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**Adopted on 6 December 2023
(Agenda items 11 and 13)**

PROCEDURES FOR PORT STATE CONTROL, 2023

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization regarding the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO resolution A.1155(32), by which it adopted the Procedures for port State control, 2021 (hereafter referred to as the "Procedures"), following successive revocation of resolutions A.1138(31), A.1119(30), A.1052(27), A.882(21), A.787(19), A.742(18), A.597(15) and A.466(XII),

RECOGNIZING that efforts by port States have greatly contributed to enhanced maritime safety and security, and prevention of marine pollution,

RECOGNIZING ALSO the need to update the Procedures to take account of the amendments to IMO instruments which have entered into force or have become effective since the adoption of resolution A.1155(32),

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee, at its 106th session, and the Marine Environment Protection Committee, at its seventy-ninth session,

- 1 ADOPTS the Procedures for port State control, 2023, as set out in the annex to the present resolution;
- 2 INVITES Governments, when exercising port State control, to implement the aforementioned Procedures;
- 3 REQUESTS the Maritime Safety Committee and the Marine Environment Protection Committee to keep the Procedures under review and to amend them as necessary;
- 4 REVOKES resolution A.1155(32).

* Reissued on 5 March 2024 with editorial changes made to the footnote on page 52 and the reference to the resolution on page 115 of the annex to this document.

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CHAPTER 1 – GENERAL

1.1 PURPOSE

This document is intended to provide basic guidance on the conduct of port State control inspections in support of the control provisions of relevant conventions and parts of the IMO Instruments Implementation Code (III Code) (resolution A.1070(28)) and afford consistency in the conduct of these inspections, the recognition of deficiencies of a ship, its equipment, or its crew, and the application of control procedures.

1.2 APPLICATION

1.2.1 These Procedures apply to ships falling under the provisions of:

- .1 the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS 1974);
- .2 the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT 1988);
- .3 the International Convention on Load Lines, 1966, as amended (LL1966);
- .4 the Protocol of 1988 relating to the International Convention on Load Lines, 1966, as amended (LL PROT 1988);
- .5 the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the 1978 and 1997 Protocols, as amended (MARPOL);
- .6 the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW 1978);
- .7 the International Convention on Tonnage Measurement of Ships, 1969, as amended (TONNAGE 1969);
- .8 the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001 (AFS 2001);
- .9 the Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG 1972);
- .10 the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC 1969);
- .11 the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended (CLC PROT 1992);
- .12 the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 (BUNKERS 2001);
- .13 the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, as amended (BWM 2004); and
- .14 the Nairobi International Convention on the Removal of Wrecks, 2007 (NAIROBI WRC 2007),

hereafter referred to as the relevant conventions.

1.2.2 Ships of non-Parties should be given no more favourable treatment (see section 1.5).

1.2.3 For ships below convention size, Parties should apply the procedures in section 1.6.

1.2.4 When exercising port State control, Parties should only apply those provisions of the conventions which are in force and which they have accepted.

1.2.5 Where the provisions of the relevant conventions are not specific, the port State control officer (PSCO) should in principle accept the design arrangement approved by the flag State and when appropriate consult with the flag Administration.

1.2.6 The PSCO should be aware that the provisions of relevant conventions permit Administrations to grant exemptions, allow equivalents¹ and approve alternative design and arrangements (ADA). When an Exemption Certificate is issued in accordance with the relevant provisions of a convention, provided it includes the correct reference to the exemption provision and the requirement to which it relates, or the ship carries the approved ADA documentation (e.g. SOLAS 1974 regulation II-1/55.4.2), port State authorities should interpret this as meaning that the ship complies with the provisions of the convention. Port State authorities should check, whenever possible, with the Administration should there be any doubt whether an exemption, equivalence or ADA has been granted.

1.2.7 Notwithstanding paragraph 1.2.4, in relation to voluntary early implementation of amendments to SOLAS 1974 and related mandatory instruments, Parties should take into account the *Guidelines on the voluntary early implementation of amendments to the 1974 SOLAS Convention and related mandatory instruments* (MSC.1/Circ.1565).

1.2.8 If a port State exercises control based on:

- .1 the International Labour Organization (ILO) Maritime Labour Convention, 2006, as amended (MLC 2006), guidance on the conduct of such inspections is given in the ILO publication "Guidelines for port State control officers carrying out inspections under the Maritime Labour Convention, 2006, as amended"; or
- .2 the ILO Convention No.147, Merchant Shipping (Minimum Standards) Convention, 1976, or the Protocol of 1996 to the Merchant Shipping (Minimum Standards) Convention, 1976, guidance on the conduct of such inspections is given in the ILO publication "Inspection of labour conditions on board ship: Guidelines for procedure".

1.3 INTRODUCTION

1.3.1 Under the provisions of the relevant conventions set out in section 1.2 above, the Administration (i.e. the Government of the flag State) is responsible for promulgating laws and regulations and for taking all other steps which may be necessary to give the relevant conventions full and complete effect so as to ensure that, from the point of view of safety of life and pollution prevention, a ship is fit for the service for which it is intended and seafarers are qualified and fit for their duties.

¹ Any Administration which allows, in substitution, a fitting, material, appliance or apparatus, or type thereof, or provision, shall communicate to the Organization particulars thereof together with a report on any trials made and the Organization shall circulate such particulars to other Contracting Governments for the information of their officers (e.g. SOLAS 1974, regulation I/5).

1.3.2 The nature of international shipping means that ships may not frequently call at ports in their flag State. It is therefore common to find that such flag States appoint the nominated surveyors at foreign ports and authorize recognized organizations (ROs) in accordance with the provisions of various conventions.

1.3.3 The following control procedures should be regarded as complementary to national measures taken by flag State Administrations in their countries and abroad and are intended to provide a common and consistent approach to the performance of port State control inspections and control measures taken as a consequence of the detection of serious deficiencies. These Procedures are also intended to provide assistance to flag State Administrations in securing compliance with convention provisions in safeguarding the safety of crew, passengers and ships, and ensuring the prevention of pollution.

1.4 PROVISION FOR PORT STATE CONTROL

SOLAS 1974 regulations I/19, IX/6.2, XI-1/4 and XI-2/9, as modified by SOLAS PROT 1988; article 21 of LL 1966, as modified by LL PROT 1988; articles 5 and 6, regulation 11 of Annex I, regulation 16.9 of Annex II, regulation 9 of Annex III, regulation 14 of Annex IV, regulation 9 of Annex V and regulation 10 of Annex VI of MARPOL; article X of STCW 1978; article 12 of TONNAGE 1969; article 11 of AFS 2001; and article 9 of BWM 2004 provide for control procedures to be followed by a Party to a relevant convention with regard to foreign ships visiting their ports. The authorities of port States should make effective use of these provisions for the purposes of identifying deficiencies, if any, in such ships which may render them substandard (see section 3.1) and ensuring that remedial measures are taken.

1.5 SHIPS OF NON-PARTIES

1.5.1 Article I(3) of SOLAS PROT 1988, article I(3) of LL PROT 1988, article 5(4) of MARPOL, article X(5) of STCW 1978, article 3(3) of AFS 2001 and article 3(3) of BWM 2004 provide that no more favourable treatment is to be given to the ships of countries which are not Party to the relevant convention. All Parties should, as a matter of principle, apply these Procedures to ships of non-Parties in order to ensure that equivalent surveys and inspections are conducted and an equivalent level of safety and protection of the marine environment is ensured.

1.5.2 As ships of non-Parties are not provided with SOLAS, Load Lines, MARPOL, AFS or BWM certificates, as applicable, or the crew members may not hold STCW certificates, the port State control officer (PSCO), taking into account the principles established in these Procedures, 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. If the ship or crew has some form of certification other than that required by a convention, the PSCO may take the form and content of this documentation into account in the evaluation of that ship. The conditions of and on such a ship and its equipment and the certification of the crew and the flag State's minimum manning standard should be compatible with the aims of the provisions of the conventions; otherwise, the ship should be subject to such restrictions as are necessary to obtain a comparable level of safety and protection of the marine environment.

1.6 SHIPS BELOW CONVENTION SIZE

1.6.1 In the exercise of their functions, PSCOs should be guided by any certificates and other documents issued by or on behalf of the flag State Administration. In such cases, the PSCOs should limit the scope of inspection to the verification of compliance with those certificates and documents.

1.6.2 To the extent a relevant instrument is not applicable to a ship below convention size, the PSCO's task should be to assess whether the ship is of an acceptable standard in regard to safety and the environment. In making that assessment, the PSCO should take due account of such factors as the length and nature of the intended voyage or service, the size and type of the ship, the equipment provided and the nature of the cargo.

1.7 DEFINITIONS

1.7.1 **Bulk carrier:** While noting the definitions in SOLAS 1974, regulations IX/1.6 and XII/1.1 and resolution MSC.277(85), for the purposes of port State control, PSCOs should be guided by the ship's type indicated in the ship's certificates in determining whether a ship is a bulk carrier and recognize that a ship which is not designated as a bulk carrier as the ship type on the ship certificate may carry certain bulk cargo as provided for in the above instruments.

1.7.2 **Clear grounds:** Evidence that the ship, its equipment, or its crew do not correspond substantially with the requirements of the relevant conventions or that the master or crew members are not familiar with essential shipboard procedures relating to the safety of ships or the prevention of pollution. Examples of clear grounds are included in section 2.4.

1.7.3 **Deficiency:** A condition found not to be in compliance with the requirements of the relevant convention.

1.7.4 **Detention:** Intervention action taken by the port State when the condition of the ship or its crew does not correspond substantially with the relevant conventions to ensure that the ship will not sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment, whether or not such action will affect the normal schedule of the departure of the ship.

1.7.5 **Initial inspection:** A visit on board a ship to check the validity of the relevant certificates and other documents, the overall condition of the ship, its equipment and its crew (see also section 2.2).

1.7.6 **More detailed inspection:** An inspection conducted when there are "clear grounds", as defined under paragraph 1.7.2.

1.7.7 **Nearest appropriate and available repair yard:** A port where follow-up action can be taken, and it is in, or closest to, the port of detention or the port where the ship is authorized to proceed taking into account the cargo on board.

1.7.8 **Port State control officer (PSCO):** A person duly authorized by the competent authority of a Party to a relevant convention to carry out port State control inspections, and responsible exclusively to that Party.

1.7.9 **Recognized organization (RO):** An organization which meets the relevant conditions set forth in the Code for Recognized Organizations (RO Code) (MSC.349(92) and MEPC.237(65)) and has been assessed and authorized by the flag State Administration in accordance with provisions of the RO Code to provide the necessary statutory services and certification to ships entitled to fly its flag.

1.7.10 **Stoppage of an operation:** Formal prohibition against a ship to continue an operation due to an identified deficiency or deficiencies which, singly or together, render the continuation of such operation hazardous.

1.7.11 **Substandard ship:** A ship whose hull, machinery, equipment or operational safety is substantially below the standards required by the relevant convention or whose crew is not in conformity with the safe manning document.

1.7.12 **Valid certificates:** A certificate that has been issued, electronically or on paper, directly by a Party to a relevant convention or on its behalf by an RO, contains accurate and effective dates, meets the provisions of the relevant convention and to which the particulars of the ship, its crew and its equipment correspond.

1.8 PROFESSIONAL PROFILE OF PSCOs

1.8.1 Port State control should be carried out only by qualified PSCOs who fulfil the qualifications and training specified in section 1.9.

1.8.2 When the required professional expertise cannot be provided by the PSCO, the PSCO may be assisted by any person with the required expertise, as acceptable to the port State.

1.8.3 PSCOs and persons assisting them should be free from any commercial, financial and other pressures and have no commercial interest in the port of inspection, the ships inspected, ship repair facilities or any support services in the port or elsewhere, nor should PSCOs be employed by or undertake work on behalf of ROs or classification societies.

1.8.4 A PSCO should carry a personal document in the form of an identity card issued by the port State and indicating that the PSCO is authorized to carry out the control.

1.9 QUALIFICATION AND TRAINING REQUIREMENTS OF PSCOs

1.9.1 The PSCO should be an experienced officer qualified as flag State surveyor.

1.9.2 The PSCO should be able to communicate in English with the key crew.

1.9.3 Training should be provided for PSCOs to give the necessary knowledge of the provisions of the relevant conventions which are relevant to the conduct of port State control, taking into account the latest IMO model courses for port State control.

1.9.4 In specifying the qualifications and training requirements for PSCOs, the Administration should take into account, as appropriate, which of the internationally agreed instruments are relevant for control by the port State and the variety of types of ships which may enter its ports.

1.9.5 PSCOs carrying out inspections of operational requirements should be qualified as a master or chief engineer and have appropriate seagoing experience, or have qualifications from an institution recognized by the Administration in a maritime-related field and have specialized training to ensure adequate competence and skill, or be a qualified officer of the Administration with an equivalent level of experience and training, for performing inspections of the relevant operational requirements.

1.9.6 Periodic seminars for PSCOs should be held in order to update their knowledge with respect to instruments related to port State control.

CHAPTER 2 – PORT STATE INSPECTIONS

2.1 GENERAL

2.1.1 In accordance with the provisions of the relevant conventions, Parties may conduct inspections by PSCOs of foreign ships in their ports.

2.1.2 Such inspections may be undertaken:

- .1 on the initiative of the Party;
- .2 at the request of, or on the basis of information regarding a ship provided by, another Party; or
- .3 on the basis of information regarding a ship provided by a member of the crew, a professional body, an association, a trade union or any other individual with an interest in the safety of the ship, its crew and passengers, or the protection of the marine environment.

2.1.3 Whereas Parties may entrust surveys and inspections of ships entitled to fly their own flag either to inspectors nominated for this purpose or to ROs, they should be aware that, under the relevant conventions, foreign ships are subject to port State control, including boarding, inspection, remedial action and possible detention, only by officers duly authorized by the port State. This authorization of PSCOs may be a general grant of authority or may be specific on a case-by-case basis.

2.1.4 All possible efforts should be made to avoid a ship being unduly detained or delayed. If a ship is unduly detained or delayed, it should be entitled to compensation for any loss or damage suffered.

2.2 INITIAL INSPECTIONS

2.2.1 In the pursuance of control procedures under the relevant conventions, which, for instance, may arise from information given to a port State regarding a ship, a PSCO may proceed to the ship and, before boarding, gain, from its appearance in the water, an impression of its standard of maintenance from such items as the condition of its paintwork, corrosion or pitting or unrepaired damage.

2.2.2 At the earliest possible opportunity, the PSCO should ascertain the type of ship, year of build and size of the ship for the purpose of determining which provisions of the conventions are applicable.

2.2.3 On boarding and introduction to the master or the responsible ship's officer, the PSCO should examine the ship's relevant certificates and documents required by the relevant conventions, as listed in appendix 12, part A. PSCOs should note the following:

- .1 certificates may be in hard copy or electronic form;
- .2 where the ship relies upon electronic certificates:
 - .1 the certificates and website used to access them should conform with the *Guidelines for the use of electronic certificates* (FAL.5/Circ.39/Rev.2 and Corr.1);

- .2 specific verification instructions are to be available on the ship; and
- .3 viewing such certificates on a computer is considered as meeting the requirement that certificates be "on board";
- .3 when examining International Tonnage Certificates, the PSCO should be guided by appendix 10; and
- .4 when examining certificates or documentary evidence of seafarers issued in accordance with STCW 1978, the PSCO should be guided by appendix 11; the list of certificates or documentary evidence required under STCW 1978 is also found in table B-I/2 of the STCW Code.

2.2.4 After the certificate and document check, the PSCO should check the overall condition of the ship, including its equipment, navigational bridge, forecabin, cargo holds/areas, engine-room and pilot transfer arrangements and verify that any outstanding deficiency from the previous PSC inspection has been rectified.

2.2.5 If the certificates required by the relevant conventions are valid and the PSCO's general impression and visual observations on board confirm a good standard of maintenance, the PSCO should generally confine the inspection to reported or observed deficiencies, if any.

2.2.6 In pursuance of control procedures under chapter IX of SOLAS 1974 in relation to the International Safety Management Code (ISM Code), the PSCO should utilize the guidelines in appendix 8.

2.2.7 If, however, the PSCO from general impressions or observations on board has clear grounds for believing that the ship, its equipment or its crew do not substantially meet the requirements, taking into account paragraph 1.2.6, the PSCO should proceed to a more detailed inspection, taking into consideration sections 2.4 and 2.5. In forming such an impression, the PSCO should utilize the guidelines in relevant appendices.

2.3 GENERAL PROCEDURAL GUIDELINES FOR PSCOs

2.3.1 The PSCO should observe the Code of good practice for port State control officers (MSC-MEPC.4/Circ.2), as shown in appendix 1, use professional judgement in carrying out all duties and consider consulting others as deemed appropriate.

2.3.2 When boarding a ship, the PSCO should present to the master or to the representative of the owner, if requested to do so, the PSCO identity card. This card should be accepted as documented evidence that the PSCO in question is duly authorized by the Administration to carry out port State control inspections.

2.3.3 If the PSCO has clear grounds for carrying out a more detailed inspection, the master should be immediately informed of these grounds and advised that, if so desired, the master may contact the Administration or, as appropriate, the RO responsible for issuing the certificate and invite their presence on board.

2.3.4 In the case of an inspection being initiated based on a report or complaint, especially if it is from a crew member, the source of the information should not be disclosed.

2.3.5 When exercising control, all possible efforts should be made to avoid a ship being unduly detained or delayed. It should be borne in mind that the main purpose of port State control is to prevent a substandard ship proceeding to sea. The PSCO should exercise

professional judgement to determine whether to detain a ship until the deficiencies are corrected or to allow it to sail with certain deficiencies, having regard to the particular circumstances of the intended voyage.

2.3.6 It should be recognized that all equipment is subject to failure and spares or replacement parts may not be readily available. In such cases, undue delay should not be caused if, in the opinion of the PSCO, safe alternative arrangements have been made.

2.3.7 Where the grounds for detention are the result of accidental damage suffered to a ship, no detention order should be issued, provided that:

- .1 due account has been given to the convention requirements regarding notification to the flag State Administration, the nominated surveyor or the RO responsible for issuing the relevant certificate;
- .2 prior to entering a port, the master or company has submitted to the port State authority details of the circumstances of the accident and the damage suffered and information about the required notification of the flag State Administration;
- .3 appropriate remedial action, to the satisfaction of the port State authority, is being taken by the ship; and
- .4 the port State authority has ensured, having been notified of the completion of the remedial action, that deficiencies which were clearly hazardous to safety, health or environment have been rectified.

2.3.8 Since detention of a ship is a serious matter involving many issues, it may be in the best interest of the PSCO to act together with other interested parties (see paragraph 4.1.3). For example, the officer may request the owner's representatives to provide proposals for correcting the situation. The PSCO should also consider cooperating with the flag State Administration's representatives or the RO responsible for issuing the relevant certificates, and consulting them regarding their acceptance of the owner's proposals and their possible additional requirements. Without limiting the PSCO's discretion in any way, the involvement of other parties could result in a safer ship, avoid subsequent arguments relating to the circumstances of the detention and prove advantageous in the case of litigation involving "undue delay".

2.3.9 Where deficiencies cannot be remedied at the port of inspection, the PSCO may allow the ship to proceed to another port, subject to any appropriate conditions determined. In such circumstances, the PSCO should ensure that the competent authority of the next port of call and the flag State are notified.

2.3.10 Detention reports to the flag State should be in sufficient detail for an assessment to be made of the severity of the deficiencies giving rise to the detention.

2.3.11 The company or its representative have a right of appeal against a detention taken by the authority of a port State. The appeal should not cause the detention to be suspended. The PSCO should properly inform the master of the right of appeal.

2.3.12 To ensure consistent enforcement of port State control requirements, PSCOs should carry an extract of section 2.3 (General procedural guidelines for PSCOs) for ready reference when carrying out any port State control inspections.

2.3.13 PSCOs should also be familiar with the detailed guidelines given in the appendices to these Procedures.

2.4 CLEAR GROUNDS

2.4.1 When a PSCO inspects a foreign ship which is required to hold a convention certificate and which is in a port or an offshore terminal under the jurisdiction of the port State, any such inspection should be limited to verifying that there are on board valid certificates and other relevant documentation and the PSCO forming an impression of the overall condition of the ship, its equipment and its crew, unless there are "clear grounds" for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificates.

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

- .1 the absence of principal equipment or arrangements required by the relevant conventions, taking into account paragraph 1.2.6;
- .2 evidence from a review of the ship's certificates that a certificate or certificates are invalid;
- .3 evidence that certificates and documents required by the relevant conventions and listed in appendix 12, part A, are not on board, are incomplete, are not maintained or are falsely maintained;
- .4 evidence from the PSCO's general impressions and observations that serious hull or structural deterioration or deficiencies exist that may place at risk the structural, watertight or weathertight integrity of the ship;
- .5 evidence from the PSCO's general impressions or observations that serious deficiencies exist in the safety, pollution prevention or navigational equipment;
- .6 information or evidence that the master or crew are not familiar with essential shipboard operations relating to the safety of ships or the prevention of pollution, or that such operations have not been carried out;
- .7 indications that key crew members may not be able to communicate with each other or with other persons on board;
- .8 the emission of false distress alerts not followed by proper cancellation procedures; and
- .9 receipt of a report or complaint containing information that a ship appears to be substandard.

2.5 MORE DETAILED INSPECTIONS

2.5.1 If the ship does not carry valid certificates, or if the PSCO, from general impressions or observations on board, has clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificates or that the master or crew are not familiar with essential shipboard procedures, a more detailed inspection, as described in this chapter, should be carried out, utilizing relevant appendices.

2.5.2 Support during the more detailed inspection could be found in the documents mentioned in appendix 12, part B, where applicable.

2.5.3 It is not envisaged that all of the equipment and procedures outlined in this chapter would be checked during a single port State control inspection, unless the condition of the ship or the familiarity of the master or crew with essential shipboard procedures necessitated such a detailed inspection. In addition, these procedures are not intended to impose the seafarer certification programme of the port State on a ship entitled to fly the flag of another Party to STCW 1978 or to impose control procedures on foreign ships in excess of those imposed on ships of the port State.

CHAPTER 3 – CONTRAVENTION AND DETENTION

3.1 IDENTIFICATION OF A SUBSTANDARD SHIP

3.1.1 In general, a ship is regarded as substandard if the hull, machinery, equipment or operational safety and the protection of the environment are substantially below the standards required by the relevant conventions or if the crew is not in conformity with the safe manning document, owing to, inter alia:

- .1 the absence of principal equipment or arrangement required by the conventions, taking into account paragraph 1.2.6;
- .2 non-compliance of equipment or arrangement with relevant specifications of the conventions, taking into account paragraph 1.2.6;
- .3 substantial deterioration of the ship or its equipment;
- .4 insufficiency of operational proficiency, or unfamiliarity with essential operational procedures by the crew; and
- .5 insufficiency of manning or insufficiency of certification of seafarers.

