

**ANNEX 6**

**RESOLUTION MEPC.181(59)**

**Adopted on 17 July 2009**

**2009 GUIDELINES FOR PORT STATE CONTROL UNDER THE  
REVISED MARPOL ANNEX VI**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by the international conventions for the prevention and control of marine pollution,

RECALLING ALSO that MARPOL Annex VI entered into force on 19 May 2005,

RECALLING FURTHER resolution MEPC.129(53) by which the Committee adopted the Guidelines for port State control for MARPOL Annex VI,

NOTING that the revised MARPOL Annex VI was adopted by resolution MEPC.176(58) which is expected to enter into force on 1 July 2010,

NOTING ALSO that articles 5 and 6 of the MARPOL Convention and regulations 10 and 11 of MARPOL Annex VI provide control procedures to be followed by a Party to the 1997 Protocol with regard to foreign ships visiting its ports,

RECOGNIZING the need to revise the Guidelines for port State control for MARPOL Annex VI, in accordance with provisions of the revised MARPOL Annex VI,

HAVING CONSIDERED the 2009 Guidelines for port State control under the revised MARPOL Annex VI prepared by the Sub-Committee on Bulk Liquids and Gases at its thirteenth session and reviewed by the Sub-Committee on Flag State Implementation at its seventeenth session,

1. ADOPTS the 2009 Guidelines for port State control under the revised MARPOL Annex VI, as set out in the Annex to the present resolution;
2. INVITES Governments, when exercising port State control for the revised MARPOL Annex VI, to apply the revised Guidelines from 1 July 2010; and
3. AGREES that, at a later stage, the 2009 Guidelines be adopted as amendments to resolution A.787(19) on Procedures for port State control, as amended by resolution A.882(21).

## ANNEX

### 2009 GUIDELINES FOR PORT STATE CONTROL UNDER THE REVISED MARPOL ANNEX VI

#### Chapter 1 GENERAL

1.1 This document is intended to provide basic guidance on the conduct of port State control inspections for compliance with MARPOL Annex VI (hereinafter referred to as “the Annex”) and afford consistency in the conduct of these inspections, the recognition of deficiencies and the application of control procedures.

1.2 The regulations of MARPOL Annex VI contain the following compliance provisions:

- .1 an IAPP Certificate is required for all ships of 400 GT or above engaged in international voyages. Administrations may establish alternative appropriate measures to demonstrate the necessary compliance in respect of ships under 400 GT engaged in international voyages;
- .2 new installations which contain ozone depleting substances, other than hydro-chlorofluorocarbons, are prohibited on or after 19 May 2005. Each ship which has rechargeable systems that contain ozone depleting substances is required to maintain an Ozone Depleting Substances Record Book;
- .3 in the case of the NO<sub>x</sub> controls, Tier I emission limits are applied to all applicable marine diesel engines over 130 kW installed on ships constructed on or after 1 January 2000 and prior to 1 January 2011.

Emission limits equivalent to Tier I may apply to marine diesel engines with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres installed on a ship constructed on or after 1 January 1990 but prior to 1 January 2000 according to regulation VI/13.7.

Tier II emission limits are applied to all applicable marine diesel engines over 130 kW installed on ships constructed on or after 1 January 2011 and prior to 1 January 2016.

Subject to the review set forth in regulation 13.10, Tier III emission limits are applied to all applicable marine diesel engines over 130 kW installed on ships constructed on or after 1 January 2016. However, while these ships are operating outside of an Emission Control Area\* established for NO<sub>x</sub> control, Tier II limits are applied.

Marine diesel engines which are subject to major conversion are to be certified to the required Tier of control according to regulation VI/13.2;

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\* As of DD/MM/YYYY, there is no area designated as Emission Control Area under regulation VI/13.

- .4 SO<sub>x</sub> and particulate matter control should be achieved by either:
  - .1 the sulphur content of any fuel oil used on board ships, subject to the provisions of regulation VI/18.2, is required not to exceed the following limits:
    - .1 4.50% m/m prior to 1 January 2012;
    - .2 3.50% m/m on and after 1 January 2012; and
    - .3 0.50% m/m on and after 1 January 2020, subject to the review set forth in regulations VI/14.8, VI/14.9 and VI/14.10.

