

PORT STATE CONTROL COMMITTEE INSTRUCTION 56/2023/07

GUIDELINES FOR PORT STATE CONTROL OFFICERS CHECKING COMPLIANCE WITH MARPOL ANNEX VI

Contents

1. INTRODUCTION

- 1.1. General
- 1.2. Goals and purpose
- 1.3. Application
 - 1.3.1 International Air Pollution Certificate
 - 1.3.2 Ozone
 - 1.3.3 NOx regulations
 - 1.3.4 Major Conversion
 - 1.3.5 SOx and particulate matter regulations
 - 1.3.6 Incinerators
 - 1.3.7 VOC
 - 1.3.8 Energy Efficiency
- 1.4. Relevant documentation
- 1.5. Definitions and abbreviations

2. INSPECTION OF SHIP

- 2.1 Pre-boarding preparation
- 2.2 Initial Inspection
 - 2.2.1. Certificates and documents
 - 2.2.2. Initial inspection on ships equipped with equivalent means of SOx compliance
 - 2.2.3. Initial inspection within an ECA or first port after transiting an ECA
 - 2.2.4. Initial inspection outside an ECA or first port after transiting an ECA
- 2.3 Clear grounds
- 2.4 More Detailed Inspection
- 2.5 Expanded Inspection

3. FOLLOW-UP ACTION

- 3.1 Deficiencies warranting detention

4. REPORTING

ANNEX

Annex 1 NON-AVAILABILITY OF COMPLIANT FUEL OIL CLAIMED (FONAR)

1. INTRODUCTION

1.1. Goals and purpose

This Guideline is solely drafted for the purpose of providing guidance to the PSCO in performing a PSC inspection on the subject matter. This Guideline does not restrict the PSCO in the scope of inspection or in using his/her professional judgement while performing the PSC inspection. Third parties cannot claim any rights based on this guideline with regard to the PSC inspection as performed by the PSCO.

1.2. General

Annex VI of MARPOL entered into force on 19 May 2005. The Annex has been revised in 2021, with an effective date of 1 November 2022.

1.3. Application

The provisions of the Annex apply to all ships, except where expressly provided otherwise.

1.3.1 International Air Pollution Prevention Certificate

An IAPP Certificate is required for all ships of 400 GT or above, and platforms and drilling rigs, engaged in international voyages. Ships below 400 GT are not required to be provided with the IAPP Certificate; however, the PSCO should judge whether the condition of the ship and its equipment satisfies the requirements set out in the Annex. Flag States may establish alternative measures to demonstrate compliance of ships of less than 400 GT engaged in international voyages.

For ships flying the flag of a non-Party the PSCO should take into account that, in accordance with article 5(4) of the MARPOL Convention, no more favorable treatment is to be given.

1.3.2 Ozone

Installations, which contain ozone-depleting substances, other than hydrochlorofluorocarbons, are prohibited on ships constructed after 19 May 2005 or in the case of ships constructed before this date when the equipment has a contract delivery date, or is delivered, on or after 19 May 2005.

Installations which contain hydro-chlorofluorocarbons are prohibited on ships constructed on or after 1 January 2020; or in the case of ships constructed before 1 January 2020, which have a contractual delivery date of the equipment to the ship on or after 1 January 2020 or, in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after 1 January 2020.

Each ship required to have an IAPP certificate, which has rechargeable systems that contain ozone-depleting substances, shall maintain an Ozone Depleting Substances Record Book¹.

1.3.3 NO_x regulations

- Tier I emission limits apply to all marine diesel engines with a power output of more than 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 liters installed on a ship constructed on or after 1 January 1990 but prior to 1 January 2000 according to regulation VI/13.7.

¹ According to RESOLUTION MEPC.316(74) (adopted on 17 May 2019) the record book can be electronic. (MARPOL annex VI regulation 12 ozone depleting substances: An electronic recording system referred to in regulation 12.6, as adopted by resolution MEPC. 176(58), shall be considered an electronic record book)

- Tier II emission limits apply to all marine diesel engines with a power output of more than 130kW installed on ships constructed on or after 1 January 2011.
- Tier III emission limits apply to all marine diesel engines with a power output of more than 130 kW installed on ships constructed on or after 1 January 2016, operating in the North American or the United States Caribbean Sea NOx emission control area.
- Tier III emission limits apply to all marine diesel engines with a power output of more than 130 kW installed on ships constructed on or after 1 January 2021, operating in the North Sea or the Baltic Sea NOx emission control area.