3.1.2 If these evident factors as a whole or individually pose a danger to the ship or persons on board or present an unreasonable threat of harm to the marine environment if it were allowed to proceed to sea, it should be regarded as a substandard ship. The PSCO should also take into account the guidelines in appendix 2.

3.2 SUBMISSION OF INFORMATION CONCERNING DEFICIENCIES

3.2.1 Information that a ship appears to be substandard could be submitted to the appropriate authorities of the port State (see section 3.3) by a member of the crew, a professional body, an association, a trade union or any other individual with an interest in the safety of the ship, its crew and passengers, or the protection of the marine environment.

3.2.2 This information should be submitted in writing to permit proper documentation of the case and of the alleged deficiencies. If the information is passed verbally, the filing of a written report should be required, identifying, for the purposes of the port State's records, the individual or body providing the information. The attending PSCO may collect this information and submit it as part of the PSCO's report if the originator is unable to do so.

3.2.3 Information which may cause an investigation should be submitted as early as possible, giving adequate time to the authorities to act as necessary.

3.2.4 Each Party to the relevant convention should determine which authorities should receive information on substandard ships and initiate action. Measures should be taken to ensure that information submitted to the wrong department is promptly passed on by such department to the appropriate authority for action.

3.3 PORT STATE ACTION IN RESPONSE TO ALLEGED SUBSTANDARD SHIPS

3.3.1 On receipt of information about an alleged substandard ship or alleged pollution risk, the authorities should immediately investigate the matter and take the action required by the circumstances in accordance with the preceding sections.

3.3.2 Authorities which receive information about a substandard ship that could give rise to detention should forthwith notify any maritime, consular and/or diplomatic representatives of the flag State in the area of the ship and request them to initiate or cooperate with investigations. Likewise, the recognized organization (RO) which has issued the relevant certificates on behalf of the flag State should be notified, where appropriate. These provisions will not, however, relieve the authorities of the port State, being a Party to a relevant convention, of the responsibility for taking appropriate action in accordance with its powers under the relevant conventions.

3.3.3 If the port State receiving information is unable to take action because there is insufficient time or no PSCOs can be made available before the ship sails, the information should be passed to the authorities of the country of the next appropriate port of call, to the flag State and also to the RO in that port, where appropriate.

3.4 RESPONSIBILITIES OF PORT STATE TO TAKE REMEDIAL ACTION

If a PSCO determines that a ship can be regarded as substandard as specified in section 3.1 and appendix 2, the port State should immediately ensure that corrective action is taken to safeguard the safety of the ship and passengers and/or crew and eliminate any threat of harm to the marine environment before permitting the ship to sail.

3.5 GUIDANCE FOR THE DETENTION OF SHIPS

3.5.1 Notwithstanding the fact that it is impracticable to define a ship as substandard solely by reference to a list of qualifying defects, guidance for the detention of ships is given in appendix 2.

3.5.2 In the case of a detention, the PSCO will immediately notify the flag Administration in writing and include the report of inspection. Likewise, the RO which has issued the relevant certificates on behalf of the flag State shall be notified, where appropriate. The parties above will also be notified in writing of the release of detention.

3.6 SUSPENSION OF INSPECTION

3.6.1 In exceptional circumstances where, as a result of a more detailed inspection, the overall condition of a ship and its equipment, also taking into account the crew conditions, is found to be obviously substandard, the PSCO may suspend an inspection.

3.6.2 Prior to suspending an inspection, the PSCO should have recorded detainable deficiencies in the areas set out in appendix 2, as appropriate and detained the ship. The PSCO should issue an inspection report as set out in appendix 13. The report should indicate in free text that the inspection has been suspended and the reason for suspending the inspection. Suspension of an inspection should not be used when an inspection is halted for operational/safety reasons (for example overnight) and continued later.

3.6.3 The suspension of the inspection may continue until the responsible parties have taken the steps necessary to ensure that the ship fully complies with the requirements of the relevant instruments and, on that basis, invite the PSCO for a re-inspection. The measures to be taken by the responsible parties are therefore explicitly not limited to the rectification of only those deficiencies which have been recorded in Form B before the inspection was suspended.

3.6.4 Where an inspection is suspended, the port State authority should notify the responsible parties without delay. The notification should include information about the detention, and state that the inspection is suspended until that authority has been informed that the ship complies with all relevant requirements.

3.7 PROCEDURES FOR RECTIFICATION OF DEFICIENCIES AND RELEASE

3.7.1 The PSCO should endeavour to secure the rectification of all deficiencies detected.

3.7.2 In the case of deficiencies which are clearly hazardous to safety or the environment, the PSCO should, except as provided in paragraph 3.7.3, ensure that the hazard is removed before the ship is allowed to proceed to sea. For this purpose, appropriate action should be taken, which may include detention or a formal prohibition of a ship to continue an operation due to established deficiencies which, individually or together, would render the continued operation hazardous.

3.7.3 Where deficiencies which caused a detention, as referred to in paragraph 3.7.2, cannot be remedied in the port of inspection, the port State authority may allow the ship concerned to proceed to the nearest appropriate repair yard available, as chosen by the master and agreed to by that authority, provided that the conditions agreed between the port State authority and the flag State are complied with. Such conditions will ensure that the ship should not sail until it can proceed without risk to the safety of the passengers or crew, or risk to other ships, or without presenting an unreasonable threat of harm to the marine environment. Such conditions may include confirmation from the flag State that remedial action has been taken on the ship in question. In such circumstances the port State authority should notify the authority of the ship's next port of call, the parties mentioned in paragraph 4.1.4 and any other authority as appropriate. Notification to authorities should be made in the form shown in appendix 14. The authority receiving such notification should inform the notifying authority of action taken and may use the form shown in appendix 15.

3.7.4 On the condition that all possible efforts have been made to rectify all other deficiencies, except those referred to in paragraphs 3.7.2 and 3.7.3, the ship may be allowed to proceed to a port where any such deficiencies can be rectified.

3.7.5 If a ship referred to in paragraph 3.7.3 proceeds to sea without complying with the conditions agreed to by the authority of the port of inspection, that port State authority should immediately alert the next port, if known, the flag State and all other authorities it considers appropriate.

3.7.6 If a ship referred to in paragraph 3.7.3 does not call at the nominated repair port, the port State authority of the repair port should immediately alert the flag State and detaining port State, which may take appropriate action, and notify any other authority it considers appropriate.

CHAPTER 4 – REPORTING REQUIREMENTS

4.1 PORT STATE REPORTING

4.1.1 Port State authorities should ensure that, at the conclusion of an inspection, the master of the ship is provided with a document showing the results of the inspection, details of any action taken by the PSCO, and a list of any corrective action to be initiated by the master and/or company. Such reports should be made in accordance with the format in appendix 13.

4.1.2 Where, in the exercise of port State control, a Party denies a foreign ship entry to the ports or offshore terminals under its jurisdiction, whether or not as a result of information about a substandard ship, it should forthwith provide the master and flag State with reasons for the denial of entry.

4.1.3 In the case of a detention, at least an initial notification should be made to the flag State Administration as soon as practicable (see paragraphs 2.3.8 and 3.3.2). If such notification is made verbally, it should be subsequently confirmed in writing. As a minimum, the notification should include details of the ship's name, the IMO number, copies of Forms A and B as set out in appendix 13, time of detention and copies of any detention order. Likewise, the ROs which have issued the relevant certificates on behalf of the flag State should be notified, where appropriate. The parties above should also be notified in writing of the release of detention. As a minimum, this information should include the ship's name, the IMO number, the date and time of release and a copy of Form B as set out in appendix 13.

4.1.4 If the ship has been allowed to sail with known deficiencies, the authorities of the port State should communicate all the facts to the authorities of the country of the next appropriate port of call, to the flag State, and to the RO, where appropriate.

4.1.5 Parties to a relevant convention, when they have exercised control giving rise to detention, should submit to the Organization reports in accordance with SOLAS 1974 regulation I/19, article 11 of MARPOL, or article X(3) of STCW 1978. Such deficiency reports should be made in accordance with the form given in appendices 13 or 16, as appropriate, or may be submitted electronically by the port State or a regional PSC regime.

4.1.6 Copies of such deficiency reports should, in addition to being forwarded to the Organization, be sent by the port State without delay to the authorities of the flag State and, where appropriate, to the RO which had issued the relevant certificate. Deficiencies found which are not related to the relevant conventions, or which involve ships of non-Parties or below convention size, should be submitted to flag States and/or to appropriate organizations but not to IMO.

4.1.7 Relevant telephone numbers and addresses of flag States' headquarters to which reports should be sent as outlined above, as well as addresses of flag State offices which provide inspection services should be provided to the Organization.¹

4.2 FLAG STATE REPORTING

4.2.1 On receiving a report on detention, the flag State and, where appropriate, the RO through the flag State Administration, should, as soon as possible, inform the Organization of remedial action taken in respect of the detention, which may be submitted electronically by the flag State to the Global Integrated Ship Information System (GISIS) or in a format shown in appendix 17.

¹ Such addresses are available in MSC-MEPC.6/Circ.21 (*National contact points for safety and pollution prevention and response*), which may be amended, the IMO Internet home page and the GISIS module on contact points (<http://gisis.imo.org/Public>).

4.2.2 Relevant telephone numbers and addresses of port State control offices, headquarters and those who provide inspection services should be provided to the Organization.

4.3 REPORTING OF ALLEGATIONS UNDER MARPOL

4.3.1 A report on alleged deficiencies or on alleged contravention of the discharge provisions relating to the provisions of MARPOL should be forwarded to the flag State as soon as possible, preferably no later than 60 days after the observation of the deficiencies or contravention. Such reports may be made in accordance with the format in appendices 13 or 16, as appropriate. If a contravention of the discharge provisions is suspected, then the information should be supplemented by evidence of violations which, as a minimum, should include the information specified in parts 2 and 3 of appendices 3 and 4 of these Procedures.

4.3.2 On receiving a report on alleged deficiencies or alleged contravention of the discharge provisions, the flag State and, where appropriate, the RO through the flag State Administration, should, as soon as possible, inform the Party submitting the report of immediate action taken in respect of the alleged deficiencies or contravention. That Party and the Organization should, upon completion of such action, be informed of the outcome and details, where appropriate, be included in the mandatory annual report to the Organization.

CHAPTER 5 – REVIEW PROCEDURES

5.1 REPORT OF COMMENTS

5.1.1 In the interest of making information regarding deficiencies and remedial measures generally available, a summary of such reports should be made by the Organization in a timely manner in order that the information can be disseminated in accordance with the Organization's procedures to all Parties to the relevant conventions. In the summary of deficiency reports, an indication should be given of flag State action or whether a comment by the flag State concerned is outstanding.

5.1.2 The appropriate committee should periodically evaluate the summary of the deficiency reports in order to identify measures that may be necessary to ensure more consistent and effective application of IMO instruments, paying close attention to the difficulties reported by Parties to the relevant conventions, particularly in respect of developing countries in their capacity as port States.

5.1.3 Recommendations to address such difficulties, when recognized by the appropriate committee, should, where appropriate, be incorporated into the relevant IMO instrument and any modifications relating to the procedures and obligations should be made in the port State documentation.

APPENDIX 1

CODE OF GOOD PRACTICE FOR PORT STATE CONTROL OFFICERS CONDUCTING INSPECTIONS WITHIN THE FRAMEWORK OF THE REGIONAL MEMORANDA OF UNDERSTANDING AND AGREEMENT ON PORT STATE CONTROL (MSC-MEPC.4/Circ.2)

Introduction

1 This Code provides guidelines regarding the standards of integrity, professionalism and transparency that regional port State control (PSC) regimes expect of all port State control officers (PSCOs) who are involved in or associated with port State control inspections.

Objective

2 The objective of this Code is to assist PSCOs in conducting their inspections to the highest professional level. PSCOs are central to achieving the aims of the regional PSC regime. They are the daily contact with the shipping world. They are expected to act within the law, within the rules of their Government and in a fair, open, impartial and consistent manner.

Fundamental principles of the Code

3 The Code of Good Practice encompasses three fundamental principles against which all actions of PSCOs are judged: integrity, professionalism and transparency. These are defined as follows:

- .1 integrity is the state of moral soundness, honesty and freedom from corrupting influences or motives;
- .2 professionalism is applying accepted professional standards of conduct and technical knowledge. For PSCOs, standards of behaviour are established by the maritime authority and the general consent of the port State members; and
- .3 transparency implies openness and accountability.

4 The list of the actions and behaviour expected of PSCOs in applying these principles is set out in the annex to this appendix.

5 Adhering to professional standards provides greater credibility to PSCOs and places more significance on their findings.

6 Nothing in the Code shall absolve PSCOs from complying with the specific requirements of the PSC instruments and applicable national laws.

Annex

CODE OF GOOD PRACTICE FOR PORT STATE CONTROL OFFICERS

Actions and behaviour of PSCOs

PSCOs should:

- 1 use their professional judgement in carrying out their duties;

Respect

- 2 remember that a ship is a home as well as a workplace for the ship's personnel and not unduly disturb their rest or privacy;
- 3 comply with any ship housekeeping rules such as removing dirty shoes or work clothes;
- 4 not be prejudiced by the race, gender, religion or nationality of the crew when making decisions and treat all personnel on board with respect;
- 5 respect the authority of the master or their deputy;
- 6 be polite but professional and firm as required;
- 7 never become threatening, abrasive or dictatorial or use language that may cause offence;
- 8 expect to be treated with courtesy and respect;

Conduct of inspections

- 9 comply with all health and safety requirements of the ship and their Administration, e.g. wearing of personal protective clothing, and not take any action or cause any action to be taken which could compromise the safety of the PSCO or the ship's crew;
- 10 comply with all security requirements of the ship and wait to be escorted around the ship by a responsible person;
- 11 present their identity cards to the master or the representative of the owner at the start of the inspection;
- 12 explain the reason for the inspections; however, where the inspection is triggered by a report or complaint, they must not reveal the identity of the person making the complaint;
- 13 apply the procedures of PSC and the convention requirements in a consistent and professional way and interpret them pragmatically when necessary;
- 14 not try to mislead the crew, for example by asking them to do things that are contrary to the relevant conventions;

- 15 request the crew to demonstrate the functioning of equipment and operational activities, such as drills, and not make tests themselves;
- 16 seek advice when they are unsure of a requirement or of their findings rather than making an uninformed decision, for example by consulting colleagues, publications, the flag Administration, the recognized organization;
- 17 where it is safe to do so, accommodate the operational needs of the port and the ship;
- 18 explain clearly to the master the findings of the inspection and the corrective action required and ensure that the report of inspection is clearly understood;
- 19 issue to the master a legible and comprehensible report of inspection before leaving the ship;

Disagreements

- 20 deal with any disagreement over the conduct or findings of the inspection calmly and patiently;
- 21 advise the master of the complaints procedure in place if the disagreement cannot be resolved within a reasonable time;
- 22 advise the master of the right of appeal and relevant procedures in the case of detention;

Integrity

- 23 be independent and not have any commercial interest in their ports and the ships they inspect or companies providing services in their ports. For example, PSCOs should not be employed, even on an occasional basis, by companies which operate ships in their ports or PSCOs should not have an interest in the repair companies in their ports;
- 24 be free to make decisions based on the findings of their inspections and not on any commercial considerations of the port;
- 25 always follow the rules of their Administrations regarding the acceptance of gifts and favours, e.g. meals on board;
- 26 firmly refuse any attempts of bribery and report any blatant cases to the maritime authority;
- 27 not misuse their authority for benefit, financial or otherwise; and

Updating knowledge

- 28 update their technical knowledge regularly.

APPENDIX 2

GUIDELINES FOR THE DETENTION OF SHIPS

1 Principles governing rectification of deficiencies or detention of a ship

1.1 In taking a decision concerning the rectification of a deficiency or detention of a ship, the port State control officer (PSCO) will have to take into consideration the results of the more detailed inspection carried out in accordance with paragraph 2.5 of the procedures and guidelines contained in this appendix.

1.2 The PSCO will exercise professional judgement in determining whether to detain the ship until the deficiencies are rectified or to allow the ship to sail with certain deficiencies without unreasonable danger to safety, health or the environment, having also considered the particular circumstances of the intended voyage.

2 Detention related to minimum safe manning and STCW certification

Before detaining a ship for the reasons of not operating at appropriate established minimum safe manning and STCW certification, the following will have to be considered, giving due regard to the points listed under areas under STCW 1978:

- .1 length and nature of the intended voyage or service;
- .2 whether or not the deficiency poses a danger to ships, persons on board or the environment;
- .3 whether or not appropriate hours of rest for the crew have been recorded and there is evidence that the minimum hours of rest have repeatedly not been kept;
- .4 ship's size and type and equipment provided; and
- .5 nature of cargo.

3 Procedures for the detention of ships of all sizes

3.1 When exercising professional judgement as to whether or not a ship should be detained, the PSCO will apply the following criteria:

- .1 timing: ships which are unsafe to proceed to sea will be detained upon the first inspection, irrespective of the time the ship will stay in port; and
- .2 re-inspection criterion: the ship will be detained if the deficiencies on a ship are sufficiently serious to merit a PSCO returning to the ship to be satisfied that they have been rectified before the ship sails.

3.2 The need for the PSCO to return to the ship classifies the seriousness of the deficiencies.

3.3 When deciding whether the deficiencies found in a ship are sufficiently serious to merit detention, the PSCO should assess whether:

- .1 the ship has relevant, valid documentation; and
- .2 the ship has the crew required in the minimum safe manning document or equivalent.

3.4 During inspection, the PSCO should further assess whether the ship and/or crew, throughout their forthcoming voyage, are able to:

- .1 navigate safely;
- .2 safely handle, carry and monitor the condition of the cargo;
- .3 operate the engine-room safely;
- .4 maintain proper propulsion and steering;
- .5 fight fires effectively in any part of the ship if necessary;
- .6 abandon ship speedily and safely and effect rescue if necessary;
- .7 prevent pollution of the environment;
- .8 maintain adequate stability;
- .9 maintain adequate watertight integrity;
- .10 communicate in distress situations if necessary; and
- .11 provide safe and healthy conditions on board.

3.5 If the result of any of these assessments is negative, taking into account all deficiencies found, the ship should be strongly considered for detention. A combination of deficiencies of a less serious nature may also warrant the detention of the ship.

4 General

The lack of valid certificates as required by the relevant conventions may warrant the detention of ships. However, ships flying the flag of States not a Party to a convention or not having implemented another relevant instrument are not entitled to carry the certificates provided for by the convention or other relevant instrument. Therefore, absence of the required certificates should not by itself constitute a reason to detain these ships; however, in applying the "no more favourable treatment" clause, substantial compliance with the provisions and criteria specified in these Procedures must be required before the ship sails.

5 Detainable deficiencies

To assist the PSCO in the use of these Guidelines, there follows a list of deficiencies, grouped under relevant conventions and/or codes, which are considered to be of such a serious nature that they may warrant the detention of the ship involved. This list is not considered exhaustive, but is intended to give examples of relevant items. However, the detainable deficiencies in the area of STCW 1978, listed below, are the only grounds for detention under this Convention.

Areas under SOLAS 1974

- 1 Failure of proper operation of propulsion and other essential machinery, as well as electrical installations.
- 2 Insufficient cleanliness of engine-room, excess amount of oily-water mixture in bilges, insulation of piping including exhaust pipes in engine-room contaminated by oil, and improper operation of bilge pumping arrangements.
- 3 Failure of the proper operation of emergency generator, lighting, batteries and switches.
- 4 Failure of proper operation of the main and auxiliary steering gear.
- 5 Absence, failure, insufficient capacity or serious deterioration of personal life-saving appliances, survival craft and launching and recovery arrangements (see also MSC.1/Circ.1490/Rev.1).
- 6 Absence, non-compliance or substantial deterioration to the extent that it cannot comply with its intended use of fire detection system, fire alarms, fire-fighting equipment, fixed fire-extinguishing installation, ventilation valves, fire dampers and quick-closing devices.
- 7 Absence, substantial deterioration or failure of proper operation of the cargo deck area fire protection on tankers.
- 8 Absence, non-compliance or serious deterioration of lights, shapes or sound signals.
- 9 Absence or failure of the proper operation of the radio equipment for distress and safety communication.
- 10 Absence or failure of the proper operation of navigation equipment, taking the relevant provisions of SOLAS 1974 regulation V/16.2 into account.
- 11 Absence of corrected navigational charts, and/or all other relevant nautical publications necessary for the intended voyage, taking into account that electronic charts may be used as a substitute for the charts.
- 12 Absence of non-sparking exhaust ventilation for cargo pump-rooms.
- 13 Serious deficiency in the operational requirements listed in appendix 7.
- 14 Number, composition or certification of crew not corresponding with safe manning document.
- 15 Non-implementation or failure to carry out the enhanced survey programme in accordance with SOLAS 1974 regulation XI-1/2 and the International Code on the Enhanced Programme of Inspections during Surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code), as amended.
- 16 Absence or failure of a voyage data recorder (VDR), when its use is compulsory.

Areas under the IBC Code

- 1 Transport of a substance not mentioned in the Certificate of Fitness or missing cargo information.
- 2 Missing or damaged high-pressure safety devices.
- 3 Electrical installations not intrinsically safe or not corresponding to the Code requirements.
- 4 Sources of ignition in hazardous locations.
- 5 Contravention of special requirements.
- 6 Exceeding of maximum allowable cargo quantity per tank.
- 7 Insufficient heat protection for sensitive products.
- 8 Pressure alarms for cargo tanks not operable.
- 9 Transport of substances to be inhibited without valid inhibitor certificate.

Areas under the IGC Code

- 1 Transport of a substance not mentioned in the Certificate of Fitness or missing cargo information.
- 2 Missing closing devices for accommodations or service spaces.
- 3 Bulkhead not gastight.
- 4 Defective air locks.
- 5 Missing or defective quick-closing valves.
- 6 Missing or defective safety valves.
- 7 Electrical installations not intrinsically safe or not corresponding to the Code requirements.
- 8 Ventilators in cargo area not operable.
- 9 Pressure alarms for cargo tanks not operable.
- 10 Gas detection plant and/or toxic gas detection plant defective.
- 11 Transport of substances to be inhibited without valid inhibitor certificate.

Areas under LL 1966 and LL PROT 1988

- 1 Significant areas of damage or corrosion or pitting of plating and associated stiffening in decks and hull affecting seaworthiness or strength to take local loads, unless properly authorized temporary repairs for a voyage to a port for permanent repairs have been carried out.

