PSCC INSTRUCTION 58/2025/16
GUIDELINES ON MARPOL ANNEX VI

Paris MoU on Port State Control

CONTENT

1. INTRODUCTION

1.1. General

Global decarbonisation efforts are driving frequent and major updates to Annex VI. PSCOs should note that more changes are expected after this guidance is published. As of now, new requirements for Attained Carbon Intensity Index documentation take effect from 1st January 2024.

1.2. Goals and purpose

This guideline provides advice to the PSCO on the inspection of MARPOL Annex VI requirements.

1.3. 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.

1.4. Application

- The provisions of MARPOL Annex VI apply to all ships, except where specifically expressed otherwise. (Regulation 1).

- Ship certification requirements for Annex VI are applied to vessels of 400GT and over. (Regulation 6)

- Engine certification requirements apply to engines over 130kW power output, aside from those used solely for emergencies. (Regulation13)

- Further NOx documentation requirements will depend on the method of ensuring engine compliance and PSCOs should refer to the NOx Technical Code 2008 for further information.

- Sulphur requirements apply to all vessels, however, PSCOs should note that equivalence is commonly used for compliance with these requirements and should refer to Section 1.4 of this guidance. (Regulation 14)

- Fuel Oil Consumption Reporting and Operational Carbon Intensity Index documentation requirements are applied to vessels of 5000GT an over. (Regulations 27 and 28).

- Specific care needs to be taken when applying Annex VI as the applicability varies between vessels, engines and equipment; based on construction, conversion and installation dates for the applicable regulations and standards.

- Specific care also needs to be taken to the vessels previous, current and next port locations where Annex VI contains various Emissions Control Areas (ECA), differing for NOx (Regulation 13) and SOx (Regulation 14).

- Regulations concerning Volatile Organic Compounds only apply to tankers and some gas carriers. Noting that this applies only in ports where VOCs are regulated as informed to the IMO.

- Shipboard Incineration requirements and application vary depending on the type approval specification of the particular incinerator.

1.5. Exemptions, Equivalents, Alternative Design Arrangements and Major Conversions

Regulation VI/3 of MARPOL Annex VI allows exemptions for testing ship emission reduction technologies. Regulation VI/3.2 outlines how long permits can last and which requirements cannot be waived.

For equivalent solutions, the Flag State must inform the IMO. Details of individual vessel arrangements might be found in the IMO GISIS.

PSCOs may investigate emissions violations. While Annex VI allows exceptions for emissions caused by ship damage or equipment failure, the Master must show that all reasonable steps were taken to prevent or reduce emissions after the incident or its discovery.

As of this instruction's publication, alternative fuels are still developing. When inspecting retrofit solutions, PSCOs should carefully review the definition of a Major Conversion under MARPOL Annex VI and refer to the Flag State's documentation for guidance.

1.6. Relevant Documentation

.1 Approved documentation relating to exceptions and/or exemptions granted under Regulation 3;

.2 The International Air Pollution Prevention Certificate (IAPP Certificate, Regulation 6), including its supplement.

.3 Ozone Depleting Substances Record Book, if applicable (Regulation 12)

.4 The Engine International Air Pollution Prevention Certificate (EIAPP Certificate, Regulation 13 and NOx Technical Code 2008 Section 2.2) including its supplement.

.5 The Technical File (NOx Technical Code 2008 Section 2.3.4) for each applicable marine diesel engine;

.6 Depending on the method of onboard NOx verification (NOx Technical Code 2008 Section 6), the ship should carry one the following:

- a. the Record Book of Engine Parameters for each marine diesel engine ,if using the engine parameter check method; or
- b. documentation relating to the simplified measurement method; or
- c. documentation related to the direct measurement and monitoring method;

.7 Engine NOx Tier On/Off Status Logbook (Regulation 13.5), if applicable;

.8 The Approved Method File (Regulation 13.7), if applicable;

.9 Fuel Oil Changeover Procedure and Logbook (Regulation 14), if applicable;

.10 Volatile Organic Compound Management Plan, approved by the Administration (Regulation 15), if applicable;

.11 Type Approval Certificate of Shipboard Incinerator and Manufacturers Operation Manual (Regulation 16), if applicable;

.12 Bunker Delivery Notes (Regulation 18);

.13 The International Energy Efficiency Certificate (IEEC, Regulation 6 and Regulation 19) including its supplement;

.14 The Energy Efficiency Design Index (EEDI) Technical File (Regulation 22), if applicable;

.15 The Energy Efficiency Existing Ship Index (EEXI) Technical File (Regulation 23), if applicable;

.16 Ship Energy Efficiency Management Plan (SEEMP) (Regulation 26), consisting of:

- a. a Part I of the Ship Energy Efficiency Management Plan (SEEMP)'(all vessels above 400 GT)
- b. a verified Part II (vessels above 5000 GT)
- c. a verified Part III (Vessels above 5000 GT , if applicable;

.17 Statement of Compliance related to the Fuel Oil Consumption Reporting (Regulation 6), if applicable;

.18 Statement of Compliance related to Operational Carbon Intensity Rating (Reg 6), if applicable, this may be combined with the Statement of Compliance for Fuel Oil Consumption Reporting.