1.3.4 Major Conversion

For the purpose of Annex VI/Reg. 13 Major Conversions means²:

- Replacement of an engine;
- Substantial modification (as defined in the NOx Technical Code);

If an engine is replaced with a non-identical marine diesel engine, the replacement engine shall comply with the standards set forth at the time of replacement³.

If the engine is substantially modified the following applies:

- Ships constructed prior to 1 January 2000, Tier I standards shall apply
- Ships constructed on or after 1 January 2000, the standards in force at the time the ship was constructed shall apply

1.3.5 SOx and particulate matter regulations

From 1 March 2020, the sulphur content of fuel oil used or carried (Carriage Ban) for use on board a ship shall not exceed 0.50% m/m.

However, for ships operating within an Emission Control Area the sulphur content of fuel oil used on board ships shall not exceed 0.10% m/m; or Compliance with SOx emission control requirements shall be achieved by an equivalent method as approved.

In case, an oil sample has to be obtained onboard by the PSCO to verify the sulphur content in the fuel oil, this should be done at the ships designated sampling point⁴. The ship's crew must lead the PSCO to the designated sampling point.

1.3.6 Incinerators

Incinerators installed on or after 1 January 2000 are required to comply with requirements contained in Appendix IV to the Annex; however, the list of prohibited substances/materials applies to all incinerators.

1.3.7 VOC

A tanker carrying crude oil is required to have on board and implement a VOC management plan approved by the flag State. Tanker vapour emission control systems are only required where their fitting is specified by the relevant authority. The relevant authorities may vary in each port State (e.g. the environmental agency, the port authorities or the PSC authorities of the port State).

In all other aspects, the PSCO should be guided by the procedures for ships referred to in chapter 2 of this Instruction 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.

² See interpretations 6 and 7 to the Annex.

³ See interpretation 7 to the annex

⁴ A required sampling point is applicable for both new (constructed after entry into force) and existing ships (first renewal survey of the IAPP certificate 12 month or later, after entry into force). The requirement enters into force 1 April 2022. Reference is made to the Guideline for onboard sampling for verification of the sulphur content of the fuel oil used on board ships (Circular MEPC.1/Circ.864)

If the master claims that it was not possible to bunker compliant fuel prior to entering the ECA the PSCO should use the assessment scheme in appendix 1 of this instruction.

1.3.8 Energy Efficiency

To reduce the carbon intensity of international shipping vessels, to which chapter IV of MARPOL Annex VI applies, shall comply with “technical” and “operational” carbon intensity requirements.

The technical requirements are the Energy Efficiency Design Index (EEDI) and the Energy Efficiency Existing Ship Index (EEXI). The EEDI and EEXI are calculated for ships as applicable and reflected on the supplement to the International Energy Efficiency Certificate

Ships must attain EEXI approval once in a lifetime by the first periodical survey (annual, intermediate or renewal) in 2023 at the latest. At the completion of this survey a new IEEC with reference to the new EEXI regulations shall be issued.

For each ship of 5000 GT or above fuel oil consumption data shall be collected over each calendar year (see appendix IX of MARPOL Annex VI). Within three months after the end of the year this data shall be submitted for verification to the Administration or an organization authorized by the administration. Based on this verification a “statement of compliance – fuel oil consumption reporting and operational carbon intensity rating” (SoC) will be issued to the ship.

After the end of calendar year 2023 and the years following specific ship types of 5000 GT or more (see reg.28) shall calculate the attained operational Carbon Intensity Indicator (CII) and report the CII to the administration. The CII is reflected on the SoC including a rating (A – E) of the annual operational carbon intensity of the ship.

For ships rated D for three consecutive years or rated E a corrective action plan shall be developed and included in the SEEMP. The SEEMP is subjected to verification.

1.4. Relevant documentation

For the relevant documentation, please see paragraph 2.2.1 “Certificates and Documents”.

1.5. Definitions and abbreviations

The PSCC Instruction containing “Definitions and Abbreviations” serves as general document and is to be used in conjunction with this Paris MoU document.

2. INSPECTION OF SHIP

2.1. Pre-boarding preparation

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.