- 2 A recognized case of insufficient stability.
- 3 The absence of sufficient and reliable information, in an approved form, which by rapid and simple means enables the master to arrange for the loading and ballasting of the ship in such a way that a safe margin of stability is maintained at all stages and at varying conditions of the voyage, and that the creation of any unacceptable stresses in the ship's structure is avoided.
- 4 Absence, substantial deterioration or defective closing devices, hatch closing arrangements and watertight/weathertight doors.
- 5 Overloading.
- 6 Absence of, or impossibility to read, draught marks and/or load line marks.
- 7 The means of freeing water from the deck not in satisfactory or operational condition.

Areas under MARPOL Annex I

- 1 Absence, serious deterioration or failure of proper operation of the oily-water filtering equipment, the oil discharge monitoring and control system or the 15 ppm alarm arrangements.
- 2 Remaining capacity of slop and/or sludge tank insufficient for the intended voyage.
- 3 Oil Record Book not available.
- 4 Unauthorized discharge bypass fitted.
- 5 Failure to meet the requirements of regulation 20.4 or alternative requirements specified in regulation 20.7.
- 6 Oily bilge water and/or oil residue accumulated in machinery spaces.

Areas under MARPOL Annex II

- 1 Absence of Procedures and Arrangements Manual (P and A Manual).
- 2 Cargo is not categorized.
- 3 No Cargo Record Book available.
- 4 Unauthorized discharge bypass fitted.

Areas under MARPOL Annex III and dangerous goods carriage requirements

- 1 Absence of a valid Document of Compliance for carriage of dangerous goods (if required).
- 2 Absence of a Dangerous Cargo Manifest or detailed stowage plan before departure of the ship.
- 3 Stowage and segregation provisions of the IMDG Code chapters 7.1, 7.2, 7.4, 7.5 and 7.6 are not met.

- 4 Ship is carrying dangerous goods not in compliance with the Document of Compliance for carriage of dangerous goods of the ship.
- 5 Ship is carrying damaged or leaking dangerous goods packages.
- 6 Ship's personnel assigned to specific duties related to the cargo are not familiar with those duties, with any dangers posed by the cargo and with the measures to be taken in such a context.

Areas under MARPOL Annex IV

- 1 Absence of valid International Sewage Pollution Prevention Certificate.
- 2 Sewage treatment plant not approved and certified by the Administration.
- 3 Failure of sewage treatment plant.
- 4 Ship's personnel not familiar with disposal/discharge requirements of sewage.

Areas under MARPOL Annex V

- 1 Absence of garbage management plan.
- 2 No garbage record book available.
- 3 Ship's personnel not familiar with disposal/discharge requirements of garbage management plan.

Areas under MARPOL Annex VI

- 1 Absence of valid International Air Pollution Prevention Certificate (IAPP Certificate), Engine International Air Pollution Prevention Certificates (EIAPP Certificates) or Technical Files if applicable.
- 2 Absence of International Energy Efficiency Certificate (IEE Certificate), the EEDI Technical file or EEXI Technical file; or the Ship Energy Efficiency Management Plan (SEEMP).
- 3 In relation to the absence of a valid Statement of Compliance¹ for:
 1. Fuel Oil Consumption Reporting from 2019 and onwards of 1 June of each following year (Regulation 27), and/or
 2. Carbon Intensity Rating from 2023 and onwards of each following year (Regulation 28);

a pragmatic approach should be applied if a ship has changed the flag and/or the company and there is evidence the losing Administration has not acted in accordance with regulation/s or data was not provided by the previous company when the ship was transferred.

¹ New ships are not required to be furnished with statements of compliance until June of the following year.

- 4 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 NO_x Tier III emission control area in which it is operating.
- 5 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.
- 6 On ships not equipped with equivalent means of SO_x compliance, based on the methodology of sample analysis in accordance with appendix VI¹ of MARPOL Annex VI, 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 the appendix).
- 7 On ships equipped with equivalent means of SO_x compliance:
 - .1 absence of an appropriate approval for the equivalent means, which applies to relevant fuel combustion units on board;
 - .2 EGCS systems installed on board fail to provide effective equivalence to the requirements of regulations VI/14 and 14.4; and
 - .3 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 (see the annex to appendix 18).
- 8 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 (resolution MEPC.76(40) as amended by MEPC.93(45), or resolution MEPC.244(66), as amended by resolution MEPC.368(79), as appropriate).
- 9 The master and crew are not familiar with essential procedures regarding the operation of air pollution prevention equipment or reporting requirements as defined in paragraph 2.6.14 of appendix 18.

Areas under STCW 1978

- 1 Failure of seafarers to hold a certificate, to have an appropriate certificate, to have a valid dispensation or to provide documentary proof that an application for an endorsement has been submitted to the Administration.
- 2 Failure to comply with the applicable safe manning requirements of the Administration.

¹ Amendments to MARPOL VI, appendix VI, Verification procedures for a MARPOL Annex VI fuel oil sample.

3 Failure of navigational or engineering watch arrangements to conform to the requirements specified for the ship by the Administration.

4 Absence in a watch of a person qualified to operate equipment essential to safe navigation, safety radiocommunications or the prevention of marine pollution.

5 Inability to provide for the first watch at the commencement of a voyage and for subsequent relieving watches persons who are sufficiently rested and otherwise fit for duty.

Areas under AFS 2001

1 Absence of a valid International Anti-fouling System Certificate or a Declaration on Anti-fouling System.

2 Sampling proves it is non-compliant within the port's jurisdiction.

Areas which may not warrant a detention, but where, for example, cargo operations have to be suspended

Failure of the proper operation (or maintenance) of inert gas systems, cargo-related gear or machinery should be considered sufficient grounds to stop cargo operation.

APPENDIX 3

GUIDELINES FOR INVESTIGATIONS AND INSPECTIONS CARRIED OUT UNDER MARPOL ANNEX I

PART 1

INSPECTION OF IOPP CERTIFICATE, SHIP AND EQUIPMENT

1 Ships required to carry an IOPP Certificate

1.1 On boarding and introduction to the master or responsible ship's officer, the port State control officer (PSCO) should examine the International Oil Pollution Prevention Certificate (IOPP Certificate), including the attached Supplement - Record of Construction and Equipment for ships other than oil tankers or Record of Construction and Equipment for oil tankers, and the Oil Record Book (ORB). The ORB may be presented in an electronic format. 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.

1.2 The certificate carries the information on the type of ship and the dates of surveys and inspections. As a preliminary check it should be confirmed that the dates of surveys and inspections are still valid. Furthermore, it should be established if the ship carries an oil cargo and whether the carriage of such oil cargo is in conformity with the certificate (see also paragraph 1.11 of the Record of Construction and Equipment for Oil Tankers).

1.3 Through examining the Record of Construction and Equipment, the PSCO may establish how the ship is equipped for the prevention of marine pollution.

1.4 If the certificate is valid and the general impression and visual observations on board confirm a good standard of maintenance, the PSCO should generally confine the inspection to reported deficiencies, if any.

1.5 If, however, the PSCO from general impressions or observations on board has clear grounds for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate, a more detailed inspection should be initiated.

1.6 The inspection of the engine-room should begin with forming a general impression of the state of the engine-room, the presence of traces of oil in the engine-room bilges and the ship's routine for disposing of oil-contaminated water from the engine-room spaces.

1.7 Next, a closer examination of the ship's equipment as listed in the IOPP Certificate may take place. This examination should also confirm that no unapproved modifications have been made to the ship and its equipment.

1.8 Should any doubt arise as to the maintenance or the condition of the ship or its equipment, then further examination and testing may be conducted as considered necessary. In this respect reference is made to annex 3 to the *Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2023* (resolution A.1186(33)), as may be amended.

1.9 The PSCO should bear in mind that a ship may be equipped over and above the requirements of MARPOL Annex I. If such equipment is malfunctioning, the flag State should be informed. This alone, however, should not cause a ship to be detained unless the discrepancy presents an unreasonable threat of harm to the marine environment.

1.10 In the case of oil tankers, the inspection should include the cargo tank and pump-room area of the ship and should begin with forming a general impression of the layout of the tanks, the cargoes carried, and the routine of cargo slops disposal.

2 Ships of non-Parties to MARPOL Annex I and other ships not required to carry an IOPP Certificate

2.1 As this category of ships is not provided with an IOPP Certificate, the PSCO should be satisfied with regard to the construction and equipment standards relevant to the ship on the basis of the requirements set out in MARPOL Annex I.

2.2 In all other respects the PSCO should be guided by the procedures for ships referred to in section 1 above.

2.3 If the ship has some form of certification other than the IOPP Certificate, the PSCO may take the form and content of this documentation into account in the evaluation of that ship.

3 Control

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

PART 2

CONTRAVENTION OF DISCHARGE PROVISIONS

1 Experience has shown that information furnished to the flag State as envisaged in appendix 5 of these Procedures is often inadequate to enable the flag State to cause proceedings to be brought in respect of the alleged violation of the discharge requirements. This appendix is intended to identify information which is often needed by a flag State for the prosecution of such possible violations.

2 It is recommended that, in preparing a port State report on deficiencies, where contravention of the discharge requirements is involved, the authorities of the coastal or port State be guided by the itemized list of possible evidence as shown in part 3 of this appendix. It should be borne in mind in this connection that:

- .1 the report aims to provide the optimal collation of obtainable data; however, even if all the information cannot be provided, as much information as possible should be submitted; and

- .2 it is important for all the information included in the report to be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention had occurred.

3 In addition to the port State report on deficiencies, a report should be completed by a port or coastal State on the basis of the itemized list of possible evidence. It is important that these reports are supplemented by documents such as:

- .1 a statement by the observer of the pollution; in addition to the information required under section 1 of part 3 of this appendix, the statement should include considerations which lead the observer to conclude that no other possible pollution source is in fact the source;
- .2 statements concerning the sampling procedures both of the slick and on board; these should include location where and time when samples were taken, identity of person(s) taking the samples and receipts identifying the persons having custody and receiving transfer of the samples;
- .3 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed, and names of persons performing the analyses and their experience;
- .4 a statement by the PSCO on board together with the PSCO's rank and organization;
- .5 statements by persons being questioned;
- .6 statements by witnesses; all observations, photographs and documentation should be supported by a signed verification of their authenticity; all certifications, authentications or verifications shall be executed in accordance with the laws of the State which prepares them; all statements should be signed and dated by the person making the statement and, if possible, by a witness to the signing; the names of the persons signing statements should be printed in legible script above or below the signature;
- .7 photographs of the oil slick; and
- .8 copies or printouts of relevant recordings, etc., pages of ORBs, logbooks, discharge.

4 The report referred to in paragraphs 2 and 3 should be sent to the flag State. If the coastal State observing the pollution and the port State carrying out the investigation on board are not the same, the State carrying out the latter investigation should also send a copy of its findings to the State observing the pollution and requesting the investigation.

PART 3

ITEMIZED LIST OF POSSIBLE EVIDENCE ON ALLEGED CONTRAVENTION OF THE MARPOL ANNEX I DISCHARGE PROVISIONS

1 Action on sighting oil pollution

1.1 Particulars of ship or ships suspected of contravention

- .1 Name of ship
- .2 Reasons for suspecting the ship
- .3 Date and time (UTC) of observation or identification
- .4 Position of ship
- .5 Flag and port of registry
- .6 Type (e.g. tanker, cargo ship, passenger ship, fishing vessel), size (estimated tonnage) and other descriptive data (e.g. superstructure colour and funnel mark)
- .7 Draught condition (loaded or in ballast)
- .8 Approximate course and speed
- .9 Position of slick in relation to ship (e.g. astern, port, starboard)
- .10 Part of the ship from which side discharge was seen emanating
- .11 Whether discharge ceased when ship was observed or contacted by radio

1.2 Particulars of slick

- .1 Date and time (UTC) of observation if different from paragraph 1.1.3
- .2 Position of oil slick in longitude and latitude if different from paragraph 1.1.4
- .3 Approximate distance in nautical miles from the nearest land
- .4 Approximate overall dimension of oil slick (length, width and percentage thereof covered by oil)
- .5 Physical description of oil slick (direction and form, e.g. continuous, in patches or in windrows)
- .6 Appearance of oil slick (indicate categories)
 - Category A: Barely visible under most favourable light condition
 - Category B: Visible as silvery sheen on water surface
 - Category C: First trace of colour may be observed

- Category D: Bright band of colour
 - Category E: Colours begin to turn dull
 - Category F: Colours are much darker
- .7 Sky conditions (bright sunshine, overcast, etc.), lightfall and visibility (kilometres) at the time of observation
- .8 Sea state
- .9 Direction and speed of surface wind
- .10 Direction and speed of current

1.3 Identification of the observer(s)

- .1 Name of observer
- .2 Organization with which observer is affiliated (if any)
- .3 Observer's status within the organization
- .4 Observation made from aircraft/ship/shore/otherwise
- .5 Name or identity of ship or aircraft from which observation was made
- .6 Specific location of ship, aircraft, place on shore or otherwise from which observation was made
- .7 Activity engaged in by observer when observation was made, e.g. patrol, voyage, flight (en route from ... to ...)

1.4 Method of observation and documentation

- .1 Visual
- .2 Conventional photographs
- .3 Remote sensing records and/or remote sensing photographs
- .4 Samples taken from slick
- .5 Any other form of observation (specify)

Note: A photograph of the discharge should preferably be in colour. Photographs can provide the following information: that a material on the sea surface is oil; that the quantity of oil discharged does constitute a violation of the Convention; that the oil is being, or has been, discharged from a particular ship; and the identity of the ship.

Experience has shown that the aforementioned can be obtained with the following three photographs:

- details of the slick taken almost vertically down from an altitude of less than 300 m with the sun behind the photographer;
- an overall view of the ship and slick showing oil emanating from a particular ship; and
- details of the ship for the purposes of identification.

1.5 Other information if radio contact can be established

- .1 Master informed of pollution
- .2 Explanation of master
- .3 Ship's last port of call
- .4 Ship's next port of call
- .5 Name of ship's master and owner
- .6 Ship's call sign

2 Investigation on board

2.1 Inspection of IOPP Certificate

- .1 Name of ship
- .2 Distinctive number or letters
- .3 Port of registry
- .4 Type of ship
- .5 Date and place of issue
- .6 Date and place of endorsement

Note: If the ship is not issued an IOPP Certificate, as much as possible of the requested information should be given.

2.2 Inspection of Supplement of the IOPP Certificate

- .1 Applicable paragraphs of sections 2, 3, 4, 5 and 6 of the Supplement (non-oil tankers)
- .2 Applicable paragraphs of sections 2, 3, 4, 5, 6, 7, 8, 9 and 10 of the Supplement (oil tankers)

Note: If the ship does not have an IOPP Certificate, a description should be given of the equipment and arrangements on board, designed to prevent marine pollution.

2.3 Inspection of Oil Record Book (ORB)

- .1 Copy or print out sufficient pages of the ORB – part I to cover a period of 30 days prior to the reported incident
- .2 Copy or print out sufficient pages of the ORB – part II (if on board) to cover a full loading/unloading/ballasting and tank cleaning cycle of the ship. Also copy the tank diagram.

2.4 Inspection of logbook

- .1 Last port, date of departure, draught forward and aft
- .2 Current port, date of arrival, draught forward and aft
- .3 Ship's position at or near the time the incident was reported
- .4 Spot check if positions mentioned in the logbook agree with positions noted in the ORB

2.5 Inspection of other documentation on board

Other documentation relevant for evidence (if necessary, make copies) such as:

- .1 recent ullage sheets
- .2 records of monitoring and control equipment

2.6 Inspection of ship

- .1 Ship's equipment in accordance with the Supplement of the IOPP Certificate
- .2 Samples taken. State location on board
- .3 Traces of oil in vicinity of overboard discharge outlets
- .4 Condition of engine-room and contents of bilges
- .5 Condition of oily-water separator, filtering equipment and alarm, stopping or monitoring arrangements
- .6 Contents of sludge and/or holding tanks
- .7 Sources of considerable leakage on oil tankers

The following additional evidence may be pertinent:

- .8 Oil on surface of segregated or dedicated clean ballast
- .9 Condition of pump-room bilges
- .10 Condition of crude oil washing (COW) system
- .11 Condition of inert gas (IG) system

- .12 Condition of monitoring and control system
- .13 Slop tank contents (estimate quantity of water and of oil)

2.7 Statements of persons concerned

If the ORB – part I has not been properly completed, information on the following questions may be pertinent:

- .1 Was there a discharge (accidental or intentional) at the time indicated on the incident report?
- .2 Is the bilge discharge controlled automatically?
- .3 If so, at what time was this system last put into operation and at what time was this system last put on manual mode?
- .4 If not, what were the date and time of the last bilge discharge?
- .5 What was the date of the last disposal of residue and how was disposal effected?
- .6 Is it usual to effect discharge of bilge water directly to the sea, or to store bilge water first in a collecting tank? Identify the collecting tank.
- .7 Have oil fuel tanks recently been used as ballast tanks?

If the ORB – part II has not been properly completed, information on the following questions may be pertinent:

- .8 What was the cargo/ballast distribution in the ship on departure from the last port?
- .9 What was the cargo/ballast distribution in the ship on arrival in the current port?
- .10 When and where was the last loading effected?
- .11 When and where was the last unloading effected?
- .12 When and where was the last discharge of dirty ballast?
- .13 When and where was the last cleaning of cargo tanks?
- .14 When and where was the last COW operation and which tanks were washed?
- .15 When and where was the last decanting of slop tanks?
- .16 What is the ullage in the slop tanks and the corresponding height of interface?
- .17 Which tanks contained the dirty ballast during the ballast voyage (if ship arrived in ballast)?
- .18 Which tanks contained the clean ballast during the ballast voyage (if ship arrived in ballast)?

In addition, the following information may be pertinent:

- .19 Details of the present voyage of the ship (previous ports, next ports, trade)
- .20 Contents of oil fuel and ballast tanks
- .21 Previous and next bunkering, type of oil fuel
- .22 Availability or non-availability of reception facilities for oily wastes during the present voyage
- .23 Internal transfer of oil fuel during the present voyage

In the case of oil tankers, the following additional information may be pertinent:

- .24 The trade the ship is engaged in, such as short/long distance, crude or product or alternating crude/product, lightering service, oil/dry bulk
- .25 Which tanks are clean and dirty
- .26 Repairs carried out or envisaged in cargo tanks

Miscellaneous information:

- .27 Comments in respect of condition of ship's equipment
- .28 Comments in respect of pollution report
- .29 Other comments

3 Investigation ashore

3.1 Analyses of oil samples

Indicate method and results of the samples' analyses.

3.2 Further information

Additional information on the ship, obtained from oil terminal staff, tank cleaning contractors or shore reception facilities may be pertinent.

Note: Any information under this heading is, if practicable, to be corroborated by documentation such as signed statements, invoices, receipts.

4 Information not covered by the foregoing

5 Conclusion

- .1 Summing up of the investigator's technical conclusions.
- .2 Indication of applicable provisions of MARPOL Annex I which the ship is suspected of having contravened.
- .3 Did the results of the investigation warrant the filing of a deficiency report?

PART 4

GUIDELINES FOR IN-PORT INSPECTION OF CRUDE OIL WASHING PROCEDURES

1 Preamble

1.1 Guidelines for the in-port inspection of crude oil washing (COW) procedures, as called for by resolution 7 of the International Conference on Tanker Safety and Pollution Prevention, 1978, are required to provide a uniform and effective control of crude oil washing to ensure compliance of ships at all times with the provisions of MARPOL.

1.2 The design of the crude oil washing installation is subject to the approval of the flag Administration. However, although the operational aspect of crude oil washing is also subject to the approval of the same Administration, it might be necessary for a port State authority to see to it that continuing compliance with agreed procedures and parameters is ensured.

1.3 The COW Operations and Equipment Manual has been so specified that it contains all the necessary information relating to the operation of crude oil washing on a particular tanker. The objectives of the inspection would then be to ensure that the provisions of the Manual dealing with safety procedures and with pollution prevention are being strictly adhered to.

1.4 The method of the inspection is at the discretion of the port State authority and may cover the entire operation or only those parts of the operation which occur when the PSCO is on board.

1.5 Inspection will be governed by articles 5 and 6 of MARPOL.

2 Inspections

2.1 A port State should make the appropriate arrangements so as to ensure compliance with requirements governing the crude oil washing of oil tankers. This is not, however, to be construed as relieving terminal operators and shipowners of their obligations to ensure that the operation is undertaken in accordance with the regulations.

2.2 The inspection may cover the entire operation of crude oil washing or only certain aspects of it. It is thus in the interest of all concerned that the ship's records with regard to the COW operations are maintained at all times so that a PSCO may verify those operations undertaken prior to the inspection.

3 Ship's personnel

3.1 The person in charge and the other nominated persons who have responsibility in respect of the crude oil washing operation should be identified. They must, if required, be able to show that their qualifications meet the requirements, as appropriate, of paragraphs 5.2 and 5.3 of the *Revised specifications for the design, operation and control of crude oil washing systems* (resolution A.446(XI)), as amended.

3.2 The verification may be accomplished by reference to the individual's discharge papers, testimonials issued by the ship's operator or by certificates issued by a training centre approved by an Administration. The numbers of such personnel should be at least as stated in the Manual.

4 Documentation

The following documents should be available for inspection:

- .1 the IOPP Certificate and the Record of Construction and Equipment, to determine:
 - .1 whether the ship is fitted with a crude oil washing system as required in regulation 33 of MARPOL Annex I;
 - .2 whether the crude oil washing system is according to and complying with the requirements of regulations 33 and 35 of MARPOL Annex I;
 - .3 the validity and date of the Operations and Equipment Manual; and
 - .4 the validity of the Certificate;
- .2 the approved Manual;
- .3 the ORB; and
- .4 the Cargo Ship Safety Equipment Certificate to confirm that the inert gas system conforms to regulations contained in chapter II-2 of SOLAS 1974.

5 Inert gas system

5.1 Inert gas system regulations require that instrumentation be fitted for continuously indicating and permanently recording at all times when inert gas is being supplied, the pressure and the oxygen content of the gas in the inert gas supply main. Reference to the permanent recorder would indicate if the system had been operating before and during the cargo discharge in a satisfactory manner.

5.2 If conditions specified in the Manual are not being met, the washing must be stopped until satisfactory conditions are restored.

5.3 As a further precautionary measure, the oxygen level in each tank to be washed is to be determined at the tank. The meters used should be calibrated and inspected to ensure that they are in good working order. Readings from tanks already washed in port prior to inspection should be available for checking. Spot checks on readings may be instituted.

6 Electrostatic generation

It should be confirmed either from the cargo log or by questioning the person in charge that the presence of water in the crude oil is being minimized as required by paragraph 6.7 of the *Revised specifications for the design, operation and control of crude oil washing systems* (resolution A.446(XI)), as amended.