Note that for the Statement of Compliance related to fuel oil consumption reporting and operational carbon intensity rating, in cases where the vessel has changed Flag Administration partway through a calendar year, there are specific reporting considerations. (Regulations 27 and 28).

Electronic Record Books may be used for recording requirements related Ozone Depleting Substances (ODS), Nitrogen Oxides (NOx) and Sulphur Oxides (SOx). See PMOU guidance on Electronic Record Books.

2. Inspection of Ship

2.1. Initial Inspection

2.1.1 Pre-boarding preparation

The PSCO should ascertain the gross tonnage of the vessel and date of ship construction which inform various provisions of Annex VI, in order to confirm which regulations of Annex VI are applicable.

The PSCO should also be able to ascertain whether the vessel is entering, transiting or exiting an ECA to its port of inspection, and whether the port in question regulates Volatile Organic Compound emissions.

The PSCO is recommended to check for any exemptions or equivalences related to Annex VI the vessel may have in the IMO database, if it is known that the vessel is using an alternative provision (e.g. alternative fuel or exhaust gas cleaning system).

2.1.2 Certificates and Documents

The PSCO should examine, as a minimum, those documents listed in Annex 10 of the Paris MOU on Port State Control on an initial inspection. The PSCO may also be guided by the certificates and documents listed in section 1.4 and 1.5 above, where applicable. The PSCO should check for consistency of information between documents as well as the carriage of the required documents.

2.2. Specific Regulation Guidance for document checks

2.2.1 Nitrogen - method used for demonstrating NOx compliance for each applicable marine diesel engine oxides (NOx) (regulation VI/13)

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 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 only[1]; 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

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

.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.

2.2.2 Sulphur oxides (SOx) and particulate matter (PM) (regulation 14)

If the vessel is changing over fuel upon entering and leaving emission control areas to achieve compliance, there should be the following available:

- 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 (regulations VI/18.5 and VI/14.4);

- Written procedures covering fuel oil change over operations (in a working language or languages understood by the crew) (regulation VI/14.6); and

- 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, but may be electronic if authorised to be so) 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.

Exhaust Gas Cleaning Systems (EGCS) are a common equivalence to burning low sulphur fuel. On ships equipped with equivalent means of compliance, the PSCO should, where applicable, examine the following:

.1 Evidence that the ship has received an appropriate approval for any installed equivalent means (approved, under trial or being commissioned);

.2 The Supplement of the IAPP certificate, should indicate equivalent means are used for fuel oil combustion units on board or that compliant fuel oil is used in equipment not covered; and

.3 BDNs on board 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.

There are two methods of demonstrating exhaust gas cleaning systems, “Scheme A” has a unit certification with parameter and emissions checks, and “Scheme B” is continuous emission monitoring with parameter checks.

.1 The approved documentation for EGCS[2] required depends on the Scheme:

- SOx Emission Compliance Certificate (only for Scheme A)
- SOx Emission Compliance Plan
- SOx Emission Compliance Certificate
- EGC Technical Manual (Specific to Scheme A or Scheme B)
- Onboard Monitoring Manual
- GC Record Book or Logging System

[2] Resolution MEPC.340(77) - 2021 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

.2 The required EGCS monitoring records should be 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 the case where the 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 may present those corrective actions taken in order to rectify the situation in accordance with the guidance given in the EGC 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 Volatile organic compounds (regulation VI/15)

Vapour Emission Collection Systems as approved by the Administration are a requirement for loading cargoes in certain ports/terminals. PSCOs should familiarize themselves with the Ports within their jurisdiction to understand if it is a requirement for their area and for which vessel sizes and cargo types. This notification is available in IMO GISIS.

Tankers carrying crude oil should present the approved VOC Management Plan (regulation VI/15.6);

2.2.4 Shipboard incineration (regulation VI/16)

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

Regulations VI/16.1 – VI/16.4 cover onboard incineration in general

Regulations VI/16.6 – VI/16.9 cover specifically incinerators installed on ships constructed on or after 1 January 2000 or to units installed on existing ships on or after that date.