However, while ships are operating within an Emission Control Area established for SO<sub>x</sub> and particulate matter control, the sulphur content of fuel oil used on board ships is required not to exceed the following limits:

- .1 1.50% m/m prior to 1 July 2010;
  - .2 1.00% m/m on and after 1 July 2010; and
  - .3 0.10% m/m on and after 1 January 2015;
- or,
- .2 equivalent method as approved (regulation VI/4);
- .5 only those incinerators installed on or after 1 January 2000 are required to comply with the associated requirements (appendix IV to the Annex), however, the restrictions as to which materials may be incinerated apply to all incinerators; and
  - .6 a tanker carrying crude oil is required to have on board and implement a VOC management plan approved by the Administration. Tanker vapour emission control systems are only required where their fitting is specified by the relevant authority.

1.3 Chapters 1 (General), 4 (Contravention and detention), 5 (Reporting requirements) and 6 (Review procedures) of the Procedures for Port State Control adopted by resolution A.787(19), as amended by resolution A.882(21), also apply to these Guidelines.

## **Chapter 2 INSPECTIONS OF SHIPS REQUIRED TO CARRY THE IAPP CERTIFICATE**

### **2.1 Initial inspections**

2.1.1 On boarding and introduction to the master or responsible ship's officer, the port State control officer (PSCO) should examine the following documents, where applicable:

- .1 the International Air Pollution Prevention Certificate (IAPP Certificate) (regulation VI/6), including its Supplement\* ;
- .2 the Engine International Air Pollution Prevention Certificate (EIAPP Certificate) (paragraph 2.2 of the NO<sub>x</sub> Technical Code) including its Supplement, for each applicable marine diesel engine;
- .3 the Technical File (paragraph 2.3.4 of the NO<sub>x</sub> Technical Code) for each applicable marine diesel engine;
- .4 depending on the method used for demonstrating NO<sub>x</sub> compliance for each applicable marine diesel engine:
  - .1 the Record Book of Engine Parameters for each marine diesel engine (paragraph 6.2.2.7 of the NO<sub>x</sub> Technical Code) demonstrating compliance with regulation VI/13 by means of the marine diesel engine parameter check method; or
  - .2 documentation relating to the simplified measurement method; or
  - .3 documentation related to the direct measurement and monitoring method;
- .5 the Approved Method File (regulation VI/13.7);
- .6 written procedures covering fuel oil change over operations where separate fuel oils are used in order to achieve compliance (regulation VI/14.6);
- .7 approved documentation relating to any installed exhaust gas cleaning systems, or equivalent means, to reduce SO<sub>x</sub> emissions (regulation VI/4);
- .8 the bunker delivery notes and associated samples or records thereof (regulation VI/18);
- .9 the copy of the type approval certificate of any shipboard incinerator installed on or after 1 January 2000 (for the incinerators with capacities up to 1,500 kW) (resolutions MEPC.76(40) and MEPC.93(45));
- .10 the Ozone Depleting Substances Record Book (regulation VI/12.6);
- .11 the VOC Management Plan (regulation VI/15.6); and
- .12 any notification to the ship's flag Administration issued by the master or officer in charge of the bunker operation together with any available commercial documentation relevant to non-compliant bunker delivery.

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\* Under regulation 6(2) of MARPOL Annex VI, a ship constructed before the date of entry into force of MARPOL Annex VI shall be issued with an International Air Pollution Prevention Certificate no later than the first scheduled dry-docking after the date of such entry into force, but in no case later than three years after this date.

The PSCO should ascertain the date of ship construction and the date of installation of equipment on board which are subject to the provisions of the Annex, in order to confirm which regulations of the Annex are applicable.

2.1.2 As a preliminary check, the IAPP Certificate's validity should be confirmed by verifying that the Certificate is properly completed and signed and that required surveys have been performed.

2.1.3 Through examining the Supplement to the IAPP Certificate, the PSCO may establish how the ship is equipped for the prevention of air pollution.

2.1.4 If the certificates and documents are valid and appropriate, and the PSCO's general impressions and visual observations on board confirm a good standard of maintenance, the PSCO should generally confine the inspection to reported deficiencies, if any.

2.1.5 In the case where the bunker delivery note or the representative sample as required by regulation VI/18 presented to the ship are not in compliance with the relevant requirements, the master or officer in charge of the bunker operation should have documented that through a Notification to the ship's flag Administration with copies to the port Authority under whose jurisdiction the ship did not receive the required documentation pursuant to the bunkering operation and to the bunker deliverer. A copy should be retained on board the ship, together with any available commercial documentation, for the subsequent scrutiny of port State control.

2.1.6 If, however, the PSCO's general impressions or observations on board give clear grounds (see paragraph 2.1.7) for believing that the condition of the ship or its equipment do not correspond substantially with the particulars of the certificates or the documents, the PSCO should proceed to a more detailed inspection.