7 Communication

It should be established that effective means of communication exist between the person in charge and the other persons concerned with the COW operation.

8 Leakage on deck

PSCOs should ensure that the COW piping system has been operationally tested for leakage before cargo discharge and that the test has been noted in the ship's ORB.

9 Exclusion of oil from engine-room

It should be ascertained that the method of excluding cargo oil from the machinery space is being maintained by inspecting the isolating arrangements of the tank washing heater (if fitted) or of any part of the tank washing system which enters the machinery space.

10 Suitability of the crude oil

In judging the suitability of the oil for crude oil washing, the guidance and criteria contained in section 9 of the COW Operations and Equipment Manual should be taken into account.

11 Checklist

It should be determined from the ship's records that the pre-crude oil wash operational checklist was carried out and all instruments functioned correctly. Spot checks on certain items may be instituted.

12 Wash programmes

12.1 Where the tanker is engaged in a multiple port discharge, the ORB would indicate if tanks were crude oil washed at previous discharge ports or at sea. It should be determined that all tanks which will or may be used to contain ballast on the forthcoming voyage will be crude oil washed before the ship departs from the port. There is no obligation to wash any tank other than ballast tanks at a discharge port except that each of these other tanks must be washed at least in accordance with paragraph 6.1 of the *Revised specifications for the design, operation and control of crude oil washing systems* (resolution A.446(XI)), as amended. The ORB should be inspected to check that this is being complied with.

12.2 All crude oil washing must be completed before a ship leaves its final port of discharge.

12.3 If tanks are not being washed in one of the preferred orders given in the Manual, the PSCO should determine that the reason for this and the proposed order of tank washing are acceptable.

12.4 For each tank being washed it should be ensured that the operation is in accordance with the Manual in that:

- .1 the deck-mounted machines and the submerged machines are operating either by reference to indicators, the sound patterns or other approved methods;
- .2 the deck-mounted machines, where applicable, are programmed as stated;
- .3 the duration of the wash is as required; and
- .4 the number of tank washing machines being used simultaneously does not exceed that specified.

13 Stripping of tanks

13.1 The minimum trim conditions and the parameters of the stripping operations are to be stated in the Manual.

13.2 All tanks which have been crude oil washed are to be stripped. The adequacy of the stripping is to be checked by hand-dipping at least in the aftermost hand-dipping location in each tank or by such other means provided and described in the Manual. It should be ascertained that the adequacy of stripping has been checked or will be checked before the ship leaves its final port of discharge.

14 Ballasting

14.1 Tanks that were crude oil washed at sea will be recorded in the ORB. These tanks must be left empty between discharge ports for inspection at the next discharge port. Where these tanks are the designated departure ballast tanks they may be required to be ballasted at a very early stage of the discharge. This is for operational reasons and also because they must be ballasted during cargo discharge if hydrocarbon emission is to be contained on the ship. If these tanks are to be inspected when empty, this must be done shortly after the tanker berths. If a PSCO arrives after the tanks have begun accepting ballast, the sounding of the tank bottom would not be available. However, an examination of the surface of the ballast water is then possible. The thickness of the oil film should not be greater than that specified in paragraph 4.2.10(b) of the *Revised specifications for the design, operation and control of crude oil washing systems* (resolution A.446(XI)), as amended.

14.2 The tanks that are designated ballast tanks will be listed in the Manual. It is, however, left to the discretion of the master or responsible officer to decide which tanks may be used for ballast on the forthcoming voyage. It should be determined from the ORB that all such tanks have been washed before the tanker leaves its last discharge port. It should be noted that where a tanker backloads a cargo of crude oil at an intermediate port into tanks designated for ballast, then it should not be required to wash those tanks at that particular port but at a subsequent port.

14.3 It should be determined from the ORB that additional ballast water has not been put into tanks which have not been crude oil washed during previous voyages.

14.4 It should be verified that the departure ballast tanks are stripped as completely as possible. Where departure ballast is filled through cargo lines and pumps these must be stripped either into another cargo tank or ashore by the special small diameter line provided for this purpose.

14.5 The methods to avoid vapour emission where locally required will be provided in the Manual and they must be adhered to. The PSCO should ensure that this is being complied with.

14.6 The typical procedures for ballasting listed in the Manual must be observed. The PSCO should ensure this is being complied with.

14.7 When departure ballast is to be shifted, the discharge into the sea must be in compliance with regulations 15 and 34 of MARPOL Annex I. The ORB should be inspected to ensure that the ship is complying with this.

APPENDIX 4

GUIDELINES FOR INVESTIGATIONS AND INSPECTIONS CARRIED OUT UNDER MARPOL ANNEX II

PART 1

INSPECTION OF CERTIFICATE (COF OR NLS CERTIFICATE), SHIP AND EQUIPMENT

1 Ships required to hold a Certificate

1.1 On boarding and after introducing themselves to the master or responsible ship's officer, the port State control officer (PSCO) should examine the Certificate of Fitness (COF) or NLS Certificate and Cargo Record Book (CRB). The CRB may be presented in an electronic format. 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.

1.2 The Certificate includes information on the type of ship, the dates of surveys and a list of the products which the ship is certified to carry.

1.3 As a preliminary check, the Certificate's validity should be confirmed by verifying that the Certificate is properly completed and signed and that required surveys have been performed. In reviewing the Certificate, particular attention should be given to verifying that only those noxious liquid substances which are listed on the Certificate are carried and that these substances are in tanks approved for their carriage.

1.4 The CRB should be inspected to ensure that the records are up to date. The PSCO should check whether the ship left the previous port(s) with residues of noxious liquid substances on board which could not be discharged into the sea. The book could also have relevant entries from the appropriate authorities in the previous ports. If the examination reveals that the ship was permitted to sail from its last unloading port under certain conditions, the PSCO should ascertain that such conditions have been or will be adhered to. If the PSCO discovers an operational violation in this respect, the flag State should be informed by means of a deficiency report.

1.5 If the Certificate is valid and the PSCO's general impressions and visual observations on board confirm a good standard of maintenance, the PSCO should, provided that the CRB entries do not show any operational violations, confine the inspection to reported deficiencies, if any.

1.6 If, however, the PSCO's general impressions or observations on board show clear grounds for believing that the condition of the ship, its equipment, or its cargo and slops handling operations do not correspond substantially with the particulars of the Certificate, the PSCO should proceed to a more detailed inspection:

- .1 Initially this requires an examination of the ship's approved P and A Manual.
- .2 The more detailed inspection should include the cargo and pump-room areas of the ship and should begin with forming a general impression of the layout of the tanks, the cargoes carried, pumping and stripping conditions and cargo.

- .3 Next, a closer examination of the ship's equipment as shown in the P and A Manual may take place. This examination should also confirm that no unapproved modifications have been made to the ship and its equipment.
- .4 Should any doubt arise as to the maintenance or the condition of the ship or its equipment, further examination and testing may be conducted as may be necessary. In this respect reference is made to the *Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2023* (resolution A.1186(33)), as may be amended.

1.7 The PSCO should bear in mind that a ship may be equipped over and above the requirements of MARPOL Annex II. If such equipment is malfunctioning, the flag State should be informed. This alone, however, should not cause a ship to be detained unless the malfunction presents an unreasonable threat of harm to the marine environment.

2 Ships of non-Parties to the Convention

2.1 As this category of ship is not provided with a COF or NLS Certificate as required by MARPOL Annex II, the PSCO should be satisfied with regard to the construction and equipment standards relevant to the ship on the basis of the requirements set out in MARPOL Annex II and the Standards for Procedures and Arrangements.

2.2 In all other respects, the PSCO should be guided by the procedures for ships referred to in section 1 above (i.e. ships required to hold a Certificate).

2.3 If the ship has some form of certification other than the required Certificate, the PSCO may take the form and content of this document into account in the evaluation of that ship. Such a form of certification, however, is only of value to the PSCO if the ship has been provided with a P and A Manual.

3 Control

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

PART 2

CONTRAVENTION OF DISCHARGE PROVISIONS

1 With illegal discharges, past experience has shown that information furnished to the flag State is often inadequate to enable the flag State to cause proceedings to be brought in respect of the alleged violation of the discharge requirements. This appendix is intended to identify information which will be needed by a flag State for the prosecution of violations of the discharge provisions under MARPOL Annex II.

2 It is recommended that in preparing a port State report on deficiencies, where contravention of the discharge requirements is involved, the authorities of a coastal or port State should be guided by the itemized list of possible evidence as shown in part 3 of this appendix. It should be borne in mind in this connection that:

- .1 the report aims to provide the optimal collation of obtainable data; however, even if all the information cannot be provided, as much information as possible should be submitted;

- .2 it is important for all the information included in the report to be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention has occurred; and
- .3 the discharge may have been oil, in which case part 2 to appendix 3 of this resolution applies (Guidelines for investigation and inspections carried out under MARPOL Annex I).

3 In addition to the port State report on deficiencies, a report should be completed by a port or coastal State, on the basis of the itemized list of possible evidence. It is important that these reports are supplemented by documents such as:

- .1 a statement by the observer of the pollution; in addition to the information required under section 1 of part 3 of this appendix, the statement should include considerations which have led the observer to conclude that none of any other possible pollution sources is in fact the source;
- .2 statements concerning the sampling procedures both of the slick and on board; these include location where and time when samples were taken, identity of person(s) taking the samples and receipts identifying the persons having custody and receiving transfer of the samples;
- .3 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;
- .4 a statement by the PSCO on board together with the PSCO's rank and organization;
- .5 statements by persons being questioned;
- .6 statements by witnesses;
- .7 photographs of the slick; and
- .8 copies or printouts of relevant pages of the CRB, logbooks, discharge recordings, etc.

4 All observations, photographs and documentation should be supported by a signed verification of their authenticity. All certifications, authentications or verifications shall be executed in accordance with the laws of the State which prepares them. All statements should be signed and dated by the person making the statement and, if possible, by a witness to the signing. The names of the persons signing statements should be printed in legible script above or below the signature.

5 The report referred to in paragraphs 2 and 3 should be sent to the flag State. If the coastal State observing the pollution and the port State carrying out the investigation on board are not the same, the State carrying out the latter investigation should also send a copy of its findings to the State observing the pollution and requesting the investigation.

PART 3

ITEMIZED LIST OF POSSIBLE EVIDENCE ON ALLEGED CONTRAVENTION OF THE MARPOL ANNEX II DISCHARGE PROVISIONS

1 Action on sighting pollution

1.1 Particulars of ship or ships suspected of contravention

- .1 Name of ship and IMO number
- .2 Reasons for suspecting the ship
- .3 Date and time (UTC) of observation or identification
- .4 Position of ship
- .5 Flag and port of registry
- .6 Type, size (estimated tonnage) and other descriptive data (e.g. superstructure colour and funnel mark)
- .7 Draught condition (loaded or in ballast)
- .8 Approximate course and speed
- .9 Position of slick in relation to ship (e.g. astern, port, starboard)
- .10 Part of the ship from which discharge was seen emanating
- .11 Whether discharge ceased when ship was observed or contacted by radio

1.2 Particulars of slick

- .1 Date and time (UTC) of observation if different from item 1.1.3
- .2 Position of slick in longitude and latitude if different from item 1.1.4
- .3 Approximate distance in nautical miles from the nearest land
- .4 Depth of water according to sea chart
- .5 Approximate overall dimension of slick (length, width and percentage thereof covered)
- .6 Physical description of slick (direction and form, e.g. continuous, in patches or in windrows)
- .7 Colour of slick
- .8 Sky conditions (bright sunshine, overcast, etc.), lightfall and visibility (kilometres) at the time of observation
- .9 Sea state

.10 Direction and speed of surface wind

.11 Direction and speed of current

1.3 Identification of the observer(s)

.1 Name of observer

.2 Organization with which observer is affiliated (if any)

.3 Observer's status within the organization

.4 Observation made from aircraft, ship, shore or otherwise

.5 Name or identity of ship or aircraft from which observation was made

.6 Specific location of ship, aircraft, place on shore or otherwise from which observation was made

.7 Activity engaged in by observer when observation was made, e.g. patrol, voyage, flight (enroute from ... to ...)

1.4 Method of observation and documentation

.1 Visual

.2 Conventional photographs

.3 Remote sensing records and/or remote sensing photographs

.4 Samples taken from slick

.5 Any other form of observation (specify)

Note: A photograph of the discharge should preferably be in colour. The best results may be obtained with the following three photographs:

- details of the slick taken almost vertically down from an altitude of less than 300 metres with the sun behind the photographer;
- an overall view of the ship and slick showing a substance emanating from the particular ship; and
- details of the ship for the purposes of identification.

1.5 Other information if radio contact can be established

.1 Master informed of pollution

.2 Explanation of master

.3 Ship's last port of call

.4 Ship's next port of call

.5 Name of ship's master and owner

.6 Ship's call sign

2 Investigation on board

2.1 Inspection of the Certificate (COF or NLS Certificate)

.1 Name of ship and IMO number

.2 Distinctive number or letters

.3 Port of registry

.4 Type of ship

.5 Date and place of issue

.6 Date and place of endorsement

.7 List of Annex II substances the ship is certified to carry

.8 Limitation as to tanks in which these substances may be carried

2.2 Inspection of P and A Manual

.1 Ship equipped with an efficient stripping system

.2 Residue quantities established at survey

2.3 Inspection of CRB

Copy or print out sufficient pages of the CRB to cover a full loading/unloading/ballasting and tank cleaning cycle of the ship. Also copy the tank diagram.

2.4 Inspection of logbook

.1 Last port, date of departure, draught forward and aft

.2 Current port, date of arrival, draught forward and aft

.3 Ship's position at or near the time the incident was reported

.4 Spot check if times entered in the CRB in respect of discharges correspond with sufficient distance from the nearest land, the required ship's speed and with sufficient water depth

2.5 Inspection of other documentation on board

Other documentation relevant for evidence (if necessary, make copies) such as:

- cargo documents of cargo presently or recently carried, together with relevant information on required unloading temperature, viscosity and/or melting point;

- records of temperature of substances during unloading; and
- records of monitoring equipment if fitted.

2.6 Inspection of ship

- .1 Ship's equipment in accordance with the P and A Manual
- .2 Samples taken; state location on board
- .3 Sources of considerable leakage
- .4 Cargo residues on surface of segregated or dedicated clean ballast
- .5 Condition of pump-room bilges
- .6 Condition of monitoring system
- .7 Slop tank contents (estimate quantity of water and residues)

2.7 Statements of persons concerned (if the CRB has not been properly completed, information on the following questions may be pertinent)

- .1 Was there a discharge (accidental or intentional) at the time indicated on the incident report?
- .2 Which tanks are going to be loaded in the port?
- .3 Which tanks needed cleaning at sea? Had the tanks been prewashed?
- .4 When and where were these cleaned?
- .5 Residues of which substances were involved?
- .6 What was done with the tank washing slops?
- .7 Was the slop tank, or cargo tank used as a slop tank, discharged at sea?
- .8 When and where was the discharge effected?
- .9 What are the contents of the slop tank or cargo tank used as slop tank?
- .10 Which tanks contained the dirty ballast during the ballast voyage (if ship arrived in ballast)?
- .11 Which tanks contained the clean ballast during the ballast voyage (if ship arrived in ballast)?
- .12 Details of the present voyage of the ship (previous ports, next ports, trade)
- .13 Difficulties experienced with discharge to shore reception facilities
- .14 Difficulties experienced with efficient stripping operations

- .15 Which tanks are clean or dirty on arrival?
- .16 Repairs carried out or envisaged in cargo tanks

Miscellaneous information

- .17 Comments in respect of condition of ship's equipment
- .18 Comments in respect of pollution report
- .19 Other comments

3 Investigation ashore

3.1 Analyses of samples

Indicate method and results of the samples' analyses.

3.2 Further information

Additional information on the ship, obtained from terminal staff, tank cleaning contractors or shore reception facilities, may be pertinent.

Note: Any information under this heading is, if practicable, to be corroborated by documentation such as signed statements, invoices, receipts.

3.3 Information from previous unloading port terminal

- .1 Confirmation that the ship was unloaded, stripped or prewashed in accordance with its P and A Manual
- .2 The nature of difficulties, if any
- .3 Restrictions by authorities under which the ship was permitted to sail
- .4 Restrictions in respect of shore reception facilities

4 Information not covered by the foregoing

5 Conclusion

- .1 Summing up of the investigator's conclusions
- .2 Indication of applicable provisions of MARPOL Annex II which the ship is suspected of having contravened
- .3 Did the results of the investigation warrant the filing of a deficiency report?

PART 4

PROCEDURES FOR INSPECTION OF UNLOADING, STRIPPING AND PREWASHING OPERATIONS (MAINLY IN UNLOADING PORTS)

1 Introduction

The PSCO or the surveyor authorized by the Administration exercising control in accordance with regulation 16 of MARPOL Annex II should be thoroughly acquainted with MARPOL Annex II and the custom of the port as of relevance to cargo handling, tank washing, cleaning berths, prohibition of lighters alongside, etc.

2 Documentation

The documentation required for the inspection referred to in this appendix consists of:

- .1 COF or NLS Certificate;
- .2 cargo plan and shipping document;
- .3 P and A Manual; and
- .4 CRB.

3 Information by ship's staff

3.1 Of relevance to the PSCO or the surveyor appointed or authorized by the Administration is the following:

- .1 the intended loading and unloading programme of the ship;
- .2 whether unloading and stripping operations can be effected in accordance with the P and A Manual and if not the reason why it cannot be done;
- .3 the constraints, if any, under which the efficient stripping system operates (i.e. back pressure, ambient air temperature, malfunctioning, etc.); and
- .4 whether the ship requests an exemption from the prewashing and the discharge of residues in the unloading port.

3.2 When tank washing is required without the use of water the PSCO or the surveyor appointed or authorized by the Administration is to be informed about the tank washing procedure and disposal of residues.

3.3 When the CRB is not up to date, any information on prewash and residue disposal operations outstanding should be supplied.

4 Information from terminal staff

Terminal staff should supply information on limitations imposed upon the ship in respect of back pressure and/or reception facilities.

5 Control

5.1 On boarding and introduction to the master or responsible ship officers, the PSCO or the surveyor appointed or authorized by the Administration should examine the necessary documentation.

5.2 The documentation may be used to establish the following:

- .1 noxious liquid substances to be unloaded, their categories and stowage (cargo plan, P and A Manual);
- .2 details of efficient stripping system, if fitted (P and A Manual);
- .3 tanks which require prewashing with disposal of tank washings to reception facilities (shipping document and cargo temperature);
- .4 tanks which require prewashing with disposal of tank washings either to reception facilities or into the sea (P and A Manual, shipping document and cargo temperature);
- .5 prewash operations and/or residue disposal operations outstanding (CRB); and
- .6 tanks which may not be washed with water owing to the nature of substances involved (P and A Manual).

5.3 In respect of the prewash operations referred to under paragraph 5.2, the following information is of relevance (P and A Manual):

- .1 pressure required for tank washing machines;
- .2 duration of one cycle of the tank washing machine and quantity of water used;
- .3 washing programmes for the substances involved;
- .4 required temperature of washing water; and
- .5 special procedures.

5.4 The PSCO or the surveyor authorized by the Administration, in accordance with regulation 16 of MARPOL Annex II, should ascertain that unloading, stripping and/or prewash operations are carried out in conformity with the information obtained in accordance with paragraph 2 (Documentation) of this part. If this cannot be achieved, alternative measures should be taken to ensure that the ship does not proceed to sea with more than the quantities of residue specified in regulation 12 of MARPOL Annex II, as applicable. If the residue quantities cannot be reduced by alternative measures the PSCO or the surveyor appointed or authorized by the Administration should inform the port State Administration.

5.5 Care should be taken to ensure that cargo hoses and piping systems of the terminal are not drained back to the ship.

5.6 If a ship is exempted from certain pumping efficiency requirements under regulation 4.4 of MARPOL Annex II or requests an exemption from certain stripping or prewashing procedures under regulation 13.4 of MARPOL Annex II, the conditions for such exemption set out in the said regulations should be observed. These concern:

- .1 regulations 4.2 and 4.3: the ship is constructed before 1 July 1986 and is exempted from the requirement for reducing its residue quantities to specified limits of regulation 12 (i.e. category X or Y substances 300 litres and category Z substances 900 litres); this is subject to the conditions of regulation 4.3 that whenever a cargo tank is to be washed or ballasted, a prewash is required with disposal of prewash slops to shore reception facilities; the COF or NLS Certificate should have been endorsed to the effect that the ship is solely engaged in restricted voyages;
- .2 regulation 4.4: the ship is never required to ballast its cargo tanks and tank washing is only required for repair or dry-docking; the COF or NLS Certificate should indicate the particulars of the exemption; each cargo tank should be certified for the carriage of only one named substance;
- .3 regulation 13.4.1: cargo tanks will not be washed or ballasted prior to the next loading;
- .4 regulation 13.4.2: cargo tanks will be washed and prewash slops will be discharged to reception facilities in another port; it should be confirmed in writing that an adequate reception facility is available at that port for such purpose; and
- .5 regulation 13.4.3: the cargo residues can be removed by ventilation.

5.7 The PSCO or the surveyor appointed or authorized by the Administration must endorse the CRB under section J whenever an exemption under regulation 13.4 referred to in paragraph 5.6 above has been granted, or whenever a tank having unloaded category X substances has been prewashed in accordance with the P and A Manual.

5.8 Alternatively, for category X substances, regulation 13.6.1.1 of MARPOL Annex II, residual concentration should be measured by the procedures which each port State authorizes. In this case the PSCO or the surveyor authorized by the Administration must endorse in the CRB under section K whenever the required residual concentration has been achieved.

5.9 In addition to paragraph 5.7 above, the PSCO or the surveyor authorized by the Administration shall endorse the CRB whenever the unloading, stripping or prewash of category Y and Z substances, in accordance with the P and A Manual, has actually been witnessed.

5.10 With reference to endorsements 5.7, 8, 9 if the ship has implemented an electronic record book, the shipowner may request these endorsements using a stand-alone form or request of a copy of the surveyor's report to accompany the electronic record book entry.

EXAMPLE FORM OF A CARGO RECORD BOOK ENDORSEMENT

Cargo Record Book Endorsement

(Official Seal)

(State)

Issued under the authority of the Government of:

_____ (full designation of the country)

by _____

(Organization, company, government agency authorized)

Name of Ship:	Distinctive Number or Letters:	Port of Registry:
Gross Tonnage:	IMO Number: ¹	

Port:		
Tank(s):	Substance(s):	Category(ies):
	Yes	No
Tank(s), pump(s) and piping system(s) emptied?		
Prewash carried out in accordance with the PA Manual?		
Tank washings resulting from prewash been discharged ashore and is the tank empty?		
Exemption granted from mandatory prewash?		

