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'I' ITEM NOTE

From:	General Secretariat of the Council
To:	Permanent Representatives Committee (Part 1)
No. Cion doc.:	8312/18 MAR 50 OMI 14 ENV 249
No. prev. doc.:	8406/18 MAR 53 OMI 17 ENV 259
Subject:	IMO - Draft Union submission to be submitted to the Intersessional Meeting of the IMO on the Consistent implementation of Regulation 14.1.3 of MARPOL Annex VI in London 9 – 13 July 2018 – Port State Control Guidelines - Endorsement

INTRODUCTION

1. On 24 April 2018, the Commission transmitted to the Council a Staff Working Document containing a draft submission to the first meeting of the Intersessional Working Group on the Consistent Implementation of Regulation 14.1.3 of MARPOL Annex VI ('ISWG-AP 1') of the International Maritime Organization ('IMO'). The draft submission proposes amendments to the 2009 IMO Guidelines for port State control under the revised Annex VI to the International Convention for the Prevention of Pollution from Ships ('MARPOL') contained in IMO Resolution MEPC.181(59). The deadline for transmitting the draft submission to the IMO Secretariat is 25 May 2018.

2. The purpose of this submission, and of the two related submissions transmitted at the same time, is to prepare for and facilitate the consistent implementation from 1 January 2020 of the global limit of 0.50% sulphur content in fuel oil used on board ships.
3. The proposed amendments build upon the experience on control and enforcement of the low sulphur regulations in Sulphur Oxides Emission Control Areas ((SO_x)-ECAs) established in European waters.

WORK WITHIN THE COUNCIL

4. The draft submission was examined by the Shipping Working Party at its meetings on 2 and 14 May 2018. Based on the comments by delegations at the last meeting, minor modifications were made to the draft submission with the purpose of reaching consensus. Those modifications are marked in **bold underline** (new text) and ~~double strikethrough~~ (deleted text).
5. However, there is no agreement on who should submit the draft submission. The Commission maintains the view that the draft submission should be made by "the European Commission on behalf of the European Union", while the Member States consider that it should be made by the Member States and the European Commission.
6. Given the urgency and importance of the matter, it was agreed at working party level to propose to transmit the submission in the name of the Member States and the European Commission, while taking good note of the position of the Commission.

CONCLUSION

7. In the light of the above, the Permanent Representatives Committee is invited to
 - endorse the text of the draft submission in the annex, with a view to its transmission by the Presidency to the International Maritime Organization by 25 May 2018.

INTERSESSIONAL MEETING ON
CONSISTENT IMPLEMENTATION OF
REGULATION 14.1.3 OF MARPOL ANNEX VI
Agenda item 4

ISWG-AP 1/4/X
X May 2018
ENGLISH ONLY

DEVELOPMENT OF DRAFT AMENDMENTS TO THE EXISTING GUIDELINES

Submitted by Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the United Kingdom and the European Commission

SUMMARY

Executive summary: This document provides input to agenda item 4 on the Development of draft amendments to the existing Guidelines. In particular, it proposes necessary amendments to IMO Res. MEPC.181(59) on inspection guidelines for Parties under MARPOL Annex VI to ensure uniform enforcement of Regulation 14.1.3 in the port State control regime. It builds upon the experience on control and enforcement of the low sulphur regulations in Sulphur Oxides Emission Control Areas ((SO_x)-ECAs) established in European waters.

Strategic Direction, if applicable: ~~7.3~~ **1**

Output: ~~7.3.4~~ **1.17**

Action to be taken: ~~Consider the revision of IMO MEPC.181(59) based on Annex~~
Paragraph 15

Related documents: MEPC 71/17, PPR 4/21 (annex 13), MEPC 71/5/9, MEPC 70/5/2, MEPC 70/INF.41, MEPC 71/9/5, PPR 4/20/2, PPR 5/13, PPR 5/13/1, PPR 5/13/3, PPR 5/13/5, PPR 5/13/11, PPR 5/WP.6 (annex 5 and 6)

Introduction

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5) and provides input to agenda item 4 on "Development of draft amendments to the existing Guidelines" to support the consistent implementation of regulation 14.1.3 of MARPOL Annex VI.

