oil residues (sludge). Oil residue (sludge) may be disposed of directly from the oil residue (sludge) tank(s) through the standard discharge connection, or any other approved means of disposal. The oil residue (sludge) tank(s) shall be provided with a designated pump for disposal that is capable of taking suction from the oil residue (sludge) tank(s); and shall have no discharge connections to the bilge system, oily bilge water holding tank(s), tank top or oily water separators except that the tank(s) may be fitted with drains, with manually operated

self-closing valves and arrangements for subsequent visual monitoring of the settled water, that lead to an oily bilge water holding tank or bilge well, or an alternative arrangement, provided such arrangement does not connect directly to the bilge piping system.

*b. Accidental oil outflow performance  
(Reg. 23 of MARPOL Annex I refers)*

For oil tankers of less than 5,000 tonnes deadweight, the MARPOL regulation imposes limitation on the length of each cargo tank so as to limit the amount of cargo oil carried in the tank, which also minimize the oil leakage of each tank in case of accident. This new provision shall apply to oil tankers delivered on or after 1 January 2010. For local vessels licensed under Cap.548 it is proposed that the requirement will only apply to new vessels constructed after the enforcement date of this Amendment Regulation.

*c. Stability instrument  
(Reg. 28(6) of MARPOL Annex I refers, which will enter into force on 1 January 2016)*

All oil tankers shall be fitted with stability instrument capable of verifying compliance with intact and damage stability requirements. Oil tankers constructed before 1 January 2016 shall comply with the requirement at the first scheduled renewal survey of the ship after 1 January 2016 but not later than 1 January 2021. The Director may waive the requirements of stability instrument for the following oil tankers if loaded in accordance with the conditions approved by the Director taking into account the guidelines developed by IMO:

- (a) oil tankers which are on a dedicated service, with a limited number of permutations of loading such that all anticipated conditions have been approved in the stability information provided to the master;
- (b) oil tankers which are loaded within an approved range of loading conditions; or
- (c) oil tankers constructed before 1 January 2016 provided with

approved limiting KG/GM curves covering all applicable intact and damage stability requirements.

### **Implementation of International Requirements**

6. HKSAR should keep in line with the latest international standards for the prevention of oil pollution and should implement the requirements mentioned in paragraph 5 above by amending the Hong Kong Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A). The proposal was discussed in the LVAC Sub-committee on Survey Work of Local Vessels in its meeting on 29 August 2014 and there was no objection to the proposal.

### **Endorsement sought**

7. Members' comments and endorsement are sought on the above proposal to implement the latest MARPOL Annex I requirements for Hong Kong vessels.

Marine Department  
Multi-lateral Policy Division  
September 2014

**Amendments to MARPOL Annex I since 2004**

<b>Year</b>	<b>IMO Resolution</b>	<b>Enter Into Force</b>	<b>Amendments to MARPOL Annex I</b>
2004	MEPC.117(52)	01/01/2007	Provisions were completely revised and addition of regulation 22 and 23 on pump room bottom protection and accidental oil outflow performance respectively
2006	MEPC.141(54)	01/08/2007	Amendments to regulations 1 and 21 and addition of regulation 12A on oil fuel tank protection
2006	MEPC.154(55)	01/03/2008	Addition of regulation 1.11.10 on designation of the Southern South African waters as a special area
2007	MEPC.164(56)	01/12/2008	Amendments to regulation 38 on reception facilities outside special areas
2009	MEPC.186(59)	01/01/2011	Addition of a new chapter 8 concerning transfer of oil cargo between oil tankers at sea and subsequent amendment to the IOPP certificate
	MEPC.187(59)	01/01/2011	Amendments to regulations 1, 12, 13, 17, 38 on tanks for oil residues (sludge)
2010	MEPC.189(60)	01/08/2011	Addition of a new chapter 9 concerning the use or carriage of oils in the Antarctic area
2012	MEPC.216(63)	01/08/2013	Amendments to regulation 38 on regional arrangement for port reception facilities
2013	MEPC.235(65)	01.10.2014	Amendments to Form A and Form B of Supplements to the IOPP Certificate
2013	MEPC.238(65)	01.01.2015	Amendments to MARPOL Annexes I to make mandatory the Code for Recognized Organizations
2014	MEPC.246(66)	01.01.2016	Amendments to MARPOL Annex I to mandate the IMO Instruments Implementation Code (III Code)
2014	MEPC.248(66)	01.01.2016	Amendments to MARPOL Annex I on mandatory carriage requirements for a stability instrument for oil tankers

**Proposed amendments to the  
Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap.  
413A)**

The proposed amendments to the Regulations are listed in the followings:

1. Pump-room bottom protection

A new section is added to the Regulations to specify the pump-room be provided with a double bottom space. The purpose of the double bottom space is to protect the pump-room in case of stranding (Reg. 22 of MARPOL Annex I refers).

2. Accidental oil outflow performance

Reg. 23 of MARPOL Annex I stipulates that oil tankers of 5000 tonnes deadweight and above delivered on or after 1 January 2010 shall meet an accidental oil outflow parameter in the event of collision or stranding. For oil tankers of less than 5000 tonnes deadweight, the regulation imposes limitation on the length of each cargo tank. Due to the technical nature of the regulation, it is proposed to implement this provision via direct reference approach.

3. Oil fuel tank protection

A new section is added to the Regulations to restrict the location of oil fuel tanks of all ships with an aggregate oil fuel capacity of 600m<sup>3</sup> and above delivered on or after 1 August 2010. The purpose of the provision is to protect the oil fuel tanks in the event of collision or stranding (Reg. 12A of MARPOL Annex I refers).

4. Designation of special areas

Following sea areas are to be designated as special area to enhance the protection of these areas against oil pollution by ships (Reg. 1 of MARPOL Annex I refers):

- a. the North West European waters;
- b. the Oman area of the Arabian Sea; and

- c. the Southern South African waters.
5. **Transfer of oil cargo between oil tankers at sea**

A new section is added to the Regulations to require oil tankers of 150 gross tonnage and above engaged in the transfer of oil cargo at sea shall have on board an approved operations plan written in the working language of the ship (Reg. 41 of MARPOL Annex I refers).
6. **Special requirements for Antarctic area**

With the exception of vessels engaged in securing the safety of ships or in a search and rescue operation, the carriage or use of some specified oils are prohibited (Reg. 43 of MARPOL Annex I refers).
7. **Oil tankers carrying heavy grade oil as cargo**

A new section is added to the Regulations to set out the requirements for oil tankers which cannot meet the double hull condition for the carriage of heavy grade oil as cargo, provided that the operation shall not go beyond the date on which the ship reaches 25 years after delivery (Reg. 21 of MARPOL Annex I refers).
8. **Intact stability**

A new section is added to the Regulations to specify the intact stability oil tankers of 5000 tonnes deadweight and above delivered on or after 1 February 2002. The provision is to ensure the ship has adequate stability under the worst possible conditions of cargo and ballast loading including intermediate stages of liquid transfer operations (Reg. 27 of MARPOL Annex I refers).
9. **Stability instrument**

Oil tankers shall be fitted with a stability instrument capable of verifying compliance with intact and damage stability requirements. Oil tankers constructed before 1 January 2016 shall comply with the requirement at the first scheduled renewal survey of the ship after 1 January 2016 but not later than 1 January 2021 (Reg. 28(6) of MARPOL Annex I refers, which will enter into force on 1 January 2016).