Reasons _____ for _____ exemption:

¹ Refer to IMO ship identification number scheme (resolution A.1117(30)).

THIS IS TO ENDORSE:

That, in accordance with regulation 16 of MARPOL Annex II, the entries into the Cargo Record Book according to regulation 13.6 of MARPOL Annex II have been made and operations have been carried out in accordance with the Procedures and Arrangements Manual.

(Date)

(Name and Signature of authorized surveyor)

(Seal or stamp of the issuing authority, as appropriate)

APPENDIX 5

GUIDELINES FOR DISCHARGE REQUIREMENTS UNDER MARPOL ANNEXES I AND II

1 Introduction

1.1 Regulations 15 and 34 of MARPOL Annex I prohibit the discharge into the sea of oil and regulation 13 of Annex II prohibits the discharge into the sea of noxious liquid substances except under precisely defined conditions. A record of these operations shall be completed, where appropriate, in the form of an Oil or Cargo Record Book as applicable and shall be kept in such a place as to be readily available for inspection at all reasonable times.

1.2 The regulations referred to above provide that whenever visible traces of oil are observed on or below the surface of the water in the immediate vicinity of a ship or of its wake, a Party should, to the extent that it is reasonably able to do so, promptly investigate the facts bearing on the issue of whether or not there has been a violation of the discharge provisions.

1.3 The conditions under which noxious liquid substances are permitted to be discharged into the seas include quantity, quality and position limitations, which depend on category of substance and sea area.

1.4 An investigation into an alleged contravention should therefore aim to establish whether a noxious liquid substance has been discharged and whether the operations leading to that discharge were in accordance with the ship's Procedures and Arrangements Manual (P and A Manual).

1.5 Recognizing the likelihood that many of the violations of the discharge provisions will take place outside the immediate control and knowledge of the flag State, article 6 of MARPOL provides that Parties shall cooperate in the detection of violations and the enforcement of the provisions using all appropriate and practicable measures of detection and environmental monitoring, and adequate procedures for reporting and gathering evidence. MARPOL also contains a number of more specific provisions designed to facilitate that cooperation.

1.6 Several sources of information about possible violations of the discharge provisions can be indicated. These include:

- .1 reports by masters: article 8 and Protocol I of MARPOL require, inter alia, a ship's master to report certain incidents involving the discharge or the probability of a discharge of oil or oily mixtures, or noxious liquid substances or mixtures containing such substances;
- .2 reports by official bodies: article 8 of MARPOL requires furthermore that a Party issue instructions to its maritime inspection vessels and aircraft and to other appropriate services to report to its authorities incidents involving the discharge or the probability of a discharge of oil or oily mixtures, or noxious liquid substances or mixtures containing such substances;
- .3 reports by other Parties: article 6 of MARPOL provides that a Party may request another Party to inspect a ship; the Party making the request shall supply sufficient evidence that the ship has discharged oil or oily mixtures, noxious liquid substances or mixtures containing such substances, or that the ship has departed from the unloading port with residues of noxious liquid substances in excess of those permitted to be discharged into the sea; and

- .4 reports by others: it is not possible to list exhaustively all sources of information concerning alleged contravention of the discharge provisions; Parties should take all circumstances into account when deciding upon investigating such reports.

1.7 Action which can be taken by States other than the flag or port States that have information on discharge violations (hereinafter referred to as coastal States):

- .1 coastal States that are Parties to MARPOL, upon receiving a report of pollution by oil or noxious liquid substances allegedly caused by a ship, may investigate the matter and collect such evidence as can be collected; for details of the desired evidence, reference is made to appendices 3 and 4;
- .2 if the investigation referred to under sub-paragraph.1 above discloses that the next port of call of the ship in question lies within its jurisdiction, the coastal State should also take port State action as set out in paragraphs 2.1 to 2.6 below;
- .3 if the investigation referred to in sub-paragraph.1 above discloses that the next port of call of the ship in question lies within the jurisdiction of another Party, the coastal State should in appropriate cases furnish the evidence to that other Party and request that Party to take port State action in accordance with paragraphs 2.1 to 2.6 below; and
- .4 in either case referred to in sub-paragraphs.2 and.3 above and if the next port of call of the ship in question cannot be ascertained, the coastal State shall inform the flag State of the incident and of the evidence obtained.

2 Port State action

2.1 Parties shall appoint or authorize officers to carry out investigations for the purpose of verifying whether a ship has discharged oil or noxious liquid substances in violation of the provisions of MARPOL.

2.2 Parties may undertake such investigations on the basis of reports received from sources indicated in paragraph 1.6 above.

2.3 These investigations should be directed towards the gathering of sufficient evidence to establish whether the ship has violated the discharge requirements. Guidelines for the optimal collation of evidence are given in appendices 3 and 4.

2.4 If the investigations provide evidence that a violation of the discharge requirements took place within the jurisdiction of the port State, that port State shall either cause proceedings to be taken in accordance with its law, or furnish to the flag State all information and evidence in its possession about the alleged violation. When the port State causes proceedings to be taken, it shall inform the flag State.

2.5 Details of the report to be submitted to the flag State are set out in appendix 16.

2.6 The investigation might provide evidence that pollution was caused through damage to the ship or its equipment. This might indicate that a ship is not guilty of a violation of the discharge requirements of MARPOL Annex I or Annex II provided that:

- .1 all reasonable precautions have been taken after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and
- .2 the owner or the master did not act either with intent to cause damage or recklessly and with knowledge that damage would probably result.

2.7 However, action by the port State as set out in chapter 3 of these Procedures may be called for.

3 Inspection of crude oil washing (COW) operations

3.1 Regulations 18, 33 and 35 of MARPOL Annex I inter alia require that crude oil washing of cargo tanks be performed on certain categories of crude carriers. A sufficient number of tanks shall be washed in order that ballast water is put only in cargo tanks which have been crude oil washed. The remaining cargo tanks shall be washed on a rotational basis for sludge control.

3.2 Port State authorities may carry out inspections to ensure that crude oil washing is performed by all crude carriers either required to have a COW system or where the owner or operator chooses to install a COW system in order to comply with regulation 18 of MARPOL Annex I. In addition, compliance should be ensured with the operational requirements set out in the *Revised specifications for the design, operation and control of crude oil washing systems* (resolution A.446(XI), as amended). This can best be done in the ports where the cargo is unloaded.

3.3 Parties should be aware that the inspection referred to in paragraph 3.2 may also lead to the identification of a pollution risk, necessitating additional action by the port State as set out in chapter 3 of these Procedures.

3.4 Detailed guidelines for in-port inspections of crude oil washing procedures have been approved and published by IMO (Crude Oil Washing Systems, revised edition, 2000) and are set out in part 4 of appendix 3.

4 Inspection of unloading, stripping and prewash operations

4.1 Regulation 16 of MARPOL Annex II requires Parties to MARPOL to appoint or authorize surveyors for the purpose of implementing the regulation.

4.2 The provisions of regulation 16 are aimed at ensuring in principle that a ship having unloaded, to the maximum possible extent, noxious liquid substances of category X, Y or Z, proceeds to sea only if residues of such substances have been reduced to such quantities as may be discharged into the sea.

4.3 Compliance with these provisions is in principle ensured in the case of categories X, Y and Z substances through the application of a prewash in the unloading port and the discharge of prewash residue water mixtures to reception facilities, except that, in the case of non-solidifying and low viscosity categories Y and Z substances, requirements for the efficient stripping of a tank to negligible quantities apply in lieu of the application of a prewash. Alternatively, for a number of substances ventilation procedures may be employed for removing cargo residues from a tank.

4.4 Regulation 16.6 permits the Government of the receiving Party to exempt a ship proceeding to a port or terminal under the jurisdiction of another Party from the requirement to prewash cargo tanks and discharge residue/water mixtures to a reception facility.

4.5 Existing chemical tankers engaged on restricted voyages may by virtue of regulation 4.3 of MARPOL Annex II be exempted from the quantity limitation requirements of regulations 12.1 to 12.3. If a cargo tank is to be ballasted or washed, a prewash is required after unloading category Y or Z substances and prewash residue water mixtures must be discharged to shore reception facilities. The exemption should be indicated on the certificate.

4.6 A ship whose constructional and operational features are such that ballasting of cargo tanks is not required and cargo tank washing is only required for repairs or dry-docking may by virtue of regulation 4.4 be exempted from the provisions of regulation 12 of MARPOL Annex II, provided that all conditions mentioned in regulation 4.4 are complied with. Accordingly, the certificate of the ship should indicate that each cargo tank is only certified for the carriage of one named substance. It should also indicate the particulars of the exemption granted by the Administration in respect of pumping, piping and discharge arrangements.

4.7 Detailed instructions on efficient stripping and prewash procedures are included in a ship's P and A Manual. The Manual also contains alternative procedures to be followed in case of equipment failure.

4.8 Parties should be aware that the inspection referred to in paragraphs 1.3 and 1.4 above may lead to the identification of a pollution risk or of a contravention of the discharge provisions, necessitating port State action as set out in chapter 3 of these Procedures.

4.9 For details in respect of inspections under this section, reference is made to appendix 4.

APPENDIX 6

GUIDELINES FOR MORE DETAILED INSPECTIONS OF SHIP STRUCTURAL AND EQUIPMENT REQUIREMENTS

1 Introduction

If the port State control officer (PSCO) from general impressions or observations on board has clear grounds for believing that the ship might be substandard, the PSCO should proceed to a more detailed inspection, taking the following considerations into account.

2 Structure

2.1 The PSCO's impression of hull maintenance and the general state on deck, the condition of such items as ladderways, guard rails, pipe coverings and areas of corrosion or pitting should influence the PSCO's decision as to whether it is necessary to make the fullest possible examination of the structure with the ship afloat. Significant areas of damage or corrosion or pitting of plating and associated stiffening in decks and hull affecting seaworthiness or strength to take local loads may justify detention. It may be necessary for the underwater portion of the ship to be checked. In reaching a decision, the PSCO should have regard to the seaworthiness and not the age of the ship, making an allowance for fair wear and tear over the minimum acceptable scantlings. Damage not affecting seaworthiness will not constitute grounds for judging that a ship should be detained, nor will damage that has been temporarily but effectively repaired for a voyage to a port for permanent repairs. However, in this assessment of the effect of damage, the PSCO should have regard to the location of crew accommodation and whether the damage substantially affects its habitability.

2.2 The PSCO should pay particular attention to the structural integrity and seaworthiness of bulk carriers and oil tankers and note that these ships must undergo the enhanced programme of inspection during surveys under the provision of SOLAS 1974 regulation XI-1/2.

2.3 The PSCO's assessment of the safety of the structure of those ships should be based on the Survey Report File carried on board. This file should contain reports of structural surveys, condition evaluation reports (translated into English and endorsed by or on behalf of the Administration), thickness measurement reports and a survey planning document. The PSCO should note that there may be a short delay in the update of the Survey Report File following survey. Where there is doubt that the required survey has taken place, the PSCO should seek confirmation from the RO.

2.4 If the Survey Report File necessitates a more detailed inspection of the structure of the ship or if no such report is carried, special attention should be given by the PSCO, as appropriate, to hull structure, piping systems in way of cargo tanks or holds, pump-rooms, cofferdams, pipe tunnels, void spaces within the cargo area and ballast tanks.

2.5 For bulk carriers, PSCOs should inspect holds' main structure for any obviously unauthorized repairs. For bulk carriers, the PSCO should verify that the bulk carrier booklet has been endorsed, the water level alarms in cargo holds are fitted, and where applicable, that any restrictions imposed on the carriage of solid bulk cargoes have been recorded in the booklet and the bulk carrier loading triangle is permanently marked.

3 Machinery spaces

3.1 The PSCO should assess the condition of the machinery and of the electrical installations such that they are capable of providing sufficient continuous power for propulsion and for auxiliary services.

3.2 During inspection of the machinery spaces, the PSCO should form an impression of the standard of maintenance. Frayed, disconnected or inoperative quick-closing valve wires, disconnected or inoperative extended control rods or machinery trip mechanisms, missing valve hand wheels, evidence of chronic steam, water and oil leaks, dirty tank tops and bilges or extensive corrosion of machinery foundations are pointers to an unsatisfactory organization of the systems' maintenance. A large number of temporary repairs, including pipe clips or cement boxes, will indicate reluctance to make permanent repairs.

3.3 While it is not possible to determine the condition of the machinery without performance trials, general deficiencies, such as leaking pump glands, dirty water gauge glasses, inoperable pressure gauges, rusted relief valves, inoperative or disconnected safety or control devices, evidence of repeated operation of diesel engine scavenge belt or crankcase relief valves, malfunctioning or inoperative automatic equipment and alarm systems, and leaking boiler casings or uptakes would warrant inspection of the engine-room logbook and investigation into the record of machinery failures and accidents and a request for running tests of machinery.

3.4 If one electrical generator is out of commission, the PSCO should investigate whether power is available to maintain essential and emergency services and should conduct tests.

3.5 If evidence of neglect becomes evident, the PSCO should extend the scope of an investigation to include, for example, tests on the main and auxiliary steering gear arrangements, overspeed trips, circuit breakers.

3.6 It must be stressed that, while detection of one or more of the above deficiencies would afford guidance to a substandard condition, the actual combination is a matter for professional judgement in each case.

4 Conditions of assignment of load lines

It may be that the PSCO has concluded that a hull inspection is unnecessary but, if dissatisfied on the basis of observations on deck, with items such as defective hatch closing arrangements, corroded air pipes and vent coamings, the PSCO should examine closely the conditions of assignment of load lines, paying particular attention to closing appliances, means of freeing water from the deck and arrangements concerned with the protection of the crew.

5 Life-saving appliances

5.1 The effectiveness of life-saving appliances depends heavily on good maintenance by the crew and their use in regular drills. The lapse of time since the last survey for a Safety Equipment Certificate can be a significant factor in the degree of deterioration of equipment if it has not been subject to regular inspection by the crew. Apart from failure to carry equipment required by a convention or obvious defects such as holed lifeboats, the PSCO should look for signs of disuse of, obstructions to or defects with survival craft launching and recovery equipment, which may include paint accumulation, seizing of pivot points, absence of greasing, condition of blocks and falls, condition of lifeboat lifting hook attachment to the lifeboat hull and improper lashing or stowing of deck cargo.

5.2 Should such signs be evident, the PSCO would be justified in making a detailed inspection of all life-saving appliances. Such an examination might include the lowering of survival craft, a check on the servicing of liferafts, the number and condition of lifejackets and lifebuoys and ensuring that the pyrotechnics are still within their period of validity. It would not normally be as detailed as that for a renewal of the Safety Equipment Certificate and would concentrate on essentials for safe abandonment of the ship, but in an extreme case could progress to a full Safety Equipment Certificate inspection. The provision and functioning of effective overside lighting, means of alerting the crew and passengers and provision of illuminated routes to assembly points and embarkation positions should be given importance in the inspection.

6 Fire safety

6.1 Ships in general: The poor condition of fire and wash deck lines and hydrants and the possible absence of fire hoses and extinguishers in accommodation spaces might be a guide to a need for a close inspection of all fire safety equipment. In addition to compliance with convention requirements, the PSCO should look for evidence of a higher fire risk than normal; this might be brought about by a poor standard of cleanliness in the machinery space, which together with significant deficiencies of fixed or portable fire-extinguishing equipment could lead to a judgement of the ship being substandard. Queries on the method of structural protection should be addressed to the flag Administration and the PSCO should generally confine the inspection to the effectiveness of the arrangements provided.

6.2 Passenger ships: The PSCO should initially form an opinion of the need for inspection of the fire safety arrangements on the basis of consideration of the ship under the previous headings and, in particular, that dealing with fire safety equipment. If the PSCO considers that a more detailed inspection of fire safety arrangements is necessary, the PSCO should examine the fire-control plan on board in order to obtain a general picture of the fire safety measures provided in the ship and consider their compliance with convention requirements for the year of build. Queries on the method of structural protection should be addressed to the flag Administration and the PSCO should generally confine the inspection to the effectiveness of the arrangements provided.

6.3 The spread of fire could be accelerated if fire doors are not readily operable. The PSCO should inspect for the operability and securing arrangements of those doors in the main zone bulkheads and stairway enclosures and in boundaries of high fire risk spaces, such as main machinery rooms and galleys, giving particular attention to those retained in the open position. Attention should also be given to main vertical zones which may have been compromised through new construction. An additional hazard in the event of fire is the spread of smoke through ventilation systems. Spot checks might be made on dampers and smoke flaps to ascertain the standard of operability. The PSCO should also ensure that ventilation fans can be stopped from the master controls and that means are available for closing main inlets and outlets of ventilation systems.

6.4 Attention should be given to the effectiveness of escape routes by ensuring that vital doors are not kept locked and that alleyways and stairways are not obstructed. Regarding the minimum width of external escape routes, the arrangements approved by the flag Administrations should be accepted.

6.5 The arrangements for the location of manually operated call points as approved by the flag Administrations should be accepted.

7 Regulations for preventing collisions at sea

A vital aspect of ensuring safety of life at sea is full compliance with the collision regulations. Based on observations on deck, the PSCO should consider the need for close inspection of lanterns and their screening and means of making sound and distress signals.

8 Cargo Ship Safety Construction Certificate

The general condition of the ship may lead the PSCO to consider matters other than those concerned with safety equipment and assignment of load lines, but nevertheless associated with the safety of the vessel, such as the effectiveness of items associated with the Cargo Ship Safety Construction Certificate, which can include pumping arrangements, means for shutting off air and oil supplies in the event of fire, alarm systems and emergency power supplies.

9 Cargo Ship Safety Radio Certificates

The validity of the Cargo Ship Safety Radio Certificates and associated Record of Equipment (Form R) may be accepted as proof of the provision and effectiveness of its associated equipment, but the PSCO should ensure that appropriate certificated personnel are carried for its operation and for listening periods. Requirements for maintenance of radio equipment are contained in SOLAS 1974 regulation IV/15. The radio log or radio records should be examined. Where considered necessary, operational checks may be carried out.

10 Means of access to ship

10.1 Prior to boarding a ship, the PSCO should assess the means of embarkation on and disembarkation from the ship. The PSCO should be guided by SOLAS 1974 regulation II-1/3-9, noting its application to ships constructed on or after 1 January 2010, but also noting that paragraph 3 of this regulation applies to all ships and requires that:

- .1 the means of embarkation and disembarkation shall be inspected and maintained in suitable condition for their intended purpose, taking into account any restrictions related to safe loading; and
- .2 all wires used to support the means of embarkation and disembarkation shall be maintained as specified in SOLAS 1974 regulation III/20.4.

10.2 In regard to the maintenance of the means of embarkation and disembarkation, the PSCO should refer to the *Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation* (MSC.1/Circ.1331).

10.3 During the inspection, the PSCO should also ensure that the pilot transfer arrangements comply with SOLAS 1974 regulation V/23 and the Unified interpretation of SOLAS regulation V/23 (MSC.1/Circ.1375/Rev.1 and MSC.1/Circ.1495/Rev.1).

11 Equipment in excess of convention or flag State requirements

Equipment on board which is expected to be relied on in situations affecting safety or pollution prevention must be in operating condition. If such equipment is inoperative and is in excess of the equipment required by an appropriate convention and/or the flag State, it should be repaired, removed or, if removal is not practicable, clearly marked as inoperative and secured.

APPENDIX 7

GUIDELINES FOR CONTROL OF OPERATIONAL REQUIREMENTS

PART 1

INSPECTION PROCESSES

1 Introduction

1.1 When, during a port State control inspection, the port State control officer (PSCO) has clear grounds according to section 2.2 of the present Procedures, the following onboard operational procedures may be checked in accordance with this resolution.

1.2 However, in exercising controls recommended in these Guidelines, the PSCO should not include any operational tests or impose physical demands which, in the judgement of the master, could jeopardize the safety of the ship, crew, passengers, control officers or cargo. Prior to requiring any practical operational control, the PSCO should review training and drill records and should inspect, as appropriate, the associated safety equipment and its maintenance records. For example, an enclosed space entry drill may be sufficiently verified without an actual enclosed space entry by verifying drill records, maintenance records, physical inspection and physical demonstrations by crew of breathing apparatus, safety harnesses and atmosphere testing instruments.

1.3 When carrying out operational control, the PSCO should ensure, as far as possible, no interference with normal shipboard operations, such as loading and unloading of cargo and ballasting, which are carried out under the responsibility of the master, nor should the PSCO require demonstration of operational aspects which would unnecessarily delay the ship.

1.4 Having assessed the extent to which operational requirements are complied with, the PSCO then has to exercise professional judgement to determine whether the operational proficiency of the crew as a whole is of a sufficient level to allow the ship to sail without danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment.

1.5 When assessing the crew's ability to conduct an operational drill, the mandatory minimum requirements for familiarization and basic safety training for seafarers, as stated in STCW 1978, as amended, shall be used as a benchmark.

1.6 Definitions and abbreviations

The definitions and abbreviations used in this appendix are those of section 1.7 of the Procedures supplemented as follows:

Operational control: A control inspection to confirm the master and crew are familiar with essential shipboard procedures with respect to the safety of the ship and crew and protection of the environment and are able to apply such procedures. It includes a check on the effectiveness of communication and interaction and familiarity of the crew, including the human interface.

Functional test: A test of an item to prove the correct operation and function of equipment. Functional tests may be carried out during an initial or more detailed inspection.

2 Clear grounds

2.1 Clear grounds are defined in section 1.7.2 of the Procedures.

2.2 In addition to the general examples of clear grounds in section 2.4 of the Procedures, clear grounds related to operation requirements are listed in appendix 11 section 6.3.2.

3 More detailed inspection for operational requirements

3.1 A more detailed inspection should assess the ability of relevant crew to operate essential shipboard equipment that is relevant to their role. The responsible crew member must be able to operate such equipment independent of others and care must be taken to ensure they are not coached through the process when asked to demonstrate their understanding.

3.2 A more detailed inspection should assess the familiarity of crew with essential shipboard procedures relevant to their role, the safety of the ship and the protection of the environment.

3.3 The PSCO should make an overall assessment of the effectiveness of communication and interaction and familiarity of the crew, including the human interface.

3.4 The PSCO can use the items in section 5 below as guidance in assessing the ability of the master or crew member to operate the ship. The desired outcome is to effectively assess compliance with operational requirements in order that corrective action(s) may be applied where necessary.