2.2. Initial Inspection

2.2.1. Certificates and documents

On boarding and introduction to the master or responsible ship's officer, the PSCO should examine the following documents, where applicable:

1. The International Air Pollution Prevention Certificate (IAPP Certificate, regulation VI/6), including its Supplement.

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. The Engine International Air Pollution Prevention Certificate (EIAPP Certificate, paragraph 2.2 of the NOx Technical Code) including its supplement, for diesel engines on 130 KW after 1 of January 2000, with the exception of emergency diesel

engines, engines installed in lifeboats and any device or equipment intended to be used solely in case of emergency.

The Supplement to the IAPP Certificate should be used to establish how the ship is equipped for the prevention of air pollution;

3. The Technical File (paragraph 2.3.4 of the NOx Technical Code) for each applicable marine diesel engine;
4. The International Energy Efficiency Certificate (IEEC, regulation VI/6) including its supplement.

The IEEC shall be valid throughout the life of the ship unless the ship is withdrawn from service; a new certificate is issued following a major conversion or upon transfer of the ship to another flag State;

5. Statement of Compliance related to the Fuel Oil Consumption Reporting, where applicable⁵ (Regulation 6.4 and 6.5);

5bis. Statement of Compliance related to fuel oil consumption reporting and operational carbon intensity rating (Regulation 6.6 to 6.7) (From June 2024).

5ter. Verified plan of corrective actions for ships rated as D for three consecutive years or rated as E in accordance with regulation 28 (Regulation 6.8) (After June 2024).

6. Depending on the method used for demonstrating NOx compliance for each applicable marine diesel engine:
 - a) the Record Book of Engine Parameters for each marine diesel engine (paragraph 6.2.2.7 of the NOx Technical Code) demonstrating compliance with regulation VI/13 by means of the marine diesel engine parameter check method; or
 - b) documentation relating to the simplified measurement method; or
 - c) documentation related to the direct measurement and monitoring method;

For a ship to which regulation VI/13.5.1 applies for a particular NOx Tier III emission control area and that has one or more installed marine diesel engines certified to both Tier II and Tier III or which has one or more marine diesel engines certified to Tier II only⁶ that there are the required logbook and the recordings for the tier and on/off status of those marine diesel engines while the ship is within an applicable NOx Tier III emission control area;

7. The Approved Method File (regulation VI/13.7);
8. Written procedures covering fuel oil change over operations (which is to be in a working language or languages understood by the crew) where separate fuel oils are used in order to achieve compliance (regulation VI/14.6);
9. Approved documentation relating to exceptions and/or exemptions granted under regulation VI/3;
10. The approved documentation⁷ such as SOx Emission Compliance Certificate (SECC) where issued, EGC SOx Technical Manual (ETM), Onboard Monitoring Manual (OMM), SOx Emission Compliance Plan (SECP) and relating to any installed Exhaust Gas Cleaning System (EGCS) or equivalent means, to reduce SOx emissions (regulation VI/4);

⁵ Only required for ships of 5.000 GT or above

⁶ Unified Interpretation to regulation 13.5.3 set out in MEPC.1/ Circ.795/ Rev.4.

⁷ Resolution MEPC.259(68) - 2015 Guidelines for exhaust gas cleaning systems or MEPC. 184(59) - 2009 Guidelines for exhaust gas cleaning systems or MEPC.17 0(57) - Guidelines for exhaust gas cleaning systems

Document	Scheme A	Scheme B
SECP	X	X
SECC	X	
ETM Scheme A	X	
ETM Scheme B		X
OMM	X	X
EGC Record Book or Electronic Logging System	X	X

11. That the required EGCS monitoring records have been retained and show compliance. Additionally, that the EGCS Record Book including nitrate discharge data and performance records, or approved alternative, has been duly maintained;

In assessing the Emission Ratio and discharge water records the PSCO should be observant/attentive that such factors as transient engine operation or analyses performance outputs may result in isolated "spikes" in the recorded output which, while these measurements in themselves may be above the required Emission Ratio or discharge water limit values, do not indicate that overall the EGCS was not being operated and controlled as required and hence should not be taken as evidence of non-compliance with the requirements;

12. The Energy Efficiency Design Index technical file, where applicable (regulation VI/22)
13. The Ship Energy Efficiency Management Plan (SEEMP, regulation VI/26 and SEEMP PART II with Confirmation of compliance for vessel to which regulation VI/27 apply)
14. The bunker delivery notes (BDNs) and representative samples or records thereof (regulation VI/18);
15. 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, regulation VI/18.2; and
16. If the ship has not been able to obtain compliant fuel oil, the notification to the ship's flag Administration and the competent authority of the relevant port of destination as set out in the appendix.

