

## **Marine Department Notice No. 39 of 2016**

(Statutory Requirements)

### **Implementation of the Merchant Shipping (Prevention of Air Pollution) Regulation on Local Vessels**

The new Merchant Shipping (Prevention of Air Pollution) Regulation, CAP 413P (“the Regulation”) will come into operation on 1 July 2016 to implement the air pollution control requirements set out in Annex VI to the International Convention for the Prevention of Pollution from Ships (the ‘MARPOL’). The Regulation will replace the existing Merchant Shipping (Prevention of Air Pollution) Regulation, CAP 413M.

2. This Regulation is applicable to all Hong Kong registered ships, foreign ships within Hong Kong waters, as well as local vessels as defined in the Merchant Shipping (Local Vessels) Ordinance, CAP 548.

3. This notice serves to advise owners, operators, coxswains and agents of local vessels the specific requirements of the new Regulation applicable to local vessels and provides guidance on the implementation of these requirements. The new Regulation requires local vessels of 400 GT or above to carry on board a Hong Kong Air Pollution Prevention Certificates (HKAPP Certificate), an International Air Pollution Prevention Certificates (IAPP Certificate), or an equivalent certificate or document recognized by the Director.

4. In line with the latest Annex VI to MARPOL requirements, the Regulation will tighten the emission standards for air pollutants generated by ships. The main requirements of the Regulation that local vessels need to comply with are as follows: —

(a) **Prohibition of deliberate emission of Ozone Depleting Substances (ODS)**

The Regulation prohibits any deliberate emission of ODS from vessels. Any installation containing ODS, such as halons and chlorofluorocarbons (CFCs), are prohibited on local vessels which constructed on or after 19 May 2005. However, any installations containing hydro-chlorofluorocarbons (HCFCs) are allowed until 1 January 2020. Any equipment containing ODS if removed from local vessels must be delivered to a reception facility recognized by the appropriate authority of a port. In Hong Kong, pursuant to Waste Disposal (Chemical Waste)(General) Regulation, CAP 354C, disposal of ODS requires engaging licensed waste collectors to collect and deliver the substances to the licensed treatment facility. For details, please refer to the Guidance Note for Ozone Depleting Substances (ODS) Destruction at the Chemical Waste Treatment Centre (CWTC) which is available on the website of Environmental Protection Department ([http://www.epd.gov.hk/epd/english/environmentinhk/air/ozone\\_layer\\_protection/hcfc\\_faq.html](http://www.epd.gov.hk/epd/english/environmentinhk/air/ozone_layer_protection/hcfc_faq.html)).

Local vessels of 400 GT or above must maintain a list of systems and equipment if such systems and equipment are installed on board and containing ODS. Local vessels with rechargeable systems that contain ODS are required to maintain a record of operations, such as discharge, in an ODS Record Book. A sample of these documents is given in the appendix to this notice for reference purposes;

(b) Emission of Nitrogen Oxides (NOx)

The NOx control requirements apply to diesel engine of over 130 kW output power other than those used solely for emergency purposes. The application of different levels of control (Tier) is based on the ship construction date and within any particular Tier, the actual limit value is determined from the engine's rated speed:

Tier	Ship construction date	Total weighted cycle emission limit (g/kWh) n = engine's rated speed (rpm)		
		n < 130	n = 130 to 1999	n ≥ 2000
I	On or after 1.6.2008 But before 1.7.2016	17.0	$45 \times n^{(-0.2)}$	9.8
II	On or after 1.7.2016	14.4	$44 \times n^{(-0.23)}$	7.7

For diesel engine that has undergone non-identical replacement or addition of engine, the Tier appropriate to the date of installation applies. If the modification to an existing installed engine is a substantial modification (as defined in the NOx Technical Code) or the maximum continuous rating of the engine is increased by more than 10%, Tier II emission limits apply to this modified engine installed on ships which constructed on or after 1.1.2011. For ships constructed before 1.1.2011, such modified engines shall comply with Tier I emission limits. In the case of an identical replacement engine, the Tier appropriate to the replaced engine applies.

To demonstrate that a new engine complies with the NOx limits set out above, a copy of the Engine International Air Pollution Prevention Certificate (EIAPP), as well as a Technical File should be available from the engine manufacturers and to be kept onboard.

(c) Sulphur Content of Fuel Oil

On or after 1 July 2016, but before 1 January 2020, the sulphur content of any fuel oil used on board local vessels must not exceed 3.5% m/m. On or after 1 January 2020, the sulphur content of any fuel oil used on board a ship must not exceed 0.5% m/m;

(d) Shipboard Incineration

Shipboard incineration within Hong Kong waters will only be allowed if the incinerator is of IMO approved type and the operation, manual and training follow the requirement of the Regulation. Incinerators other than IMO approved type are strictly prohibited to operate in Hong Kong. In addition, the materials prohibited for shipboard incineration are expanded to include sewage sludge and sludge oil not generated onboard the local vessels, and exhaust gas cleaning system residues.

(e) Fuel Oil Quality

For local vessels of 400 GT or above, bunker delivery notes shall be kept on board for a minimum period of six months after the fuel oil is delivered on board. Whereas for local vessels of less than 400 GT, the keeping of bunker delivery notes on board is not required.

5. The details of the Regulation can be found on the website of Marine Department (<http://www.mardep.gov.hk/en/publication/home.html>). Coxswains, owners/operators of local vessels are required to observe and comply with the requirements of CAP 413P after the Regulation enters into force.
6. For enquiries, please contact Local Vessels Safety Section, 23/F Harbour Building, 38 Pier Road, Central, Hong Kong, telephone number 2852 4444 or by email ([lvs1@mardep.gov.hk](mailto:lvs1@mardep.gov.hk) or [lvs2@mardep.gov.hk](mailto:lvs2@mardep.gov.hk))
7. Marine Department Notice No. 46 of 2008 is hereby revoked.

**Maisie CHENG**  
**Director of Marine**

Marine Department  
Government of the HKSAR  
Date: 6 April 2016

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Table 1 - LIST OF EQUIPMENT CONTAINING OZONE DEPLETING SUBSTANCES (ODS)

Vessels Name: .....

License No: .....

No	Equipment Name	Quantity of Equipment	Refrigerant	Location on board	Total Quantity (kg)	Date of Installation	Coxswains's Name/Signature/Date

**SAMPLE**

Remarks:- This Record should be kept on board and made available for inspection by authorized officer.