Shipboard incineration of polyvinyl chlorides (PVC) is prohibited by regulation VI/16.3, except in shipboard incinerator for which an IMO Type Approval Certificates has been issued in accordance with MEPC.59 (33), MEPC. 76(40) or MPEC.244(66).

Regulation VI/16.6 generally requires that incinerators installed on ships constructed on or after 1 January 2000 or units which are installed on existing ships on or after that date are to be Type Approved in accordance with resolution MEPC.76(40) – as modified by resolution MEPC.93(45) or MEPC.244(66)

2.2.5 Fuel oil availability and quality (regulation VI/18)

.1 The bunker delivery notes (BDNs) should be retained onboard for 3 years after bunkering and representative samples or records thereof retained for at least 12 months or until the fuel has been consumed (if longer) (regulation VI/18)

.2 Under Regulation VI/18.2.4 of MARPOL Annex VI, a ship shall notify the Flag State and the competent authority of the relevant port of destination when it cannot purchase compliant fuel oil. Therefore, a PSCO may receive such a report.

The ship, under the Regulations, is not required to deviate from its intended voyage or to unduly delay the voyage in order to achieve compliance. However, the Master/owner must present a record of actions taken to attempt to bunker compliant fuel oil and provide evidence:

- of attempts to purchase compliant fuel oil in accordance with its voyage plan;

- if the fuel oil was not made available where expected, that attempts were made to locate alternative sources for such fuel oil; and

- 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 cost of compliant fuel is not considered to be a valid basis for claiming non-availability of fuel.

.1 If non-compliant fuel has been bunkered, 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 the bunker delivery, regulation VI/18.2; and

.2 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 compliant fuel.

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

.4 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;

.5 The port State should take into account all the relevant circumstances and the evidence presented when exercising their professional judgement, and should accept the situation if all evidence is suitable, noting it is not through the fault of the vessel that the non-compliance has occurred and all relevant steps have been taken.

2.2.6 SEEMP and Operational Carbon Intensity (Regulation VI/28)

A vessel which has an annual operational CII rating of D for 3 consecutive years or a rating of E, requires a corrective action plan, and a review of the SEEMP to include the plan. This must be approved by the Administration (or RO).

2.2.7 Walk-round

During the period of rapid development in decarbonization solutions, a PSCO may encounter unfamiliar technology, or unusual designs. PSCOs are encouraged in cases of doubt to consult drawings onboard or other supporting documentation to ensure any modifications or elements found on the walk-round align with what is expected.

Any fuel oil samples taken by the PSCO to verify the sulphur content, should be done at the ships approved designated sampling point[3]. Exhaust Gas Cleaning Systems bring the vessel into compliance after combustion of the fuel, therefore there is little benefit in sampling fuel from a vessel using such alternative methods.

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 certificates required by Annex VI are missing or clearly invalid;

.2 documents required by Annex VI are missing or clearly invalid;

.3 the absence, malfunction or serious deficiency of equipment or arrangements specified in the certificates or documents;

.4 the presence of equipment or arrangements not specified in the certificates or documents;

.5 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;

.6 the vessel is not complying with the requirements of an exemption or equivalence;

.7 a discharge of ozone depleting substances, presence of equipment containing ODS not indicated on the IAPP supplement or evidence of the installation of new installations containing prohibited ODS;

.8 one of more of the installed marine diesel engines have not been operated in accordance with the provisions of the respective Technical File;

.9 the tier and/or on/off status of applicable installed marine diesel engines has not been maintained correctly or as changed as required within a NOx ECA;

.10 inconsistency between information in the bunker delivery note and ship’s indicated fuel sulphur level in the IAPP certificate supplement;

.11 fuel changeover records show that the vessel was burning non-compliant fuel within an emission control area.

.12 an equivalent means of SOx compliance has not been used as required;

.13 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;

.14 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;

.15 the vessels crew are not following the provisions of a VOC management plan, or using a vapour emission collection system in a VOC regulated port;

.16 prohibited substances have been incinerated onboard, or allowed substances in an incinerator without the correct type approval standard;

[3] A required sampling point is applicable for both new (constructed after entry into force) and existing ships at the first IAPP renewal after 1 April 2023. The requirement came into force 1 April 2022 (Circular MEPC.1/Circ.864)

.17 in cases where non-compliant fuel has been bunkered or non-availability of compliant fuel, the evidence, actions taken and reporting are not as required.

.18 A vessel with an operational CII rating of D for 3 consecutive years, or rated as E, which is missing a plan of corrective actions in the SEEMP verified by the Administration.

2.4. More Detailed Inspection

2.4.1 Ozone depleting substances (regulation VI/12)

The PSCO should verify that:

.1 the Master or crew are familiar with the procedures to prevent emissions of ozone- depleting substances;

.2 there are effectively implemented maintenance procedures for the equipment containing ozone-depleting substances; and

.3 there are no deliberate emissions of ozone-depleting substances; and

.4 all installations containing ODS are indicated on the IAPP supplement.