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. A copy should be retained on board the ship, together with any available commercial documentation, for the subsequent inspection of port State control;

In addition, if the BDN shows compliant fuel, but the master has independent test results of the fuel oil sample taken by the ship during the bunkering which indicates non-compliance, the master may have documented that through a Notification to the ship's flag Administration with copies to the competent authority of the relevant port of destination, the Administration under whose jurisdiction the bunker deliverer is located and to the bunker deliverer;

In all cases, a copy may be retained on board the ship, together with any available commercial documentation, for the subsequent inspection of port State control;

17. The copy of the type approval certificate of applicable shipboard incinerator⁸;
18. The Ozone Depleting Substances Record Book (regulation VI/12.6);
19. The VOC Management Plan (regulation VI/15.6);

The Record Books referenced in sub-paragraphs 5, 10 and 13 above may be presented in an electronic format⁹. A declaration from the Administration should be viewed in order to accept this Electronic Record Book. If a declaration cannot be provided, a hard copy Record Book will need to be presented for examination.

2.2.2. *Initial inspection on ships equipped with equivalent means of SOx compliance*

On ships equipped with equivalent means of compliance, the PSCO should, in addition to par. 2.2.1., where applicable, examine:

1. Evidence that the ship has received an appropriate approval for any installed equivalent means (approved, under trial or being commissioned);
2. Evidence that the ship is using an equivalent means, as identified on the Supplement of the IAPP certificate, for fuel oil combustion units on board or that compliant fuel oil is used in equipment not so covered; and
3. BDNs on board¹⁰ which indicate that the fuel oil is intended to be used in combination with an equivalent means of SOx compliance or the ship is subject to a relevant exemption to conduct trials for SOx emission reduction and control technology research.

In the case where an EGCS is not in compliance with the relevant requirements, the master or officer in charge may have documented that through a Notification to the ship's flag Administration with copies to the competent authority of the relevant port of destination, and present those corrective actions taken in order to rectify the situation in accordance with the guidance given in the EGCS Technical Manual. If a malfunction occurs in the instrumentation for the monitoring of emission to air or the monitoring of wash water discharge to sea, the ship may have alternative documentation demonstrating compliance.

2.2.3. *Initial inspection within an ECA or first port after transiting an ECA*

When a ship is inspected in a port in an ECA designated for SOx emission control, or when the port is first port of call after transiting the ECA the PSCO should, in addition to par. 2.2.1., where applicable, examine:

1. evidence of fuel oil delivered to and used on board with a sulphur content of not more than 0.10% m/m through the BDNs and appropriate onboard records including records of bunkering operations as set out in the Oil Record Book Part 1 (regulation VI/18.5 and VI/14.4); and
2. for those ships using separate fuel oils for compliance with regulation VI/14, evidence of a written procedure (in a working language or languages understood by the crew) and records of changeover to fuel oil with a sulphur content of not more than 0.10% m/m before entering the ECA such that compliant fuel is being used when entering the ECA as required in regulation VI/14.6.

When a ship to which regulation VI/13.5.1 applies for a particular NOx Tier III emission control area is inspected in a port in that area, the PSCO should look at:

1. the records in respect of the tier and on/off status, together with any changes to that status while within that NOx Tier III emission control area, which are to be

⁸ IMO Resolution MEPC. 244(66) 2014 Standard Specification for Shipboard Incinerators

⁹ According to RESOLUTION MEPC.316(74) (adopted on 17 May 2019) the record book can be electronic.

¹⁰ IMO Resolution MEPC. 305(73) Prohibition on the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship is not applicable to fuel oil carried as cargo or for ships fitted with an approved equivalent means of compliance

logged as required by regulation VI/13.5.3 in respect of an installed marine diesel engine certified to both Tier II and Tier III or which is certified to Tier II only¹¹; and

2. the status of an installed marine diesel engine which is certified to both Tier II and Tier III showing that that engine was operating in its Tier III condition on entry into Tier III emission control area and that status was maintained at all times while that marine diesel engine was in operation within that area; or
3. the records related to the conditions associated with an exemption granted under regulation VI/13.5.4 have been logged as required by that exemption and that the terms and duration of that exemption have been complied with as required.