Background

2 During MEPC 70, the Committee agreed that the effective date of implementation of the fuel oil standard in regulation 14.1.3 of MARPOL Annex VI should be 1 January 2020. At MEPC 71, the Committee further approved the new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI", for inclusion in the PPR Sub-Committee's biennial agenda for 2018/2019 and the provisional agenda for PPR 5, with a target completion year of 2019.

3 IMO Assembly 30 approved the request from MEPC 71 for an intersessional working group meeting in 2018 due to the urgency of the work. Subsequently, PPR 5 prepared the terms of reference for the intersessional meeting and agreed to develop a single set of guidelines as opposed to the development of other guidance. Item 3 of the outline to the set of guidelines to be developed on "Verification issues and control mechanism and actions" refers to port state control and the related *2009 Guidelines for port state control under the revised MARPOL Annex VI* (IMO Res. MEPC.181(59)) as an element to be considered for consequential amendments at the intersessional meeting (item 3 of the terms of reference).

4 The sulphur content of certain liquid fuels including marine fuels used by ships operating in waters falling under the jurisdiction of EU Member States is regulated through Directive (EU) 2016/802. The main Directive's provisions require stricter sulphur-in-fuel content: 0,10 % on all ships operating in (SO_x)-ECAs (since January 2015) in EU waters and on ships at berth (since January 2010); 0,50 % on all ships operating outside the (SO_x)-ECAs as from 1 January 2020 as in regulation 14.1.3 of MARPOL Annex VI. The majority of competent authorities in the EU Member States in charge of sulphur enforcement are port state control officers (PSCOs) or any other duly authorized officials designated for fuel sampling by the competent authorities of the State under its responsibility as a port State.

5 The EU has gained considerable experience in the implementation and enforcement of the low sulphur regulations as presented in PPR 5/13/5. Based on that experience, the Annex to this document proposes amendments to Resolution MEPC.181(59) on inspection guidelines for Parties under MARPOL Annex VI for the consideration at the intersessional meeting. The EU Member States have also preliminarily discussed with industry the proposals submitted in this document, under the European Sustainable Shipping Forum¹.

6 The Sub-Committee on Implementation of IMO Instruments is already in the process of revising the MARPOL Annex VI port State control guidelines in the Working Group on Measures to harmonize port State control (PSC) activities and procedures worldwide. The proposal submitted in the Annex to this document can contribute and should be timely incorporated into that revision effort.

MARPOL Annex VI port state control guidelines

7 The scope of IMO Res. MEPC.181(59) on inspection guidelines for Parties under MARPOL Annex VI already includes the sulphur regulations. However, amendments are urgent and necessary in order to reflect the effective date of implementation of the fuel oil standard in regulation 14.1.3 of MARPOL Annex VI as from 1 January 2020.

8 Based on the experience gathered, additional guidance can be provided during initial inspections to port state control officers (**PSCOs**). Depending on the areas of trade, in or outside the ECAs, PSCOs should verify the fuel oil delivered to and used on board through the bunker delivery notes and appropriate records on board. This would apply also if and when a high sulphur fuel oil carriage ban is approved at MEPC 72.

9 A number of Parties are already conducting sampling on a spot-check basis or take fuel samples only as a part of a detailed inspection (by PSCOs or by any other duly authorized officials for fuel sampling designated by the competent authorities). The Organization has developed specific guidelines for Parties to MARPOL in relation to onboard sampling for the verification of the sulphur content of fuel oil used on board ships (MEPC.1/Circ.864). PPR 5/13/1 submitted by Japan, already refers to the possibility for the Administration to take samples from the fuel oil tanks.