3.5 Drills

A more detailed inspection may include drills. Where drills are to be conducted these should be carried out at a safe pace. PSCOs should not expect to see operational activities including drills conducted in real time. Care should be taken to ensure that all crew familiarize themselves with their duties and with the equipment. If necessary, drills should be stopped or suspended if the PSCO considers that the crew are carrying out unsafe practices or if there is a real emergency. In addition, the following should be considered:

- .1 the PSCO should devise the emergency scenario on which a drill will be based in conjunction with the master. Experience has shown that the best assessment is achieved when the PSCO devises and controls the scenario (in collaboration with the master), since there is then an element of uncertainty on the part of the ship's officers as to how a drill will progress and is more realistic to the actual onboard situation facing crew members in a critical situation; and
- .2 it is essential that meetings are held between the PSCOs and key members of the ship's personnel before and after any operational activity involving multiple crew members. An initial briefing should be used to explain in general terms how the activity will be conducted and should also enable the ship's staff to recognize the PSCOs who are witnessing the activity; it is recommended that all PSCOs witnessing the drill wear distinctive high visibility clothing to distinguish them from crew members.

3.6 Meeting on inspection outcomes and findings with regard to operational requirements

At the conclusion of the inspection a meeting should be held with the master to ensure there is a common understanding of the outcomes and any findings of the detailed inspection, to identify any shortcomings and, if appropriate, where operational activity did not meet the required standard.

4 Communication

4.1 The PSCO may determine if the key crew members are able to communicate with each other, and with passengers, as appropriate, in such a way that the safe operation of the ship is not impaired, especially in emergency situations.

4.2 The PSCO may ask the master which languages are used as the working languages and may verify whether the language has been recorded in the logbook.

4.3 The PSCO may ensure that the key crew members are able to understand each other during the inspection or drills. The crew members assigned to assist passengers should be able to give the necessary information to the passengers in case of an emergency.

4.4 Language difficulty between PSCOs and non-English-speaking crews can make it difficult to put across the intentions for the conduct of the inspection and any associated drills. Care needs to be exercised when an unsatisfactory inspection outcome is found to ensure there is a differentiation between the miscommunication between the PSCO and the crew and failure of operational requirements.

4.5 Passenger ships constructed on or after 1 July 2010 shall have on board a safety centre. The safety centre shall either be a part of the navigation bridge or be located in a separate space adjacent but having direct access to the navigation bridge.

4.6 The PSCO should verify that effective means of communication between the safety centre, the central control station, the navigation bridge, the engine control room, the storage room(s) for fire-extinguishing system(s) and fire equipment lockers are provided.

5 Assessing the ship with respect to operational requirements

5.1 If any of the following are found during a more detailed inspection, detention of the ship may be considered:

- .1 failure of deck officers and crew to monitor cargo loading operations and take precautions appropriate to that cargo;
- .2 lack of awareness of the operation of, and limitations of, navigation equipment or how to test such equipment (including navigation lights);
- .3 deck officers unable to demonstrate the operation of essential navigation equipment such as ECDIS and integrated navigation systems. This includes the monitoring and interrogating alarms on such systems;

- .4 there is evidence that the ship's navigation has been carried out in an unsafe manner including, but not limited to:
 - .1 failure to monitor the ship's position in accordance with shipboard procedures;
 - .2 failure to verify the accuracy of position-fixing through use of multiple means of obtaining fixes;
 - .3 failure to properly plan and assess a voyage;
 - .4 navigating the ship into danger or into restricted areas;
 - .5 deck officers unfamiliar with the operation and testing of radio communications equipment and/or the mechanism by which marine safety information is provided to the ship;
 - .6 relevant officers and crew unfamiliar with the locations of the starting positions or the starting operation of the fire-fighting equipment such as the emergency fire pump or the release system for the fixed fire-fighting system;
 - .7 relevant officers and crew lack awareness of the location, operation and coverage area of ventilation stops in the accommodation, engine-room and other protected areas;
 - .8 officers and crew unaware of the location of fire alarm indicators in the accommodation and in the engine-room;
 - .9 relevant officers and crew not aware of the location and operation of the fuel cut-off quick-closing valves for main engine and auxiliary engines;
 - .10 relevant officers and crew unaware of the operation of life-saving equipment and how to effectively test such equipment;
 - .11 relevant officers and crew unfamiliar with the operation of equipment, or procedures, intended to prevent maritime pollution; or
 - .12 evidence of unsafe operations that pose a risk to life and the environment.

5.2 Observation by PSCO must be directly related to compliance with Convention requirements. In relating the deficiency, it is critical to note that having the necessary equipment installed and operational does not provide a capability as required by Convention unless the master and crew are familiar with the operation of the equipment and associated procedures as required by STCW section A-I/4.4. Examples of deficiencies and relevant convention references are shown below:

- .1 engineer officer unable to demonstrate the operation of fuel oil valves provided in accordance with SOLAS regulation II-2/4.2.2.3.4 from outside the machinery space;

Note 1: This would be related to SOLAS regulation XI-1/4

- .2 engineer officer unable to demonstrate the operation of the sewage treatment plant required by regulation 2 of MARPOL Annex IV;

Note 1: This would be related to regulation 14 of MARPOL Annex IV.

Note 2: Where the sewage treatment plant was found to be unserviceable or sewage had been discharged into the sea this should also be related as evidence of the failure of operational requirements.

and

- .3 (on a ship subject to SOLAS regulation V/19.2.10) deck officer unable to demonstrate the process of planning and conducting a navigational passage and unable to demonstrate how to determine the ship position using ECDIS.

Note 1: This could be related to SOLAS regulation XI-1/4, or section A-I/4.4 of STCW. Depending on the nature and scope of the issues, either could be used, noting SOLAS has a broader scope.

6 Detailed guidance on assessing compliance with operational requirements

6.1 Detailed guidance on areas to be inspected is provided in part 2 of this appendix. Detailed guidance is divided into means of assessing compliance day-to-day activities and emergency preparedness. An assessment of compliance in respect of both should be undertaken where the circumstances warrant it.

6.2 The PSCO should consider requesting a drill be conducted where ship's records indicate that the specified drill has not been conducted in accordance with the Convention requirements.

7 Witnessing and assessment of drills

7.1 If a drill will involve passengers, it is prudent to provide as much notice as possible before the start of the drill to enable the master to inform the passengers about the drill. The information should be broadcast by public announcements in all relevant languages for the route concerned. The announcement should be repeated during the drill with appropriate intervals. The completion of the drill should be announced to the passengers.

7.2 During the conduct of a drill, the PSCO should consider questioning the crew members, particularly those assigned to assist any passengers, in order to get an impression of the safety awareness on board the ship.

7.3 When witnessing a drill, the PSCO should seek:

- .1 confirmation that the crew follow what is required of them by the muster list;
- .2 confirmation that there are sufficient personnel assigned to the various parties to cope with the duties given to them;
- .3 confirmation that there is an effective means of communication between the party, the party leader and the bridge, and that relevant information is being exchanged;

- .4 confirmation of the efficiency of the crew working as a team. This would be based on questioning of personnel and observation of their actions, the response times should be noted of the various parties in assembling at their stations and the reaction of the parties to unplanned events should also be noted;
- .5 confirmation that key members of the crew are able to understand each other;
- .6 confirmation of the efficiency of the equipment used, for example:
 - .1 that the fire alarms are audible and efficient;
 - .2 that the fire and watertight doors close as required; and
 - .3 that items of personal fire-fighting equipment appear well maintained; and
- .7 confirmation that the response time was considered fast enough (taking into account safety of the drill as indicated in paragraph 2.5.4 of this appendix), considering the size of the ship and the locations of fire, personnel and fire-fighting equipment.

7.4 In the case of evacuation or abandon ship drills:

- .1 confirmation that the escape arrangements for passengers/crew from lower decks are adequate, that the assembly or muster stations are clearly indicated, that the crew are familiar with the layout of the ship and are able to respond to changes in circumstances, for example directing passengers so as to avoid a smoke-filled area; and
- .2 confirmation that the boat lowering party is proficient and that boats are lowered and ready for embarkation with ancillary equipment deployed.

7.5 If the PSCO determines that the crew are unfamiliar with their duties or incapable of safely operating the life-saving and fire-fighting equipment, the PSCO should halt the drill, notify the master that the drill was unsuccessful and use their professional judgement to establish the next steps, noting the likelihood that this will establish "clear grounds" for a more detailed inspection.

7.6 Having assessed the extent to which operational requirements are complied with, the PSCO(s) should then exercise their professional judgement to determine whether the operational familiarity of the crew as a whole is of sufficient level to allow the ship to sail without danger to the ship or persons on board, or presenting an unreasonable threat of harm to the marine environment.

8 Detention under operational requirements

8.1 Paragraph 3.1.1 and sub-paragraph 3.1.1.4 of the Procedures identify a substandard ship as being one where operational safety is substantially below the standards required by the relevant convention and specifically, in the case of operational requirements, where there is:

"insufficiency of operational proficiency, or unfamiliarity of essential operational procedures by the crew"

8.2 In such cases the relevant operational requirements provisions of conventions require the port State to take such action as necessary to bring ships into compliance where it is found that the master and/or crew are unfamiliar with essential shipboard procedures. The following provisions are relevant:

- .1 SOLAS regulation XI-1/4;
- .2 MARPOL Annex I, regulation 11;
- .3 MARPOL Annex II, regulation 16.9;
- .4 MARPOL Annex III, regulation 9;
- .5 MARPOL Annex IV, regulation 14;
- .6 MARPOL Annex V, regulation 9;
- .7 MARPOL Annex VI, regulation 10; and
- .8 STCW, Article X and regulation I/4 and section A-I/4.

PART 2

GUIDANCE ON SPECIFIC INSPECTION ACTIVITIES

1 Introduction

This section provides detailed guidance on specific inspection activities described in part 1 with respect to the assessment of compliance with operation requirements in relation to day-to-day activities.

1.1 Bridge operation

1.1.1 The PSCO may determine if officers in charge of a navigational watch are familiar with bridge control and navigational equipment, changing the steering mode from automatic to manual and vice versa, and the ship's manoeuvring characteristics.

1.1.2 All officers in charge of a navigational watch should have knowledge of the location and operation of all safety and navigational equipment. Moreover, these officers should be familiar with procedures which apply to the navigation of the ship in all circumstances and should be aware of all information available.

1.1.3 The PSCO may also verify the familiarity of the officers with all the information available to them such as manoeuvring characteristics of the ship, life-saving signals, up-to-date nautical publications, checklists concerning bridge procedures, instructions and manuals.

1.1.4 The Permit to Operate High-Speed Craft (HSC) includes limitations of the maximum significant wave height (and wind force for hovercraft) within which the craft may operate. When carrying out inspections of HSC, PSCOs may verify by the logbook and the weather records whether these limitations have been respected. PSCOs may find that a voyage had to be completed when worse weather conditions than permitted were encountered and not expected according to the weather forecast, but a new voyage should not commence in such conditions.

1.1.5 The PSCO may verify the familiarity of the officers with procedures such as periodic tests and checks of equipment, preparations for arrival and departure, changeover of steering modes, signalling, communications, alarm system, manoeuvring, emergencies and logbook entries.

1.2 Cargo operation

1.2.1 The PSCO may determine if ship's personnel assigned to specific duties related to the cargo and cargo equipment are familiar with those duties, any dangers posed by the cargo and with the measures to be taken in such a context. This will require the availability of all relevant cargo information as required by SOLAS 1974 regulation VI/2.

1.2.2 With respect to the carriage of solid bulk cargoes, the PSCO should verify, as appropriate, that cargo loading is performed in accordance with a ship's loading plan and unloading in accordance with a ship's unloading plan agreed by the ship and the terminal, taking into account the information provided by the loading instrument, where fitted.

1.2.3 The PSCO, when appropriate, may determine whether the responsible crew members are familiar with the relevant provisions of the International Maritime Solid Bulk Cargoes Code (IMSBC Code), particularly those concerning moisture limits and trimming of the cargo.

Additionally, it is expected that the responsible crew members have appropriate knowledge of the recommendatory IMO Code of Safe Practice for Ships Carrying Timber Deck Cargoes (2011 TDC Code) and the Code of Safe Practice for Cargo Stowage and Securing (CSS Code) (non-mandatory, except mandatory sub-chapter 1.9), as amended.

1.2.4 Some solid materials transported in bulk can present a hazard during transport because of their chemical nature or physical properties. Section 2 of the IMSBC Code gives general precautions. Section 4 of the IMSBC Code contains the obligation imposed on the shipper to provide all necessary information to ensure safe transport of the cargo. The PSCO may determine whether all relevant details, including all relevant certificates of tests, have been provided to the master by the shipper.

1.2.5 For some cargoes, such as cargoes which are subject to liquefaction, special precautions are given (see section 7 of the IMSBC Code). The PSCO may determine whether all precautions are met with special attention to the stability of those ships engaged in the transport of cargoes subject to liquefaction and solid hazardous waste in bulk.

1.2.6 Officers responsible for cargo handling and operation and key crew members of oil tankers, chemical tankers and liquefied gas carriers should be familiar with the cargo and cargo equipment and with the safety measures as stipulated in the relevant sections of the IBC and IGC Codes.

1.2.7 For the carriage of grain in bulk, reference is made to part C of chapter VI of SOLAS 1974 and the mandatory International Code for the Safe Carriage of Grain in Bulk (Grain Code).

1.2.8 The PSCO may determine whether the operations and loading manuals include all the relevant information for safe loading and unloading operations in port as well as in transit conditions.

1.3 Operation of machinery

1.3.1 The PSCO may determine if responsible ship's personnel are familiar with their duties related to operating essential machinery, such as:

- .1 emergency and standby sources of electrical power;
- .2 auxiliary steering gear;
- .3 bilge and fire pumps; and
- .4 any other equipment essential in emergency situations.

1.3.2 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

- .1 emergency generator:
 - .1 actions which are necessary before the engine can be started;
 - .2 different possibilities to start the engine in combination with the source of starting energy; and
 - .3 procedures when the first attempts to start the engine fail; and

- .2 standby generator engine:
 - .1 possibilities to start the standby engine, automatic or by hand;
 - .2 blackout procedures; and
 - .3 load-sharing system.

1.3.3 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

- .1 which type of auxiliary steering gear system applies to the ship;
- .2 how it is indicated which steering gear unit is in operation; and
- .3 what action is needed to bring the auxiliary steering gear into operation.

1.3.4 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

- .1 bilge pumps:
 - .1 number and location of bilge pumps installed on board the ship (including emergency bilge pumps);
 - .2 starting procedures for all these bilge pumps;
 - .3 appropriate valves to operate; and
 - .4 most likely causes of failure of bilge pump operation and their possible remedies; and
- .2 fire pumps:
 - .1 number and location of fire pumps installed on board the ship (including the emergency fire pump);
 - .2 starting procedures for all these pumps; and
 - .3 appropriate valves to operate.

1.3.5 The PSCO may verify whether the responsible ship's personnel are familiar with, inter alia:

- .1 starting and maintenance of lifeboat engine and/or rescue boat engine;
- .2 local control procedures for those systems which are normally controlled from the navigating bridge;
- .3 use of the emergency and fully independent sources of electrical power of radio installations;
- .4 maintenance procedures for batteries;

- .5 emergency stops, fire detection system and alarm system operation of watertight and fire doors (stored energy systems); and
- .6 change of control from automatic to manual for cooling water and lube oil systems for main and auxiliary engines.

1.4 Manuals, instructions, etc.

1.4.1 The PSCO may determine if the appropriate crew members are able to understand the information given in manuals, instructions, etc. relevant to the safe condition and operation of the ship and its equipment, and if they are aware of the requirements for maintenance, periodic testing, training, drills and recording of logbook entries.

1.4.2 The following information, inter alia, should be provided on board and PSCOs may determine whether it is in a language or languages understood by the crew and whether crew members concerned are aware of the contents and are able to respond accordingly:

- .1 instructions concerning the maintenance and operation of all the equipment and installations on board for the fighting and containment of fire should be kept under one cover, readily available in an accessible position;
- .2 clear instructions to be followed in the event of an emergency should be provided for every person on board;
- .3 illustrations and instructions in appropriate languages should be posted in passenger cabins and be conspicuously displayed at muster stations and other passenger spaces to inform passengers of their muster station, the essential action they must take in an emergency and the method of donning lifejackets;
- .4 posters and signs should be provided on or in the vicinity of survival craft and their launching controls and shall illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions or warnings;
- .5 instructions for onboard maintenance of life-saving appliances;
- .6 training manuals should be provided in each crew mess room and recreation room or in each crew cabin; the training manual, which may comprise several volumes, should contain instructions and information, in easily understood terms illustrated wherever possible, on the life-saving appliances provided in the ship and on the best method of survival; and
- .7 SOPEP in accordance with regulation 37 of MARPOL Annex I, or SMPEP for noxious liquid substances in accordance with regulation 17 of MARPOL Annex II, where applicable; and
- .8 stability booklet, associated stability plans, stability information and approved stability instrument for tankers.

1.5 Oil and oily mixtures from machinery spaces

1.5.1 The PSCO may determine if all operational requirements of MARPOL Annex I have been met, taking into account:

- .1 the quantity of oil residues generated;
- .2 the capacity of the sludge and bilge water holding tank; and
- .3 the capacity of the oily-water separator.

1.5.2 An inspection of the ORB should be made. The PSCO may determine if reception facilities have been used and note any alleged inadequacy of such facilities.

1.5.3 The PSCO may determine whether the responsible officer is familiar with the handling of sludge and bilge water. The relevant items from the guidelines for systems for handling oily wastes in machinery spaces of ships may be used as guidance. Taking into account the above, the PSCO may determine if the ullage of the sludge tank is sufficient for the expected generated sludge during the next intended voyage. The PSCO may verify that, in respect of ships for which the Administration has waived the requirements of regulations 14(1) and (2) of MARPOL Annex I, all oily bilge water is retained on board for subsequent discharge to a reception facility.

1.5.4 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with the Format for reporting alleged inadequacies of port reception facilities (MEPC.1/Circ.834/Rev.1, appendix 1 of the annex), as may be amended.

1.6 Loading, unloading and cleaning procedures for cargo spaces of tankers

1.6.1 The PSCO may determine if all operational requirements of MARPOL Annexes I or II have been met, taking into account the type of tanker and the type of cargo carried, including the inspection of the ORB and/or CRB. The PSCO may determine if the reception facilities have been used and note any alleged inadequacy of such facilities.

1.6.2 For the control on loading, unloading and cleaning procedures for tankers carrying oil, reference is made to paragraphs 3.1 to 3.4 of appendix 5 where guidance is given for the inspection of crude oil washing (COW) operations. In appendix 3, the PSCO may find detailed guidelines for in-port inspection of crude oil washing procedures.

1.6.3 For the control on loading, unloading and cleaning procedures for tankers carrying noxious liquid substances, reference is made to paragraphs 4.1 to 4.9 of appendix 5 where guidance is given for the inspection of unloading, stripping and prewash operations. More detailed guidelines for these inspections are given in appendix 4.

1.6.4 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with MEPC.1/Circ.834/Rev.1, as may be amended.

1.6.5 The Garbage Record Book may be presented in an electronic format. 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.

1.6.6 When a ship is permitted to proceed to the next port with residues of noxious liquid substances on board in excess of those permitted to be discharged into the sea during the ship's passage, it should be ascertained that the residues can be received by that port. At the same time, that port should be informed, if practicable.

1.7 Dangerous goods and harmful substances in packaged form

1.7.1 The PSCO may determine if the required shipping documents for the carriage of dangerous goods and harmful substances carried in packaged form are provided on board and whether the dangerous goods and harmful substances are properly stowed and segregated and the crew members are familiar with the essential action to be taken in an emergency involving such packaged cargo (see SOLAS 1974 regulation VII/3).

1.7.2 Ship types and cargo spaces of ships of over 500 gross tonnage built on or after 1 September 1984 and ship types and cargo spaces of ships of less than 500 gross tonnage built on or after 1 February 1992 are to fully comply with the requirements of SOLAS 1974 chapter II-2. Administrations may reduce the requirements for cargo ships of less than 500 gross tonnage, but such reductions shall be recorded in the Document of Compliance. A Document of Compliance is not required for ships which only carry class 6.2, class 7 or dangerous goods in limited quantities and excepted quantities.

1.7.3 MARPOL Annex III contains requirements for the carriage of harmful substances in packaged form which are identified in the IMDG Code as marine pollutants. Cargoes which are determined to be marine pollutants should be labelled and stowed in accordance with MARPOL Annex III.

1.7.4 The PSCO may determine whether a Document of Compliance is on board and whether the ship's personnel are familiar with this document provided by the Administration as evidence of compliance of construction and equipment with the requirements. Additional control may consist of:

- .1 checking whether the dangerous goods have been stowed on board in conformity with the Document of Compliance, using the dangerous goods manifest or the stowage plan, required by SOLAS 1974 chapter VII; this manifest or stowage plan may be combined with the one required under MARPOL Annex III;
- .2 checking whether inadvertent pumping of leaking flammable or toxic liquids is not possible in case these substances are carried in under-deck cargo spaces; or
- .3 determining whether the ship's personnel are familiar with the relevant provisions of the Medical First Aid Guide and Emergency Procedures for Ships Carrying Dangerous Goods.

1.8 Garbage

1.8.1 The PSCO may determine if all operational requirements of MARPOL Annex V have been met. The PSCO may determine if the reception facilities have been used and note any alleged inadequacy of such facilities.

1.8.2 The *2017 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.295(71)), as may be amended, are to assist ship operators complying with the requirements set forth in Annex V and domestic laws.

1.8.3 The PSCO may determine whether:

- .1 ship's personnel are aware of these Guidelines, in particular section 2 on "Garbage management"; and
- .2 ship's personnel are familiar with the disposal and discharge requirements under MARPOL Annex V inside and outside a special area and are aware of the areas determined as special areas under MARPOL Annex V.

1.8.4 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with MEPC.1/Circ.834/Rev.1, as may be amended.

1.9 Sewage

1.9.1 The PSCO may determine:

- .1 if all operational requirements of MARPOL Annex IV have been met; the PSCO may determine if the sewage treatment system, comminuting and disinfecting system or holding tank has been used and note any alleged inadequacy of the system or holding tank; and
- .2 that appropriate ship's personnel are familiar with the correct operation of the sewage treatment system, comminuting and disinfecting system or holding tank.

1.9.2 The PSCO may determine whether appropriate ship's personnel are familiar with the discharge requirements of regulation 11 of MARPOL Annex IV.

1.9.3 When reception facilities in other ports have not been used because of inadequacy, the PSCO should advise the master to report the inadequacy of the reception facility to the ship's flag State, in conformity with the waste reception facility reporting requirements (MEPC.1/Circ.834/Rev.1, as may be amended).