2.2.4. *Initial inspection outside an ECA or first port after transiting an ECA*

When a ship is inspected in a port outside ECA the PSCO should, in addition to par. 2.2.1., examine, where applicable, the same documentation and evidence as during inspections in ports inside the ECA. The PSCO should in particular look at:

1. evidence that the sulphur content of the fuel oil is in accordance with regulation VI/14.1¹² through the BDNs and appropriate onboard records including records of bunkering operations as set out in the Oil Record Book Part 1 (regulation VI/18.5 and VI/14.4); and
2. the volume of low sulphur fuel oils in each tank, as well as the date, time and position of the ship shall be recorded in a logbook (as prescribed by the Administration) at the time that the fuel-change-over operation has been completed prior to entering the ECA or is commenced after exit from such an area

For vessels operating in, or expecting to operate in, low temperature air and/or water conditions the PSCO may pay special attention to:

1. existing pipelines for delivery of compliant fuel oil, with a sulphur content of not more than 0.10% m/m, to machinery spaces are located, or equipped with appropriate heating facilities, to provide functionality of the pipelines in low temperature air and/or water conditions;
2. written fuel change over procedures should include required actions providing fuel delivery to machinery spaces in low temperature water and/or air conditions. The possibility of unavailability of compliant fuel in these conditions should be excluded.
3. existing pipelines for delivery of compliant fuel oil for combustion purposes for propulsion or operation on board a ship is not applicable to fuel oil carried as cargo or for ships fitted with an approved equivalent means of compliance.

2.3 Clear grounds

If, from general impression or observations on board the PSCO has clear grounds for believing that the ship, its equipment or its crew does not substantially meet the requirements, the PSCO should proceed to a more detailed inspection.

"Clear grounds" to conduct a more detailed inspection include (but are not limited to):

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 or malfunctioning of equipment or arrangements specified in the certificates or documents;

¹¹ Unified Interpretation to regulation 13.5.3 set out in MEPC.1/ Circ.795/ Rev.4.

¹² IMO Resolution MEPC. 305(73) Prohibition on the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship is not applicable to fuel oil carried as cargo or for ships fitted with an approved equivalent means of compliance.

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 of inconsistency between information in the bunker delivery note and paragraph 2.3 of the Supplement to the IAPP certificate;
8. evidence that an equivalent means has not been used as required; or
9. evidence, for example by fuel calculators, that the quantity of bunkered compliant fuel oil is inconsistent, delivered to and/or used on board the ship does not comply with the ship's voyage plan; and
10. receipt of a report or complaint containing information that the ship appears to be non-compliant including but not limited to information from remote sensing surveillance of SOx emissions or portable fuel oil sulphur content measurement devices indicating that a ship appears to use non-compliant fuel while in operation/underway;
11. evidence that the tier and/or on/off status of applicable installed marine diesel engines has not been maintained correctly or as required;
12. receipt of a report or complaint containing information that one or more of the installed marine diesel engines has not been operated in accordance with the provisions of the respective Technical File or the requirements relevant to a particular NOx Tier III emission control area; and
13. Receipt of a report or complaint containing information that the conditions attached to an exemption granted under regulation VI/13.5.4 have not been complied with.

2.4. More Detailed Inspection

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.

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 NOx 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 NOx emission, have been made to the marine diesel engines;
3. in the case of an installed marine diesel engine certified to Tier III that the required records, if applicable, in accordance with regulation VI/13.5.3 or in the Technical File, including those required by 2.3.6 of the NOx Technical Code, have been maintained as necessary and that the marine diesel engine, including any NOx control device and associated ancillary systems and equipment, including, where

fitted, bypass arrangements, is maintained in accordance with the associated Technical File and is in good order;

4. if applicable, examine whether the conditions attached to an exemption granted under regulation VI/13.5.4 have been complied with as required;
5. examine marine diesel engines with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 liters 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;
6. 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
7. Emergency marine diesel engines intended to be used solely in case of emergency are still in use for this purpose.

The PSCO should check and verify whether fuel oil complies with the provisions of regulation VI/14 taking into account appendix VI¹³ of this Annex.

The PSCO should pay attention to Shortage or unavailability on board of the ship of fuel oil with a sulphur content of not more than 0.10% m/m due to possible considerable changing of weather conditions during the time the ship operates in the ECA should not be accepted;

The PSCO should check the record required in regulation VI/14.6 in order to identify the sulphur content of fuel oil used by the ship depending on the area of trade. It should be taken into account that another equivalent approved means could have been applied as required. The fuel oil consumed in and outside the ECA, and that there is enough fuel in compliance with regulation VI/14 to reach the next port destination.