¹ The European Sustainable Shipping Forum brings together 28 EU Member States, the European Commission and 32 maritime organisations. The forum aims at enabling, inter alia, a structured dialogue on the monitoring of compliance with the sulphur regulations with focus on the consistent implementation of the 0.50% sulphur cap, creating the framework conditions for the use of liquefied natural gas (LNG) as a ship fuel, the increasing use of EGCS technology in shipping, in particular its technical, economic, environmental and operational aspects, coordinating research and development activities and encouraging innovation, exploring all available financing opportunities, considering compatibility with the EU's broader environmental protection objectives, and identifying potential improvements in sustainability and competitiveness.

10 In the case of ships equipped with equivalent means, such as exhaust gas cleaning systems, the PSCOs should verify that these have received an appropriate approval from the flag State and that the bunker delivery notes on board indicate that the fuel oil is intended to be used in combination with an equivalent means of SO_x compliance.

11 As recommended in PPR 5/13/5, appropriate guidance is needed also in relation to clear grounds for a more detailed inspection. These can be related to, for example, inconsistencies in the BDNs, or based on information from remote sensing technologies such as "sniffers" or from portable devices as well as from 'fuel calculator' tools.

12 During more detailed inspections on ships equipped with equivalent means, the PSCOs should verify that the system is properly functioning, is in operation, there are tamper-proof continuous-monitoring systems², if applicable, and that the records of measurement of SO₂ (ppm)/CO₂ (%) ratios show emission reductions equivalent to those under regulation 14.

13 Detainable deficiencies on ships not equipped with equivalent means of SO_x compliance should include cases where the sulphur content of any fuel oil being used on board exceeds the limits set in the regulations as this constitutes an unreasonable threat of harm to human health and the environment.

14 Based on the above, a thorough revision of the *2009 Guidelines for port state control under the revised MARPOL Annex VI* (resolution MEPC.181(59)) is included in the Annex to this document.

Action requested of the Intersessional Working Group

15 The Intersessional Working Group is invited to take the Annex of this document into consideration and take action as appropriate.

² Monitoring of emission values in SO₂ (ppm)/CO₂ (% v/v) ratio.

ANNEX
PROPOSED AMENDMENTS TO IMO Res. MEPC.181(59)

**2009XXXX 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, and platforms and drilling rigs, engaged in international voyages. Administrations may establish alternative appropriate measures to demonstrate the necessary compliance in respect of ships under of less than 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_x 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 the effective date of an Emission Control Area (ECA).

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_x 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;

.4 In the case of SO_x and particulate matter regulations control should be achieved by either:

.1 the sulphur content of any fuel oil used [or carried for use] on board ships, subject to the provisions of regulation [VI/18.2][VI/14], 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_x 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 compliance with SO_x emission control requirements shall be achieved by an equivalent method as approved (regulation VI/4);

* As of DD/MM/YYYY, there are two areas designated as Emission Control Area under regulation VI/13.

- .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 apply to all incinerators; and
- .6 a tanker carrying crude oil is required to have on board and implement a volatile organic compounds (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 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_x Technical Code) including its Supplement, for each applicable marine diesel engine;
- .3 the Technical File (paragraph 2.3.4 of the NO_x Technical Code) for each applicable marine diesel engine;
- .4 depending on the method used for demonstrating NO_x 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_x 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 the written procedures covering fuel oil change over operations (which is not required to be in English) where separate fuel oils are used in order to achieve compliance (regulation VI/14.6);

^{*} ~~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.~~

- .7 the approved documentation relating to any installed exhaust gas cleaning systems (type approval certificate, SECP, (SECC), ETM, OMM and the nitrate discharge data and analysis certificate), or equivalent means, to reduce SOx emissions (regulation VI/4);
- .8 the bunker delivery notes (BDNs) 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.