1.10 Air pollution prevention

The PSCO may determine whether:

- .1 the master or crew is familiar with the procedures to prevent emissions of ozone-depleting substances and sulphur when equivalent arrangements are in place;
- .2 the master or crew is familiar with the proper operation and maintenance of diesel engines, in accordance with their Technical Files;
- .3 the master or crew has undertaken the necessary fuel changeover procedures or equivalent, associated with demonstrating compliance within a SO_x emission control area;
- .4 the master or crew is familiar with the garbage screening procedure to ensure that prohibited garbage is not incinerated;

- .5 the master or crew is familiar with the operation of the shipboard incinerator, as required by regulation 16.2 of MARPOL Annex VI, within the limit provided in appendix IV to the Annex, in accordance with the operational manual;
- .6 the master or crew recognizes 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 in which emissions of VOCs are to be regulated, and is 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 2.2.29 of MARPOL Annex VI); and
- .7 the master or crew is familiar with bunker delivery procedures in respect of bunker delivery notes and retained samples as required by regulation 18 of MARPOL Annex VI.

2 Introduction

This section provides detailed guidance on specific inspection activities described in part 1 with respect to the assessment of preparedness for emergencies and drills.

2.1 Muster list

2.1.1 The PSCO may determine if the crew members are aware of their duties indicated in the muster list and that they are familiar with the duties assigned to them and are aware of the locations where they should perform their duties. This is done by asking the crew relevant questions. This could be done prior to the drill or during the drill, for instance questioning of stairway guides on a passenger ship.

2.1.2 To determine whether the muster list is up to date, the PSCO may require an up-to-date crew list.

2.1.3 The PSCO may ensure that muster lists are exhibited in conspicuous places throughout the ship, including the navigational bridge, the engine-room and the crew accommodation spaces. When determining if the muster list is in accordance with the regulations, the PSCO may verify whether:

- .1 the muster list shows the duties assigned to the different members of the crew;
- .2 the muster list specifies which officers are assigned to ensure that life-saving and fire appliances are maintained in good condition and are ready for immediate use;
- .3 the muster list specifies the substitutes for key persons who may become disabled, taking into account that different emergencies may call for different actions;
- .4 the muster list shows the duties assigned to crew members in relation to passengers in case of emergency; and
- .5 the format of the muster list used on passenger ships is approved and is drawn up in the language or languages required by the ship's flag State and in the English language.

2.1.4 The PSCO may determine whether the duties assigned to crew members manning the survival craft (lifeboats or liferafts) are in accordance with the regulations and verify that a deck officer or certificated person is placed in charge of each survival craft to be used. However, the Administration (of the flag State), having due regard to the nature of the voyage, the number of persons on board and the characteristics of the ship, may permit persons practised in the handling and operation of liferafts to be placed in charge of liferafts in lieu of persons qualified as above. A second-in-command shall also be nominated in the case of lifeboats.

2.1.5 Every motorized survival craft shall have a person assigned who is capable of operating the engine and carrying out minor adjustments.

2.2 Communication during drills

2.2.1 The PSCO may determine if the key crew members are able to communicate with each other, and with passengers, as appropriate, in such a way that the safe operation of the ship is not impaired, especially in emergency situations.

2.2.2 For drills, key crew members could be, but are not limited to:

- .1 bridge team including GMDSS operators who must also be able to communicate with the shore and other vessels;
- .2 fire parties;
- .3 damage control parties;
- .4 boat preparation parties; or
- .5 passenger muster personnel on passenger ships.

2.2.3 The PSCO should verify the working language of the vessel. The crew members assigned to assist passengers should be able to give the necessary information to the passengers in case of an emergency.

2.2.4 The PSCO should determine, if UHF or VHF handheld radios are being used for drills, that the crew are familiar with the equipment, that they are aware of reception dead zones/areas and what alternative communication methods are available.

2.2.5 When drills are being conducted the PSCO should establish that there are sufficient personnel on the bridge to make decisions, navigate the ship as necessary and deal with the considerable amount of communication that is likely.

2.2.6 When a ship is in difficulty it is likely that shore-based organizations, such as the operator of the ship and regional rescue coordination centres, will need to be involved. The PSCO should confirm the master and crew are aware of procedures where shore-based communication is required and how such communication can be established.

2.3 Search and rescue plan

For passenger ships, the PSCO may verify that there is on board an approved plan for cooperation with appropriate search and rescue services in the event of an emergency.

2.4 Fire and abandon ship drills

2.4.1 The PSCO witnessing a fire and abandon ship drill should ensure that the crew members are familiar with their duties and the proper use of the ship's installations and equipment.

2.4.2 When setting a drill scenario, witnessing the drill and finally assessing the standard of the drill, it is important to emphasize that the PSCO is not looking for an exceptional drill, particularly on cargo ships. The main points for the PSCO to be satisfied are:

- .1 In the event of a shipboard emergency can the crew organize themselves into an effective team to tackle the emergency?
- .2 Can the crew communicate effectively?
- .3 Is the master in control and is information flowing to/from the command centre?
- .4 In the event of the situation getting out of hand can the crew safely abandon the ship?

2.4.3 It is important that when setting the scenario the PSCO clearly explains to the master exactly what is required and expected during the drill, bearing in mind there may be language difficulties. PSCOs should not be intimidating, not interfere during the drill nor offer advice. The PSCO should stand back and observe only, making appropriate notes. It is important to emphasize that the PSCO's role is not to teach or train but to witness.

2.4.4 Drills should be carried out at a safe speed. PSCOs should not expect to see operational drills conducted in real time. During drills, care should be taken to ensure that everybody familiarizes themselves with their duties and with the equipment. If necessary, drills should be stopped if the PSCO considers that the crew are carrying out unsafe practices or if there is a real emergency.

2.5 Fire drills

2.5.1 The PSCO may witness a fire drill carried out by the crew assigned to these duties on the muster list. After consultation with the master of the vessel, one or more specific locations of the ship may be selected for a simulated fire. A crew member may be sent to the location(s) and activate a fire alarm system or use other means to give the alarm.

2.5.2 At the location the PSCO can describe the fire indication to the crew member and observe how the report of fire is relayed to the bridge or damage control centre. At this point most ships will sound the crew alarm to summon the fire-fighting parties to their stations. The PSCO should observe the fire-fighting party arriving on the scene, breaking out their equipment and fighting the simulated fire. Team leaders should be giving orders as appropriate to their crews and passing the word back to the bridge or damage control centre on the conditions. The fire-fighting crews should be observed for proper donning and use of their equipment. The PSCO should make sure that all the gear is complete. Merely mustering the crew with their gear is not acceptable. Crew response to personnel injuries can be checked by selecting a crew member as a simulated casualty. The PSCO should observe how the word is passed and the response of stretcher and medical teams. Handling a stretcher properly through narrow passageways, doors and stairways is difficult and takes practice.

2.5.3 The drill should, as far as practicable, be conducted as if there were an actual emergency.

2.5.4 Those crew members assigned to other duties related to a fire drill, such as the manning of the emergency generators, the CO₂ room, the sprinkler and emergency fire pumps, should also be involved in the drill. The PSCO may ask these crew members to explain their duties and, if possible, to demonstrate their familiarity with those duties.

2.5.5 On passenger ships, special attention should be paid to the duties of those crew members assigned to the closing of manually operated doors and fire dampers. These closing devices should be operated by the responsible persons in the areas of the simulated fire(s) during the drill. Crew members not assigned to the fire-fighting teams are generally assigned to locations throughout the passenger accommodations to assist in passenger evacuation. These crew members should be asked to explain their duties and the meaning of the various emergency signals and asked to point out the two means of escape from the area, and where the passengers are to report. Crew members assigned to assist passengers should be able to communicate at least enough information to direct a passenger to the proper muster and embarkation stations.

2.6 Abandon ship drills

2.6.1 After consultation with the master, the PSCO may require an abandon ship drill for one or more survival craft. The essence of this drill is that the survival craft are manned and operated by the crew members assigned to them on the muster list. If possible, the PSCO should include the rescue boat(s) in this drill. SOLAS 1974 chapter III gives specific requirements on abandon ship training and drills, of which the following principles are particularly relevant.

2.6.2 The drill should, as far as practicable, be conducted as if there were an actual emergency.

2.6.3 The abandon ship drill should include:

- .1 summoning crew, and passengers where applicable, to the muster station(s) with the required alarm and ensuring that they are aware of the order to abandon ship as specified in the muster list;
- .2 reporting to the stations and preparing for the duties described in the muster list;
- .3 checking that crew, and passengers where applicable, are suitably dressed;
- .4 checking that lifejackets are correctly donned;
- .5 lowering at least one lifeboat after the necessary preparation for launching;
- .6 starting and operating the lifeboat engine;
- .7 operating the davits used for launching liferafts;
- .8 conducting a mock search and rescue of passenger trapped in their staterooms (if applicable);
- .9 giving instructions in the use of radio life-saving appliances;

- .10 testing emergency lighting and low-location lights if applicable for mustering and abandonment; and
- .11 if the ship is fitted with marine evacuation systems, exercising the procedures required for the deployment of such systems up to the point immediately preceding actual deployment.

2.6.4 If the lifeboat lowered during the drill is not the rescue boat, the rescue boat should be lowered as well, taking into account that it is boarded and launched in the shortest possible time. The PSCO should ensure that crew members are familiar with the duties assigned to them during abandon ship operations and that the crew member in charge of the survival craft has complete knowledge of the operation and equipment of the survival craft. Care needs to be taken when requiring a ship to lower lifeboats. The number of persons inside the lifeboats during launching for the purpose of a drill should be at the master's discretion, noting that SOLAS 1974 does not require persons in the lifeboat during lowering and recovery. The purpose of this is to reduce the risk of accidents during launching and recovery; however, this must be balanced out with the risk of embarking/disembarking while the boat is still in the water, if the boat is to be taken away and run.

2.6.5 Each survival craft should be stowed in a state of continuous readiness so that two crew members can carry out preparations for embarking and launching in less than five minutes.

2.7 Enclosed space entry and rescue drills

2.7.1 After consultation with the master, the PSCO may require an enclosed space entry and rescue drill. The essence of this drill is to confirm that crew members are familiar with the procedure to enter an enclosed space and to rescue personnel safely, can demonstrate an enclosed space entry and rescue drill, and can communicate effectively when entering an enclosed space in case of planned entry and/or an emergency situation.

2.7.2 The place of the drill can be selected at an assumed enclosed space; it is not necessary to select an actual enclosed space.

2.7.3 The PSCO should check the structure of the enclosed space, the scenarios of the drills and the responsible officers listed on the muster list where applicable.

2.7.4 The enclosed space entry and rescue drill should include:

- .1 checking and use of personal protective equipment required for entry;
- .2 checking and use of communication equipment and procedures;
- .3 checking and use of instruments for measuring the atmosphere in enclosed spaces;
- .4 checking and use of rescue equipment and procedures; and
- .5 instructions in first aid and resuscitation techniques.

2.8 Emergency steering drills

2.8.1 After consultation with the master, the PSCO may require an emergency steering drill. The essence of this drill is to confirm crew members are familiar with the procedure for emergency steering.

2.8.2 The PSCO may check the procedure and means of communication at both the navigation bridge and the steering gear room.

2.8.3 The emergency steering drills should include:

- .1 direct control within the steering gear compartment;
- .2 communication procedure with the navigational bridge; and
- .3 operation of alternative power supplies where applicable.

2.9 Damage control plan and shipboard oil pollution emergency plan (SOPEP) or shipboard marine pollution emergency plan (SMPEP)

2.9.1 The PSCO may determine if a damage control plan is provided on a passenger ship and whether the crew members are familiar with their duties and the proper use of the ship's installations and equipment for damage control purposes. The same applies with regard to SOPEPs on all ships and SMPEPs where applicable.

2.9.2 The PSCO may determine if the officers of the ship are aware of the contents of the damage control booklet, which should be available to them, or of the damage control plan.

2.9.3 The officers may be asked to explain the action to be taken in various damage conditions.

2.9.4 The officers may also be asked to explain about the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof and the arrangements for the correction of any list due to flooding.

2.9.5 The officers should have a sound knowledge of the effect of trim and stability of their ship in the event of damage to and consequent flooding of a compartment and countermeasures to be taken.

2.10 Fire-control plan

2.10.1 The PSCO may determine if a fire-control plan or booklet is provided, whether the crew members are familiar with the information given in the fire-control plan or booklet, and whether, for tankers, crew members are familiar with the approved stability instrument.

2.10.2 The PSCO may verify that fire-control plans are permanently exhibited for the guidance of the ship's officers. Alternatively, booklets containing the information about the fire-control plan may be supplied to each officer, and one copy should at all times be available on board in an accessible position. Plans and booklets should be kept up to date, any alterations being recorded therein as soon as possible.

2.10.3 The PSCO may determine that the responsible officers, especially those who are assigned to related duties on the muster list, are aware of the information provided by the fire-control plan or booklet and how to act in case of a fire.

2.10.4 The PSCO may ensure that the officers in charge of the ship are familiar with the principal structural members which form part of the various fire sections and the means of access to the different compartments.

APPENDIX 8

GUIDELINES FOR PORT STATE CONTROL OFFICERS ON THE ISM CODE

1 GENERAL

1.1 The International Safety Management Code (ISM Code) was adopted by the Assembly at its eighteenth session by resolution A.741(18) and was amended by resolutions MSC.104(73), MSC.179(79), MSC.195(80), MSC.273(85) and MSC.353(92). The ISM Code has been made mandatory through SOLAS 1974 regulation IX/3.

1.2 The Administration is responsible for verifying compliance with the requirements of the ISM Code and issuing Documents of Compliance to companies and Safety Management Certificates to ships. This verification is carried out by the Administration or a recognized organization (RO).

1.3 Port State control officers (PSCOs) do not perform safety management audits. ISM auditing is the responsibility of the flag State and the company and does not fall under the scope of port State control. PSCOs conduct inspections of ships, which are a sampling process and give a snapshot of the vessel on a particular day.

1.4 The safety management system (SMS) documentation is in the ship's working language, which may not be understood by the PSCO. The procedure may not be harmonized if the PSCO is only able to review the SMS documentation on those ships where they can understand the language.

2 GOALS AND PURPOSE

2.1 The Guidelines provide guidance to PSCOs for the harmonized application of related technical or operational deficiencies found in relation to the ISM Code during a PSC inspection.

3 APPLICATION

3.1 The ISM Code applies to the following types of ships engaged in international voyages:

- .1 all passenger ships including passenger high-speed craft;
- .2 oil tankers, chemical tankers, gas carriers, bulk carriers and cargo high-speed craft of 500 gross tonnage and above; and
- .3 other cargo ships and self-propelled mobile offshore drilling units (MODUs) of 500 gross tonnage and above.

3.2 For establishing the applicability SOLAS 1974 chapter IX and the ISM Code, "gross tonnage" means the gross tonnage of the ship as determined under the provisions of TONNAGE 1969, and as stated on the International Tonnage Certificate of the ship.

3.3 The ISM Code does not apply to government-operated ships used for non-commercial purposes.

4 RELEVANT DOCUMENTATION

4.1 Applicable documentation for these Guidelines is as follows:

- .1 SOLAS 1974;
- .2 ISM Code;
- .3 Copy of the Interim DOC or copy of the DOC;
- .4 Interim SMC or SMC; and
- .5 MSC/Circ.1059-MEPC/Circ.401, as may be amended.

5 DEFINITIONS AND ABBREVIATIONS

SOLAS: International Convention for the Safety of Life at Sea, 1974, as amended

ISM Code: International Safety Management Code

The International Management Code for the Safe Operation of Ships and for Pollution Prevention, as adopted by resolution A.741(18), as amended

Procedures for Port State control: Procedures for Port State Control, 2023, as adopted by resolution A.1185(33), as may be amended

Company: The owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all duties and responsibility imposed by the Code

Administration: The Government of the State whose flag the ship is entitled to fly

DOC: Document of Compliance

A document issued to a company which complies with the requirements of the ISM Code

SMC: Safety management certificate

A document issued to a ship which signifies that the company and its shipboard management operate in accordance with the approved safety management system

SMS: Safety management system

A structured and documented system enabling company personnel to implement effectively the company safety and environmental protection policy

Objective evidence:	Quantitative or qualitative information, records or statements of fact pertaining to safety or to the existence and implementation of a safety management system element which is based on observation, measurement or test and which can be verified
Valid certificate:	A certificate that has been issued, electronically or on paper, directly by a Party to a relevant convention or on its behalf by a recognized organization, and contains accurate and effective dates, meets the provisions of the relevant convention, and with which the particulars of the ship, its crew and its equipment correspond
PSC:	Port State control
PSCO:	Port State control officer
RO:	Recognized organization An organization recognized by the Administration
MODU:	Mobile offshore drilling unit
ISM-related:	A technical and/or operational deficiency which has been assessed by the PSCO to be objective evidence of a failure, or lack of effectiveness, of the implementation of the ISM Code, and which is marked as "ISM-related" in the inspection report
ISM deficiency:	A deficiency that is cited against the ISM Code

6 INSPECTION OF SHIP

6.1 Initial inspection

6.1.1 Initial inspection should be carried out in accordance with the Procedures for Port State Control.

6.1.2 During the initial PSC inspection, the PSCO should verify that the ship carries the ISM certificates according to the provisions of chapter IX of SOLAS 1974 and the ISM Code by examining the copy of the DOC and the SMC, for which the following points are to be considered:

- .1 A copy of the DOC should be on board. However, according to the provisions of SOLAS 1974, the copy of the DOC is not required to be authenticated or certified. The copy of the DOC should have the required endorsements.
- .2 The SMC is not valid unless the operating company holds a valid DOC for that ship type. The ship type in the SMC should be included in the DOC and the company's particulars should be the same on both the DOC and the SMC. The SMC should have the required endorsements.
- .3 The validity of an Interim DOC should not exceed a period of 12 months. The validity of an Interim SMC should not exceed a period of six months. In special cases, the Administration, or at the request of the Administration another Government, may extend the validity of the Interim SMC for a period which should not exceed six months from the date of expiry.

- .4 ROs may issue a short-term DOC or SMC not exceeding five months, while the full-term certificate is being prepared in accordance with their internal procedures. If a renewal verification has been completed and a new SMC cannot be issued or placed on board the ship before the expiry date of the existing certificate, the Administration or RO may endorse the existing certificate. Such a certificate should be accepted as valid for a further period which should not exceed five months from the expiry date.
- .5 If a ship at the time when an SMC expires is not in a port in which SMC verification is to be carried out, the Administration may extend the period of validity of the SMC, but this extension should be granted only for the purpose of allowing the ship to complete its voyage to the port in which SMC verification is to be carried out, and then only in cases where it appears proper and reasonable to do so.
- .6 No SMC should be extended for a period of longer than three months, and the ship to which an extension is granted should not, on its arrival in the port in which SMC verification is to be carried out, be entitled by virtue of such extension to leave that port without having a new SMC. When the renewal verification is completed, the new SMC should be valid until a date not exceeding five years from the expiry date of the existing SMC before the extension was granted.
- .7 If no technical or operational-related deficiencies are found during an initial inspection carried out in accordance with the Procedures for Port State Control and guidelines, there is no need to consider the ISM aspect.

6.2 Clear grounds

6.2.1 Since the PSCO is not carrying out a safety management audit of the SMS during a PSC inspection, the term "clear grounds" is not applicable in this context.

6.2.2 Clear grounds and the subsequent more detailed inspection only exist for technical or operational deficiencies.

6.3 More detailed inspection

6.3.1 If a more detailed inspection for technical or operational-related deficiencies is carried out, this should be done in accordance with the Procedures for Port State Control. Any technical and/or operational deficiencies found during this inspection should be individually or collectively considered by the PSCO, using their professional judgement, to indicate that either:

- .1 these do not show a failure, or lack of effectiveness, of the implementation of the ISM Code; or
- .2 there is a failure, or lack of effectiveness, of the implementation of the ISM Code.

6.3.2 If an outstanding ISM-related deficiency from a previous PSC inspection exists and the current PSC inspection is more than three months later, the PSCO will verify, during the present PSC inspection, the effectiveness of any corrective action taken by the company by examining the areas of the technical and/or operational deficiencies of the previous PSC inspection report which led to the issuance of the ISM deficiency.

7 FOLLOW-UP ACTION

7.1 Technical, operational and ISM Code deficiencies

7.1.1 The principles outlined in the Procedures for Port State Control with regard to reporting and rectification of technical or operational deficiencies, and detention and release of the ship are applicable.

7.1.2 If there are technical or operational deficiencies reported:

- .1 which, whether detainable or non-detainable, do not show a failure, or lack of effectiveness, of the implementation of the ISM Code, no ISM deficiency should be reported in the PSC inspection report;
- .2 of which at least one non-detainable deficiency indicates a failure, or lack of effectiveness, of the implementation of the ISM Code, a non-detainable ISM deficiency will be reported in the PSC inspection report with the requirement of corrective action within three months;
- .3 which individually do not lead to a detention but collectively warrant the detention of the ship indicating a serious failure, or lack of effectiveness, of the implementation of the ISM Code, ISM deficiency will be reported in the PSC inspection report with the requirement that a safety management audit has to be carried out by the Administration or the RO before the ship may be released from its detention; and
- .4 of which at least one detainable deficiency indicates a serious failure, or lack of effectiveness, of the implementation of the ISM Code, a detainable ISM deficiency will be reported in the PSC inspection report with the requirement that a safety management audit has to be carried out by the Administration or the RO before the ship may be released from detention.

Note: Where the PSCO considers that one or more technical and/or operational deficiencies are related to the ISM Code, this should be recorded as only one ISM deficiency.

7.1.3 The PSCO will verify the effectiveness of any corrective action as described in section 6.3.2. If examination of the areas in relation to an ISM deficiency with the requirement corrective action within three months is found not satisfactory, a new detainable ISM deficiency with the requirement that a safety management audit has to be carried out by the Administration or the RO will be raised. In this case the PSCO should apply the following procedure:

- .1 record one or more technical/operational deficiencies, detainable or not, in the same area(s) which led to the issuance of the previous ISM deficiency;
- .2 mark the deficiency or deficiencies "ISM-related" and add in the additional comments the following text: "This deficiency shows non-effective implementation of the ISM Code in the areas where the ISM deficiency or deficiencies were found during the PSC inspection on _____"; and
- .3 record a new detainable ISM deficiency with the requirement that a safety management audit has to be conducted by the Administration or the RO before the ship may be released from detention.

7.2 Deficiencies not warranting detention

Minor typing errors in the DOC, the Interim DOC, the SMC, or Interim SMC should be recorded in the PSC inspection report as a technical deficiency with the certificates and no ISM deficiency should be recorded.