2.4.2 Nitrogen oxides (NOx) (regulation VI/13)

The PSCO should verify that:

.1 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;

.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 NOx Technical Code and maintained appropriately, the PSCO should pay particular attention to the following:

a. 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;

b. 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;

c. 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;

d. in the case of an installed marine diesel engine certified to Tier III that it has been operated at the correct Tier within a NOx ECA;

e. if applicable, examine whether the conditions attached to an exemption granted under regulation VI/13.5.4 have been complied with as required;

f. 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;

g. 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

h. emergency marine diesel engines intended to be used solely in case of emergency are still only in use for this purpose.

2.5. Sulphur oxides (SOx) and particulate matter (regulation VI/14)

The PSCO should check and verify that

.1 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;

.2 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;

.3 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;

.4 Where EGCS is used, that the EGCS 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.

.5 If the ship is equipped with an EGCS as an equivalent means of SOx 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 (if Scheme B) 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

.6 If the ship is equipped with EGCS, as per .5 above, the Emission Ratio and discharge water records may be inspected. 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

The PSCO's role includes assessing pollution prevention for the forthcoming voyage. Shortage or unavailability of compliant fuel oil (without alternative compliance) on board the vessel for the forthcoming voyage areas should be treated the same as insufficient garbage space, or lack of sewage storage/treatment.

2.5.1 Volatile organic compounds (regulation VI/15)

The PSCO should check and verify that

.1 the Master or crew are familiar with the regulation of emissions of volatile organic compounds (VOC), 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

.2 The Master or crew are familiar with the application of the VOC Management Plan, if applicable.

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

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[4] is installed, if required under regulation VI/15.

2.5.2 Shipboard incineration (regulation VI/16)

The PSCO should further examine whether:

.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 Annex VI), 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 The records indicate if prohibited substances have been incinerated.

Prohibited substances include:

- Annex I, II and III cargo residues or related contaminated packing materials;
- polychlorinated biphenyls (PCBs);
- garbage, as defined in Annex V of MARPOL, containing traces of heavy metals;
- refined petroleum products containing halogen compounds;
- sewage sludge and sludge oil either of which are not generated on board the ship; and
- Exhaust gas cleaning system residues

The PSCO should also check and verify that

.1 the Master or crew are familiar with the garbage screening procedure to ensure that prohibited garbage is not incinerated;

.2 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 Annex VI, in accordance with its operational manual;

.3 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).

2.6. Expanded Inspection

The PSC Instruction “Guidance on Types of Inspection” details the specific items to be verified on an expanded inspection, subject to practical feasibility and constraints relating to safety. Whilst there are no specific MARPOL Annex VI items currently listed, the guidance indicates the PSCO must use professional judgement for extra items in order to check the overall condition.

[4] IMO Circular MSC/Circ.585 Standards for Vapour Emmission Control System,

3. Follow-Up Action

3.1. Deficiencies warranting detention

The following non-exhaustive 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 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 On ships not equipped with equivalent means of SOx compliance, based on the methodology of sample analysis in accordance with appendix VI[5] of Annex VI, the sulphur content of 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

.5 On ships equipped with equivalent means of SOx 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 exceeds the limits stipulated in regulation VI/14, taking into account the provisions of regulation VI/18.2.

.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[6]; and

.7 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.

.8 Missing documentation with regards to fuel consumption reporting and CII rating (valid Statement of Compliance related to fuel oil consumption reporting and operational carbon intensity rating, International Energy Efficiency Certificate or Ship Energy Efficiency Management Plan (SEEMP I-II-III) as applicable.

If an inspection indicates that a ship has violated the emissions requirements of MARPOL Annex VI in the past, detention may not be a suitable approach depending on the situation if there is no technical deficiency or concern for the forthcoming voyage (See also Guidelines on ISM). However, a report and any supporting

[5] Amendments to MARPOL VI, Appendix VI, Verification procedures for a MARPOL Annex VI fuel oil sample (Regulation VI/18.8.2 or regulation VI/14.8)
[6] IMO Resolution MEPC. 76(40) Standard Specification for Shipboard Incinerators and IMO Resolution MEPC.24 4(66) 2014 Standard Specification for Shipboard Incinerators

evidence shall be forwarded to the Administration for any appropriate action, taking into account the requirements of regulation VI/11

4. Reporting

If an inspection indicates that a ship has violated the emissions requirements of MARPOL Annex VI, a report and any supporting evidence shall be forwarded to the Administration for any appropriate action, taking into account the requirements of regulation 11.