2.1.7 "Clear grounds" to conduct a more detailed inspection include:

- .1 evidence that certificates required by the Annex are missing or clearly invalid;
- .2 evidence that documents required by the Annex are missing or clearly invalid;
- .3 the absence of principal equipment or arrangements specified in the certificates or documents;
- .4 the presence of equipment or arrangements not specified in the certificates or documents;
- .5 evidence from the PSCO's general impressions or observations that serious deficiencies exist in the equipment or arrangements specified in the certificates or documents;
- .6 information or evidence that the master or crew are not familiar with essential shipboard operations relating to the prevention of air pollution, or that such operations have not been carried out;
- .7 evidence that the quality of fuel oil, delivered to and used on board the ship, appears to be substandard; or

- .8 receipt of a report or complaint containing information that the ship appears to be substandard.

## **2.2 More detailed inspections**

2.2.1 The PSCO should verify that:

- .1 there are effectively implemented maintenance procedures for the equipment containing ozone-depleting substances; and
- .2 there are no deliberate emissions of ozone-depleting substances.

2.2.2 In order to verify that each installed marine diesel engine with a power output of more than 130 kW is approved by the Administration in accordance with the NO<sub>x</sub> Technical Code and maintained appropriately, the PSCO should pay particular attention to the following:

- .1 examine such marine diesel engines to be consistent with the EIAPP Certificate and its Supplement, Technical File and, if applicable, Record Book of Engine Parameters or Onboard Monitoring Manual and related data;
- .2 examine marine diesel engines specified in the Technical Files to verify that no unapproved modifications, which may affect on NO<sub>x</sub> emission, have been made to the marine diesel engines;
- .3 examine marine diesel engines with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres installed on a ship constructed on or after 1 January 1990 but prior to 1 January 2000 to verify that they are certified, if so required, in accordance with regulation VI/13.7;
- .4 in the case of ships constructed before 1 January 2000, verify that any marine diesel engine which has been subject to a major conversion, as defined in regulation VI/13, has been approved by the Administration; and
- .5 emergency marine diesel engines intended to be used solely in case of emergency are still in use for this purpose.

2.2.3 The PSCO should check whether the quality of fuel oil used on board the ship conforms to the provisions of regulations VI/14 and VI/18\*, taking into account appendix IV to the Annex. Furthermore, the PSCO should pay attention to the record required in regulation VI/14.6 in order to identify the sulphur content of fuel oil used while the ship is within an Emission Control Area under regulation VI/14.3, or that other equivalent approved means have been applied as required.

2.2.4 If the ship is a tanker, as defined in regulation VI/2.21, the PSCO should verify that the vapour collection system approved by the Administration, taking into account MSC/Circ.585, is installed, if required under regulation VI/15.

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\* It should be noted that in the case where bunker delivery note or representative sample as required by regulation VI/18 are not in compliance with the relevant requirements, the master or crew should have documented that fact. Where fuel oil supply was undertaken in a port under the jurisdiction of a Party to the 1997 Protocol, the PSCO should report that non-compliance to the appropriate authority responsible for the registration of fuel oil suppliers (regulation VI/18.10.1).

2.2.5 If the ship is a tanker carrying crude oil, the PSCO should verify that there is on board an approved VOC Management Plan.

2.2.6 The PSCO should verify that prohibited materials are not incinerated.

2.2.7 The PSCO should verify that shipboard incineration of sewage sludge or sludge oil in boilers or marine power plants is not undertaken while the ship is inside ports, harbours or estuaries (regulation VI/16.4).

2.2.8 The PSCO should verify that the shipboard incinerator, if required by regulation VI/16.6.1, is approved by the Administration. For these units, it should be verified that the incinerator is properly maintained, therefore the PSCO should examine whether:

- .1 the shipboard incinerator is consistent with the certificate of shipboard incinerator;
- .2 the operational manual, in order to operate the shipboard incinerator within the limits provided in appendix IV to the Annex, is provided; and
- .3 the combustion chamber flue gas outlet temperature is monitored as required (regulation VI/16.9).