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 Initial inspection within an ECA

When a vessel is inspected in a port in the ECA, the PSCO will look at:

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 records in the Oil Record Book Part 1 (regulation VI/18.5 and VI/14.4);

The BDNs should show the quantity and the sulphur content of the delivered marine fuel oils and state the name and IMO number of the receiving ship; port (of delivery); date, address, and telephone number of marine fuel oil supplier; product name(s); quantity (metric tons); density at 15°C (kg/m³); sulphur content (% m/m) and include a declaration signed and certified by the fuel oil supplier's representative that the fuel oil supplied is in conformity with the regulations (regulation VI/14.1 or VI/4.a and VI/18.3) and that the sulphur content of the fuel oil supplied does not exceed the relevant limit if in combination with an equivalent means of compliance. The BDNs must be kept on board the ship in such a place as to be readily available for inspection at all reasonable times, and retained on board for a period of three years after the fuel oil has been delivered.

2. Evidence of a written procedure (which is not required to be in English) 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 was being used while sailing in the in the entire ECA.

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 the equipment and change over operations in the ship adequate to condition the fuel when operating in low ambient temperatures.

2.1.7 Initial inspection outside the ECA

When a vessel is inspected in a port outside the ECA the PSCO will look to the same documentation and evidence as during inspections in ports inside the ECA. The PSCO will in particular look at:

1. Evidence of fuel oil delivered to and used on board with a sulphur content of not more than [3.50% m/m (or) 0.50% m/m [as of 1 January 2020]] through the BDNs and appropriate records in the Oil Record Book Part 1;

2. Evidence of a written procedure (which is not required to be in English) and records of changeover from fuel oil with a sulphur content of not more than 0.10% m/m after leaving the ECA such that compliant fuel was being used while sailing in the in the entire ECA.

2.1.8 Initial inspection on ships equipped with equivalent means of SO_x compliance

On ships equipped with equivalent means, the PSCO will look at:

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

2. Evidence that the ship is using the equivalent means for all fuel combustion machinery on board. If this is not the case, the sulphur content of any fuel oil being used on the remaining combustion machinery does not exceed 0.10% m/m when in the ECA (or 0.50% m/m [as of 1 January 2020] outside the ECA);

3. [As of 2019] Bunker delivery notes on board indicate that the fuel oil is intended to be used in combination with an equivalent means of SO_x compliance or the ship is subject to a relevant exemption to conduct trials for sulphur oxides emission reduction and control technology research.

4. Check of the correct function of data recording and processing device (MARPOL log), including main parameters checks as appropriate*.

2.1.98 If the certificates and documents are valid and appropriate and, after a tour around the vessel to check that the overall condition of the vessel meets generally accepted international rules and standards, the PSCO's general impressions and observations on board confirm a good standard of maintenance, the inspection should be considered satisfactorily concluded.

2.1.106 If, however, the PSCO's general impressions or observations on board give clear grounds (see paragraph 2.1.117) 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.

2.1.117 "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;

* 2015 Guidelines for Exhaust Gas Cleaning Systems (Resolution MEPC.259(68)).

- .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 of deficiencies in the bunker delivery notes. The BDN is not in line with the information in the certificate (e.g. BDNs indicating use of equivalent means whereas the IAPP Supplement indicates use of compliant fuel oil as per VI/14.3);
- .78 evidence that the quality of fuel oil, delivered to and used on board the ship, appears to be substandard as defined in regulation VI/18.3;
- .9 evidence that the quantity of compliant fuel oil is insufficient for the intended voyage in the ECA; or
- .810 receipt of a report or complaint containing information that the ship appears to be substandard (including but not limited to information from remote sensing surveillance of SOx emissions indicating that a ship appears to use substandard fuel while in trade).

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_x 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_x 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 **complies with ~~conforms to~~ the provisions of regulations VI/14 and VI/18***, taking into account **amendments to appendix VI V to the Annex [and the Guidelines to be developed by the Organization in relation to fuel oil non availability]**;

[Shortage or non-availability on board 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].