Where EGCS is used, the PSCO should check that it has been installed and operated, together with its monitoring systems, in accordance with the associated approved documentation according to the survey procedures as established in the OMM.

If the ship is equipped with an EGCS as an equivalent means of SO_x compliance, the PSCO should verify that the system is properly functioning, is in operation, there are continuous- monitoring systems with tamper-proof data recording and processing devices,⁸ if applicable and the records demonstrate the necessary compliance when set against the limits given in the approved documentation and applies to relevant fuel combustion units on board. Checking can include but is not limited to: emissions ratio, pH, PAH, turbidity readings as limit values given in ETM-A or ETM-B and operation parameters as listed in the system documentation.

If the ship is a tanker, as defined in regulation VI/2.1.31, the PSCO should verify that the vapour collection system approved by the Administration¹⁴ is installed, if required under regulation VI/15.

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

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).

The PSCO should verify that the shipboard incinerator, according to regulation VI/16.6.1, is approved by the Administration. For these units, it should be verified that the incinerator is properly maintained, and that no prohibited substances are incinerated. Therefore, the PSCO should examine whether:

¹³ Amendments to MARPOL VI, Appendix VI, Verification procedures for a MARPOL Annex VI fuel oil sample (Regulation 18.8.2 or regulation 14.8).

¹⁴ IMO Circular MSC/Circ.585 Standards for Vapour Emission Control System,

1. the shipboard incinerator is consistent with the type approval certificate of shipboard incinerator;
2. the operation 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 at all times the unit is in operation (regulation VI/16.9).
4. none of the following substances are incinerated:
 - a) Annex I, II and III cargo residues or related contaminated packing materials;
 - b) polychlorinated biphenyls (PCBs);
 - c) garbage, as defined in, Annex V of the present Convention, containing traces of heavy metals;
 - d) refined petroleum products containing halogen compounds;
 - e) sewage sludge and sludge oil either of which are not generated on board the ship; and
 - f) Exhaust gas cleaning system residues.

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 NOX control;
3. the master or crew are familiar with fuel oil bunkering procedures in connection to the respective bunker delivery notes and onboard records including the Oil Record Book Part 1 (regulation VI/18.5 and VI/14.4) and retained samples as required by regulation VI/18;
4. the master or crew are familiar with the correct operation of an EGCS or other equivalent means on board together with any applicable monitoring and recording, and record keeping requirements;
5. the master or crew are familiar and have undertaken the necessary fuel oil changeover procedures, or equivalent, associated with demonstrating compliance within an Emission Control Area;
6. the master or crew are familiar with the garbage screening procedure to ensure that prohibited garbage is not incinerated;
7. 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;
8. the master or crew are familiar with the regulation of emissions of, volatile organic compounds (VOC), 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); and
9. The master or crew are familiar with the application of the VOC Management Plan, if applicable.

10. The master or crew are familiar with the SEEMP part I on Ship management plan to improve Energy Efficiency, Part II the Ship Fuel Oil Consumption Data Collection Plan and Part III the Ship Operational Carbon Intensity Plan.
11. The Master or the crew are familiar with the verified plan of corrective actions for ships rated as D for three consecutive years or rated as E in accordance with regulation 28 (After June 2024).

2.5 Expanded Inspection

There are no special requirements, related to the Annex, for the PSCO to follow during an expanded inspection.

3. FOLLOW-UP ACTION

3.1. Deficiencies warranting detention

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 under the scope of the Annex provided they will be timely addressed. 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, the navigational safety or the human health and that departure from these requirements could constitute an unreasonable threat of harm to the mentioned protection aspects and should be avoided.