2.2.9 If there are clear grounds as defined in paragraph 2.1.6, the PSCO may examine operational procedures by confirming that:

- .1 the master or crew are familiar with the procedures to prevent emissions of ozone-depleting substances;
- .2 the master or crew are familiar with the proper operation and maintenance of marine diesel engines, in accordance with their Technical Files or Approved Method file, as applicable, and with due regard for Emission Control Areas for NO<sub>x</sub> control;
- .3 the master or crew have undertaken the necessary fuel oil changeover procedures, or equivalent, associated with demonstrating compliance within an Emission Control Area for SO<sub>x</sub> and particulate matter control;
- .4 the master or crew are familiar with the garbage screening procedure to ensure that prohibited garbage is not incinerated;
- .5 the master or crew are familiar with the operation of the shipboard incinerator, as required by regulation VI/16.6, within the limits provided in appendix IV to the Annex, in accordance with its operational manual;
- .6 the master or crew are familiar with the regulation of emissions of volatile organic compounds (VOCs), when the ship is in ports or terminals under the jurisdiction of a Party to the 1997 Protocol to MARPOL 73/78 in which VOCs emissions are to be regulated, and are familiar with the proper operation of a vapour collection system approved by the Administration (in case the ship is a tanker as defined in regulation VI/2.21);

- .7 the master or crew are familiar with the application of the VOC Management Plan, if applicable; and
- .8 the master or crew are familiar with bunker delivery procedures in respect of bunker delivery notes and retained samples as required by regulation VI/18.

### 2.3 Detainable deficiencies

2.3.1 In exercising his/her functions, the PSCO should use professional judgment to determine whether to detain the ship until any noted deficiencies are corrected or to allow it to sail with certain deficiencies which do not pose an unreasonable threat of harm to the marine environment. In doing this, the PSCO should be guided by the principle that the requirements contained in the Annex, with respect to the construction, equipment and operation of the ship, are essential for the protection of the marine environment and that departure from these requirements could constitute an unreasonable threat of harm to the marine environment.

2.3.2 In order to assist the PSCO in the use of these Guidelines, there follows a list of deficiencies, which are considered, taking into account the provisions of regulation VI/3, to be of such a serious nature that they may warrant the detention of the ship involved:

- .1 absence of valid IAPP Certificate, EIAPP Certificates or Technical Files<sup>\*</sup>;
- .2 a marine diesel engine, with a power output of more than 130 kW, which is installed on board a ship constructed on or after 1 January 2000, or a marine diesel engine having undergone a major conversion on or after 1 January 2000, which does not comply with the NO<sub>x</sub> Technical Code or that does not comply with the relevant NO<sub>x</sub> emission limit;
- .3 a marine diesel engine, with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 litres, which is installed on board a ship constructed on or after 1 January 1990 but prior to 1 January 2000, and an Approved Method for that engine has been certified by an Administration and was commercially available, for which an Approved Method is not installed after the first renewal survey specified in regulation VI/13.7.2;
- .4 depending on the method used for demonstrating SO<sub>x</sub> compliance, the sulphur content of any fuel oil being used on board exceeds 4.5% m/m prior to 1 January 2012, 3.50% m/m on and after 1 January 2012 and 0.50% m/m on and after 1 January 2020<sup>1</sup>, taking into account the provisions of regulation VI/18.2;
- .5 non-compliance with the relevant requirements while operating within an Emission Control Area for SO<sub>x</sub> and particulate matter control;

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\* Under regulation 6.2 of MARPOL Annex VI, a ship constructed before the date of entry into force of MARPOL Annex VI shall be issued with an International Air Pollution Prevention Certificate no later than the first scheduled dry-docking after the date of such entry into force, but in no case later than three years after this date.

<sup>1</sup> Or 2025, depending on the results of the review of regulation VI/14.1.3, as described in regulation VI/14.8.



- .6 an incinerator installed on board the ship on or after 1 January 2000 does not comply with requirements contained in appendix IV to the Annex, or the standard specifications for shipboard incinerators developed by the Organization (resolutions MEPC.76(40) and MEPC.93(45));
- .7 the master or crew are not familiar with essential procedures regarding the operation of air pollution prevention equipment as defined in paragraph 2.2.9 above.

**Chapter 3 INSPECTIONS OF SHIPS OF NON-PARTIES TO THE ANNEX AND OTHER SHIPS NOT REQUIRED TO CARRY THE IAPP CERTIFICATE**

3.1 As this category of ships is not provided with the IAPP Certificate, the PSCO should judge whether the condition of the ship and its equipment satisfies the requirements set out in the Annex. In this respect, the PSCO should take into account that, in accordance with article 5(4) of the MARPOL Convention, no more favourable treatment is to be given to ships of non-Parties.

3.2 In all other respects the PSCO should be guided by the procedures for ships referred to in chapter 2 and should be satisfied that the ship and crew do not present a danger to those on board or an unreasonable threat of harm to the marine environment.

3.3 If the ship has a form of certification other than the IAPP Certificate, the PSCO may take such documentation into account in the evaluation of the ship.

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