* 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).

2.2.4 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 by the ship is within an Emission Control Area under regulation VI/14.3 depending on the area of trade, or that other equivalent approved means have been applied as required. The fuel oil consumed in and outside the ECA, and that there is enough fuel in compliance with VI/14 to reach the next port destination. The PSCO should also verify and cross check various documentation including BDN, navigation information from bridge's log books, engine data from the ship's statutory documents or engine room log book, oil record book, fuel change over records, fuel tanks capacity and content, etc.

2.2.5 In order to verify the fuel used by the ship or any other deficiencies found during the initial or more detailed inspection, the PSCO may obtain evidence through:

- .1 sampling of the fuel in the ship's fuel lines or in the tanks, taking into account the guidelines for onboard sampling*, or
- .2 sampling and analysis of the ~~MARPO~~ representative samples **of fuel delivered**, as appropriate.

2.2.6 If the ship is equipped with equivalent means of SO_x compliance, the PSCO should verify that the system is properly functioning, is in operation, there are tamper-proof continuous-monitoring systems**, if applicable, and applies to all fuel combustion machinery items on board. As part of the verification the following documents and records should be considered:

- .1 any supporting documents from the ship's flag Administration referring to the approval of trial, if applicable;
- .2 any documentation referring to the type of fuel and its sulphur content allowed;
- .3 Values for PAH, pH and turbidity should be checked and not exceed the limits given in Paragraph 10.1 of the revised 2015 Guidelines for Exhaust Gas Cleaning Systems (Resolution MEPC.259(68));
- .4 appropriate records in the ship's log books.

* IMO Guidelines for onboard sampling for the verification of the sulphur content of fuel oil used on board ships (MEPC.1/Circ.864)

** 3 Equivalent emission values for emission abatement methods are 4,3 and 21,7 SO₂ (ppm)/CO₂ (% v/v) for marine fuels with a sulphur content of 0,10 and 0,50 (% m/m) respectively

2.2.74 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.

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

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

2.2.107 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).

2.2.118 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).

2.2.129 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_x control;
- .3 the master or crew are familiar with fuel ~~bunkering~~ or bulk lubricating oil **bunkering** procedures in connection to the respective bunker delivery notes, oil record book part I recordings and retained samples as required by regulation VI/18.
- .34 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 for SO_x ~~and particulate matter control~~;

- .45 the master or crew are familiar with the garbage screening procedure to ensure that prohibited garbage is not incinerated;
- .56 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;
- .67 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);
- .78 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 under the scope of the Annex provided they will be timely addressed, ~~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, 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. ~~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*;

* ~~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.~~

- .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_x Technical Code or that does not comply with the relevant NO_x 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_x compliance~~ on ships not equipped with equivalent means of SO_x 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]³, or 0,10% m/m while in an ECA. If the master claims that it was not possible to bunker compliant fuel the PSCO should take into account the provisions of regulation VI/18.2 [and should use the Guidelines developed by the Organization referred to therein];
- .5 on ships equipped with equivalent means of SO_x compliance, absence of an appropriate approval for the equivalent means which applies to all fuel combustion machinery on board. In case of partial approval, the sulphur content of any fuel oil being used on the remaining combustion machinery items does not exceed the limits stipulated in regulation VI/14, taking into account the provisions of regulation VI/18.2 [and the {Guidelines developed by the Organization} referred to therein];
- ;
- .56 non-compliance with the relevant requirements while operating within an Emission Control Area for SO_x and particulate matter control;
- .67 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));
- .78 the master or crew are not familiar with essential procedures regarding the operation of air pollution prevention equipment as defined in paragraph 2.2.119 above.

³ ~~Or 2025, depending on the results of the review of regulation VI/14.1.3, as described in regulation VI/14.8.~~

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.