In order to assist the PSCO in the use of these Guidelines the following list describes situations of such, a serious nature, taking regulation VI/3 into account, that they may warrant the detention of the ship involved:

1. absence of valid IAPP Certificate, EIAPP Certificates or Technical Files, if applicable;
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 conform to its Technical File, or where the required records have not been maintained as necessary or where it has not met the applicable requirements of the particular NOX Tier III emission control area in which it is operating;
3. a marine diesel engine, with a power output of more than 5,000 kW and a per cylinder displacement at or above 90 liter, 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. On ships not equipped with equivalent means of SO_x compliance, based on the methodology of sample analysis in accordance with appendix VI¹⁵ of the Annex, the sulphur content of any fuel oil being used or carried for use on board exceeds the applicable limit required by regulation VI/14. If the master claims that it was not possible to bunker compliant fuel oil, the PSCO should take into account the provisions of regulation VI/18.2 (see Annex 1 to this instruction).
5. On ships equipped with equivalent means of SO_x compliance, absence of an appropriate approval for the equivalent means, which applies to relevant fuel combustion units on board. With regard to combustion units not connected to an EGCS, the sulphur content of any fuel oil being used on these combustion units

¹⁵ Amendments to MARPOL VI, appendix VI, Verification procedures for a MARPOL Annex VI fuel oil sample (regulation 18.8.2 or regulation 14.8).

exceeds the limits stipulated in regulation VI/14, taking into account the provisions of regulation VI/18.2 (see Annex 1 to this instruction).

6. non-compliance with the relevant requirements while operating within an Emission Control Area for SO_x and particulate matter control;
7. 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 Organization¹⁶¹⁵; and
8. the master or crew are not familiar with essential procedures regarding the operation of air pollution prevention equipment as defined in paragraph 2.4 (Examination of operational procedures) above.

4. REPORTING

Any deficiency found should be recorded as an individual deficiency.

If an inspection indicates that a ship has emitted any of the substances covered by the Annex, in violation of the provision of the Annex, a report shall be forwarded to the Administration for any appropriate action, taking into account the requirements of regulation VI/11.

¹⁶ IMO Resolution MEPC. 76(40) Standard Specification for Shipboard Incinerators and IMO Resolution MEPC.244(66) 2014 Standard Specification for Shipboard Incinerators

Annex 1 NON-AVAILABILITY OF COMPLIANT FUEL OIL CLAIMED (FONAR)

In case non-availability of compliant fuel oil is claimed, the master/owner must present a record of actions taken to attempt to bunker compliant fuel oil and provide evidence:

1. of attempts to purchase compliant fuel oil in accordance with its voyage plan;
2. if the fuel oil was not made available where expected, that attempts were made to locate alternative sources for such fuel oil; and
3. that despite best efforts to obtain compliant fuel oil no such fuel oil was made available for purchase.

Best efforts to procure compliant fuel oil include, but are not limited to, investigating alternative sources of fuel oil prior to commencing the voyage or a route.

The ship should not be required to deviate from its intended voyage or to unduly delay the voyage in order to achieve compliance.

If the ship provides the information, as above, the port State should take into account all relevant circumstances and the evidence presented to determine the appropriate action to take, including not taking control measures.

The master/owner may provide evidence as below to support their claim (not exhaustive):

1. a copy (or description) of the ship's voyage plan, including the ship's port of origin and port of destination;
2. the time the ship first received notice it would be conducting a voyage involving transit/arrival in the port and the ship's location when it first received such notice;
3. a description of the actions taken to attempt to achieve compliance, including a description of all attempts that were made to locate alternative sources of compliant fuel oil, and a description of the reason why compliant fuel was not available (e.g. compliant fuel oil was not available at ports on the "intended voyage", fuel oil supply disruptions at port, etc.);
4. the cost of compliant fuel is not considered to be a valid basis for claiming non-availability of fuel;
5. include names and addresses of the fuel oil suppliers contacted and the dates on which contact was made;
6. in cases of fuel oil supply disruption, the name of the port at which the ship was scheduled to receive compliant fuel oil and the name of the fuel supplier that is reporting the non-availability of compliant fuel oil;
7. the availability of compliant fuel oil at the next port-of-call and plans to obtain that fuel oil; and
8. If applicable, identify and describe any operational constraints that prevented use of compliant fuel oil, e.g. with respect to viscosity or other fuel oil parameters.
9. If, despite best efforts, it was not possible to procure compliant fuel oil the master/owner must notify the port State control authorities in the port of arrival and the flag Administration (regulation VI/18.2.4).
10. In case of non-compliant fuel oil carried on board, the PSCO should consider the most appropriate Contingency measure for addressing the carriage of non-compliant fuel oil as agreed with the flag state and the ship¹⁷.

¹⁷ MEPC.1/circ.881 - Guidance for port State control on contingency measures for addressing non-compliant fuel oil