7.3 Deficiencies warranting detention

The following are deficiencies which may warrant detention:

- .1 deficiencies of a technical and/or operational nature which individually or collectively provide objective evidence of a serious failure, or lack of effectiveness, of the implementation of the ISM Code;
- .2 there is no SMC, Interim SMC and/or copy of the DOC or Interim DOC on board the ship;
- .3 there is no valid SMC or Interim SMC on board;
- .4 the SMC intermediate verification is overdue;
- .5 the SMC has expired and there is no objective evidence of an extension issued by the Administration; or the SMC has been withdrawn by the Administration;
- .6 the DOC or Interim DOC has expired or been withdrawn;
- .7 the ship type as indicated on the SMC or Interim SMC is not listed on the DOC or Interim DOC;
- .8 evidence of the DOC annual verification is not available on board;
- .9 the certificate numbers on the copy of the DOC and the endorsement pages are not the same; and
- .10 the company name, the company address or the issuing Government authority on the DOC or Interim DOC is not the same as on the SMC or Interim SMC.

8 REPORTING

8.1 Technical and operational-related deficiencies

8.1.1 All technical and/or operational deficiencies should be recorded as an individual deficiency in the PSC inspection report according to the Procedures for Port State Control.

8.1.2 A technical deficiency with the defective item DOC/SMC or Interim DOC/SMC should be recorded in the PSC inspection report under the deficiency code addressing the DOC or SMC respectively.

8.2 ISM deficiency

Where the PSCO has considered the technical and/or operational deficiencies found and concluded these provide objective evidence of a failure, serious failure or lack of effectiveness of the implementation of the ISM Code, an ISM deficiency should be recorded in the PSC inspection report.

APPENDIX 9

GUIDELINES FOR PORT STATE CONTROL RELATED TO LRIT

1 PURPOSE

These Guidelines are intended to provide basic guidance to port State control officers (PSCOs) to verify compliance with the requirements of SOLAS 1974 for long-range identification and tracking (LRIT).

2 APPLICATION

2.1 LRIT equipment is required by the provisions of SOLAS 1974 regulation V/19-1, and the *Revised performance standards and functional requirements for the long-range identification and tracking of ships* (resolution MSC.263(84)/Rev.1), as amended, and requires all passenger ships, cargo ships (including high-speed craft) over 300 gross tonnage and mobile offshore drilling units (MODUs) to send LRIT position information at least every six hours. Ships fitted with an automatic identification system (AIS) and operated exclusively within sea area A1 are not required to comply with LRIT. Sea area A1 is defined by SOLAS 1974 regulation IV/2.1.15 as "an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government".

2.2 SOLAS Contracting Governments are expected to maintain an LRIT data centre, either on a national basis, or on a regional or cooperative basis with other flag States, and notify IMO of it. In turn, these LRIT data centres will forward, upon request, LRIT information from ships entitled to fly their flags, to other SOLAS Contracting Governments through the International LRIT Data Exchange. Port States are entitled to request LRIT information from foreign ships that have indicated their intention to enter a port, port facility or place under its jurisdiction.

2.3 In most cases a stand-alone Inmarsat C or Inmarsat mini-C terminal used for the GMDSS or ship security alert system will function as the LRIT terminal, but other equipment may be employed for the LRIT function (for example, Inmarsat D+ or Iridium).

3 INSPECTION OF SHIPS REQUIRED TO CARRY LRIT EQUIPMENT

3.1 Initial inspection

3.1.1 The PSCO should first establish the sea area the ship is certified to operate in. This verification should ensure that the ship is subject to the LRIT regulation in relation to its ship type and tonnage. After the certificate check, the PSCO should verify that:

- .1 the Record of Equipment (Form E, P or C) indicates LRIT as required, if applicable; and¹
- .2 the equipment identified by the ship's representative as the designated LRIT terminal is switched on.²

¹ A Record of Equipment is required for cargo ships greater than 500 gross tonnage and passenger ships.

² In exceptional circumstances and for the shortest duration possible, LRIT is capable of being switched off or may transmit less frequently (SOLAS 1974 regulation V/19-1.7.2 and resolution MSC.263(84)/Rev.1, paragraph 4.4.1).

3.1.2 In case of recent transfer of flag, the PSCO may further ensure that:

- .1 a conformance test report has been re-issued if the new flag State does not recognize the issuing body of the existing conformance test report; or
- .2 a new conformance test has been carried out by the application service provider (ASP) on behalf of the Administration before issuance of a new test report and certificate.

3.2 Clear grounds

Conditions which may warrant a more detailed inspection of equipment used for LRIT may comprise the following:

- .1 defective main or emergency source of energy;
- .2 information or indication that LRIT equipment is not functioning properly;
- .3 ship does not hold conformance test report; and
- .4 the "record of navigational activities" indicates that the LRIT installation has been switched off and that this has not been reported to the flag Administration as required by SOLAS 1974 regulation V/19-1.7.2.

3.3 More detailed inspection

3.3.1 In case of doubt or reports of malfunctioning of the LRIT installation, the flag Administration may be contacted to determine if the ship's LRIT information has been reliably relayed to the LRIT data centre.

3.3.2 If any issues are identified at the initial inspection, a more detailed inspection of equipment used for LRIT may comprise the following:

- .1 verification of the power supply, which should be connected to the main source of energy and the emergency source of energy – there is no requirement for an uninterrupted power source; if LRIT is part of the GMDSS radio installation, the power supply should conform to GMDSS regulations;
- .2 inspection of the "record of navigational activities" log to establish if and when the installation has been switched off and if this has been reported to the flag Administration (SOLAS 1974 regulation V/19-1.7.2 and resolution MSC.263(84)/Rev.1, paragraph 4.4.1); and
- .3 ensuring that any conformance test report is issued on behalf of the flag State, even by itself or by an authorized application service provider (see MSC.1/Circ.1377/Rev.11 and updated versions as shown in GISIS), available for a ship that has an LRIT installation.

4 Deficiencies warranting detention

4.1 A PSCO should use professional judgement to determine whether to detain the ship until any noted deficiencies are corrected or to permit a vessel to sail with deficiencies.¹

4.2 In order to assist the PSCO in the use of these Guidelines, the following deficiencies should be considered to be of such nature that they may warrant the detention of a ship:

- .1 absence of a valid LRIT conformance test report; and
- .2 the master or the responsible officer is not familiar with essential shipboard operational procedures relating to LRIT.

4.3 Taking into account the guidance found in the *Guidance on the implementation of the LRIT system* (MSC.1/Circ.1298), PSCOs are also advised that ships should not be detained if the LRIT installation on board works but the shoreside installation or organization is not able to receive, relay or process the information.

4.4 PSCOs are advised that a flag State may issue a short-term certificate; this could happen if, following a successful inspection for the issuance of a conformance test report, the ASP has not been able to issue a document yet, or if the ASP is not able to perform a conformance test in due time upon the request of the shipowner.

¹ SOLAS 1974 regulation V/16.2: "while all reasonable steps shall be taken to maintain the equipment required by this chapter in efficient working order, malfunctions of that equipment shall not be considered as making the ship unseaworthy or as a reason for delaying the ship in ports where repair facilities are not readily available, provided suitable arrangements are made by the master to take the inoperative equipment or unavailable information into account in planning and executing a safe voyage to a port where repairs can take place."

APPENDIX 10

GUIDELINES FOR PORT STATE CONTROL UNDER TONNAGE 1969

1 The International Convention on Tonnage Measurement of Ships, 1969 (TONNAGE 1969), which came into force on 18 July 1982, applies to:

- .1 new ships, i.e. ships the keels of which were laid on or after 18 July 1982; and
- .2 existing ships, i.e. ships the keels of which were laid before 18 July 1982, as from 18 July 1994,

except that for the purpose of application of SOLAS 1974, MARPOL and STCW 1978, the following interim schemes indicated in paragraph 2 may apply.

2 In accordance with the interim schemes adopted by the Organization,¹ the Administration may, at the request of the shipowner, use the gross tonnage determined in accordance with national rules prior to the coming into force of TONNAGE 1969 for the following ships:

- .1 for the purpose of SOLAS 1974:
 - .1 ships the keels of which were laid before 1 January 1986;
 - .2 in respect of SOLAS 1974 regulation IV/3, ships the keels of which were laid on or after 1 January 1986 but before 18 July 1994; and
 - .3 cargo ships of less than 1,600 tons gross tonnage (as determined under the national tonnage rules) the keels of which were laid on or after 1 January 1986 but before 18 July 1994; and
- .2 for the purpose of MARPOL, ships of less than 400 tons gross tonnage (as determined under the national tonnage rules) the keels of which were laid before 18 July 1994.

3 For ships to which the above interim schemes apply, a statement to the effect that the gross tonnage has been measured in accordance with the national tonnage rules should be included in the "REMARKS" column of the International Tonnage Certificate and in the footnote to the figure of the gross tonnage in the relevant SOLAS 1974 and MARPOL certificates.

4 The port State control officer (PSCO) should take the following actions as appropriate when deficiencies are found in relation to TONNAGE 1969:

- .1 if a ship does not hold a valid International Tonnage Certificate, the ship loses all privileges of TONNAGE 1969, and the flag State should be informed without delay;

¹ Resolutions A.494(XII) in respect of SOLAS 1974, A.540(13) in respect of STCW 78, and A.541(13) in respect of MARPOL.

- .2 if the required remarks and footnote are not included in the relevant certificates on ships to which the interim schemes apply, this deficiency should be notified to the master; and
- .3 if the main characteristics of the ship differ from those entered on the International Tonnage Certificate, so as to lead to an increase in the gross tonnage or net tonnage, the flag State should be informed without delay.

5 The control provisions of article 12 of TONNAGE 1969 do not include the provision for detention of a ship holding a valid International Tonnage Certificate.

APPENDIX 11

GUIDELINES FOR PORT STATE CONTROL OFFICERS ON CERTIFICATION OF SEAFARERS, MANNING AND HOURS OF REST

1 GENERAL

The International Convention for the Safety of Life at Sea (SOLAS 1974) was adopted in 1974 and entered into force in 1980. Similarly, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 1978) was adopted in 1978 and entered into force in 1984. Both have been amended several times since their entry into force.

2 GOALS AND PURPOSE

These Guidelines are intended to provide guidance for a harmonized approach to port State control (PSC) inspections in compliance with SOLAS 1974 regulation V/14 (manning) and STCW 1978 regulation I/2 (seafarer certification) and chapter VIII (hours of rest).

3 APPLICATION

3.1 SOLAS 1974 regulation V/14.2 only applies to ships covered by chapter I of SOLAS 1974. STCW 1978, as amended, applies to seafarers serving on board seagoing ships. The STCW Code is divided into a mandatory part A and a non-mandatory part B. Part B of the STCW Code is not applicable during the inspection.

3.2 All passenger ships regardless of size and all other ships of 500 gross tonnage or more should have a minimum safe manning document or equivalent on board issued by the flag State.

3.3 Any new or single deficiency which is either a deficiency related to SOLAS 1974, STCW 1978 or other IMO conventions, should preferably be registered with these conventions' references.

4 RELEVANT DOCUMENTATION

The documentation required for the inspection referred to in these Guidelines consists of:

Seafarer certification

- .1 certificate of competency;
- .2 certificate of proficiency;
- .3 endorsement attesting the recognition of a certificate (flag State endorsement);
- .4 documentary evidence (passenger ships only);
- .5 medical certificate;

Manning

- .6 minimum safe manning document;
- .7 muster list;

Hours of rest

- .8 table of ship working arrangements and/or watch schedule; and
- .9 records of daily hours of rest.

5 DEFINITIONS AND ABBREVIATIONS

5.1 Certificate of Competency means a certificate issued and endorsed for masters, officers and Global Maritime Distress and Safety System (GMDSS) radio operators in accordance with the provisions of chapters II, III, IV or VII of STCW 1978 and entitling the lawful holder thereof to serve in the capacity and perform the functions involved at the level of responsibility specified therein.

5.2 Certificate of Proficiency means a certificate, other than a certificate of competency issued to a seafarer, stating that the relevant requirements of training, competencies or seagoing service in STCW 1978 have been met.

5.3 Documentary evidence means documentation, other than a Certificate of Competency or Certificate of Proficiency, used to establish that the relevant requirements of STCW 1978, as amended, have been met. The only documentary evidence required under STCW 1978, as amended, is issued to personnel meeting the mandatory minimum requirements for the training and qualifications of masters, officers, ratings and other personnel on passenger ships (regulation V/2).

5.4 The following abbreviations have been used:

- .1 CoC (Certificate of Competency);
- .2 CoP (Certificate of Proficiency); and
- .3 MSMD (minimum safe manning document).

6 INSPECTION OF SHIP

6.1 Pre-boarding preparation

6.1.1 Taking into account the type, size, engine power and other particulars of the ship, the port State control officer (PSCO) should be aware of the relevant requirements of SOLAS 1974 regulation V/14 and STCW 1978.

6.1.2 The PSCO should be aware that resolutions are non-mandatory documents and not applicable during a PSC inspection.

6.1.3 The PSCO should also identify if the flag State is a Party to STCW 1978, as amended. If the flag State is not a Party to the Convention or is a Party but not listed in MSC.1/Circ.1163/Rev.13, as may be amended, a more detailed inspection should be carried out.

6.2 Initial inspection

Seafarer certificates and documents

6.2.1 The PSCO should examine the applicable documents, found in section 4.

6.2.2 The inspection should be limited to verification that seafarers serving on board, who are required to be certificated, hold the appropriate CoC, CoP and documentary evidence issued in accordance with chapters II, III, IV, V, VI and VII of STCW 1978, as amended, as well as their relevant flag State endorsement, valid dispensation, or documentary proof that an application for an endorsement has been submitted to the flag State Administration, where applicable. These documents are evidence of having successfully completed all required training and that the required standard of competence has been achieved.

6.2.3 During the verification of the seafarers' certificates and documents, the PSCO should confirm that they are applicable to the ship's characteristics, operation and their position on board.

6.2.4 In accordance with the provision of article VI, paragraph 2 of STCW 1978, certificates for masters and officers should be endorsed by the issuing Administration in the form prescribed in regulation I/2 of the annex to the Convention.

6.2.5 The certificates may be issued as one certificate with the required endorsement incorporated. If so incorporated, the form used should be that set forth in section A-I/2, paragraph 1 of the STCW Code.

6.2.6 The endorsement may also be issued as a separate document. If so, the form used should be that set out in section A-I/2, paragraph 2 of the STCW Code.

6.2.7 However, Administrations may use a format for certificates and endorsements different from those given in section A-I/2 of the STCW Code, provided that, at a minimum, the required information is provided in Roman characters and Arabic figures. Permitted variations to the format are set out in section A-I/2, paragraph 4 of the STCW Code.

6.2.8 Certificates and endorsements issued as separate documents should each be assigned a unique number, except that endorsements attesting the issuance of a certificate may be assigned the same number as the certificate concerned, provided that number is unique.

6.2.9 Certificates and endorsements issued as separate documents should include a date of expiry. The date of expiry on an endorsement issued as a separate document should not exceed five years from the date of issue and may never exceed the date of expiry on the certificate.

6.2.10 A CoP issued to a master or an officer in accordance with regulation V/1-1 or V/1-2, as well as a CoC that has been issued by a State other than the flag State of the ship in which the seafarer is engaged, is required to be recognized by the ship's flag State. If the PSCO identifies that the flag State has recognized a CoC or CoP from a Party not listed in MSC.1/Circ.1163, as amended, clarification should be sought from the flag Administration. According to regulation I/10, paragraph 4 of STCW 1978, certificates issued by or under the authority of a non-Party shall not be recognized by the ship's flag State Administration.

6.2.11 An Administration which recognizes under regulation I/10 a CoC or CoP issued to masters and officers should endorse that certificate to attest to its recognition. The form of the endorsement should be that found in section A-I/2, paragraph 3 of the STCW Code.

6.2.12 Incorrect wording or missing information may be a cause for suspicion regarding fraudulent certificates or endorsements.

6.2.13 Endorsements attesting to the recognition of a certificate should each be assigned a unique number; however, they may be assigned the same number as the certificate concerned, provided that number is unique.

6.2.14 Endorsements attesting to the recognition of a certificate should include a date of expiry. The date of expiry on an endorsement attesting to the recognition may never exceed the date of expiry on the certificate being recognized.

6.2.15 The capacity in which the holder of a certificate is authorized to serve should be identified in the form of endorsement in terms identical to those used in the applicable safe manning requirements of the Administration. This may result in slight variations of terminology between the original CoC and the endorsement to the recognition.

6.2.16 Seafarers must have their original CoC on board as well as any original endorsements to the recognition. An endorsement attesting the recognition of a certificate should not entitle a seafarer to serve in a higher capacity than the original CoC.

6.2.17 If circumstances require it, a flag State Administration may permit a seafarer to serve for a period not exceeding three months on ships entitled to fly its flag while holding a valid CoC issued by another party and valid for service on that party's ships. If such a situation exists, documentary proof must be readily available that an application for endorsement has been made to the Administration of the flag State. This is often referred to as the confirmation of receipt of application (CRA). This provision allows Administrations to permit seafarers to serve on their ships while the application for recognition is being processed.

6.2.18 If an endorsement to attest recognition or certificate of competency has expired or has not been issued or documentary proof of application for endorsement is not readily available, the PSCO should consider whether or not the ship can comply with STCW 1978 regulation I/4.1.2 regarding the numbers and certificates on board being in compliance with the applicable safe manning requirements of the flag State. This may be considered a deficiency in accordance with regulation I/4.2.4 and rectified before departure or detention may be applied. The officer carrying out the control should forthwith inform, in writing, the master of the ship and the Consul or, in his or her absence, the nearest diplomatic representative or the maritime authority of the State whose flag the ship is entitled to fly, so that appropriate action may be taken.

6.2.19 In cases of suspected intoxication of masters, officers and/or other seafarers while performing designated safety, security and marine environmental protection duties, the appropriate authorities of the port and flag State should be notified in accordance with chapters 3 and 4 of the Procedures for Port State Control.

6.2.20 Seafarers should have a valid medical certificate and have completed applicable familiarization on board the ship. If such crew members are assigned to any designated safety, security or pollution prevention duties, they must be trained and qualified for such duties in accordance with the applicable chapter of the STCW Code.

6.2.21 In accordance with section A-VI/1, paragraph 5 of the STCW Code, the flag State Administration may exempt the seafarers engaged on ships other than passenger ships of more than 500 gross tonnage on international voyages and tankers from some of the requirements of that section.

Manning

6.2.22 The PSCO should examine the applicable documents, found in section 4.

6.2.23 The guiding principles for port State control of the manning of a foreign ship should be:

- .1 verification that the numbers and certificates of the seafarers serving on board are in conformity with the applicable safe manning requirements of the flag State; and
- .2 verification that the vessel and its personnel conform to the international provisions as laid down in SOLAS 1974 and STCW 1978.

6.2.24 If a ship is manned in accordance with an MSMD or equivalent document issued by the flag State, the PSCO should accept that the ship is safely manned unless the document has clearly been issued without regard to the principles contained in the relevant instruments, in which case the PSCO should consult the flag State Administration.

6.2.25 If the flag State Administration has not issued a safe manning document or equivalent owing to the ship's size the PSCO should examine the CoC, CoP and their relevant flag State endorsement for the crew and compare with the requirements of STCW 1978. Regarding the number of seafarers, the PSCO should then use his or her professional judgement, taking into account chapter VIII of STCW 1978 and the STCW Code and the duration and area of the next voyage, to determine if it can be undertaken safely. The PSCO should note the number of seafarers on board during the previous voyage as another indicator of standard manning levels for the ship. The PSCO should consult the flag State Administration if additional information is necessary.

6.2.26 If an endorsement to attest recognition has expired or has not been issued or documentary proof of application for endorsement (CRA) is not readily available, the PSCO should consider whether the ship can comply with the applicable safe manning requirements of the flag State Administration. In cases where the PSCO finds that additional information is necessary, the flag State Administration should be consulted.

6.2.27 If the flag State does not respond to the request, this should be considered as clear grounds for a more detailed inspection to ensure that the number and composition of the crew are in accordance with the principles laid down in paragraph 6.2.23 above. The ship should only be allowed to proceed to sea if it is safe to do so, taking into account the criteria for detention indicated in section 7.3. In any such case, the minimum standards to be applied should be no more stringent than those applied to ships flying the flag of the port State.

Hours of rest

6.2.28 All persons who are assigned duty as officer in charge of a watch or as a rating forming part of a watch and those whose duties involve designated safety, security and environmental protection duties shall be provided with a rest period of not less than:

- .1 a minimum of 10 hours of rest in any 24-hour period; and
- .2 77 hours in any seven-day period.

6.2.29 The hours of rest may be divided into no more than two periods, one of which shall be at least 6 hours in length, and the intervals between consecutive periods of rest shall not exceed 14 hours.

6.2.30 The PSCO should examine the applicable documents, found in section 4, specifically the watch schedule and the records of daily hours of rest. The PSCO may inspect the seafarer's personal copy of his or her records pertaining to the hours of rest being held by the seafarer on board in order to verify that the records are accurate.

6.2.31 The watch schedule shall be in a standardized format,¹ easily accessible to the crew and posted in the working language or languages of the ship and in English.

6.2.32 Daily hours of rest shall be maintained in a standardized format,¹ in the working language or languages of the ship and in English.

6.2.33 The PSCO should consider that seafarers who are on call, such as when a machinery space is unattended, are to be provided with an adequate compensatory rest period if the normal period is disturbed by call-outs to work.

6.2.34 While assessing hours of rest, the PSCO should take into account any emergency conditions encountered which required a seafarer to perform additional hours of work for the immediate safety of the ship. In such cases, the master should be consulted for an explanation of the events and how impacted seafarers were provided with an adequate period of rest.

6.2.35 Flag State Administrations may provide exceptions to the requirements of paragraphs 6.2.28.2 and 6.2.29 above for no more than two consecutive weeks provided that the rest period for the seafarer is not less than 70 hours in any seven-day period.

6.3 Clear grounds

6.3.1 Clear grounds are defined in section 1.7.2 of the Procedures for Port State Control.

6.3.2 In addition to the general examples of clear grounds in section 2.4 of the Procedures, the specific occurrences below, as outlined in paragraph 1.3 of regulation I/4 of STCW 1978, are considered as factors leading to a more detailed inspection:

- .1 the ship has been involved in a collision, grounding or stranding; or
- .2 there has been a discharge of substances from the ship when under way, at anchor or at berth which is illegal under any international convention; or
- .3 the ship has been manoeuvred in an erratic or unsafe manner whereby routing measures adopted by IMO or safe navigation practices and procedures have not been followed; or
- .4 the ship is otherwise being operated in such a manner as to pose a danger to persons, property or the environment, or a compromise to security.

¹ The *IMO/ILO Guidelines for the development of tables of seafarers' shipboard working arrangements and formats of records of seafarers' hours of work or hours of rest* may be used.

6.4 More detailed inspection

6.4.1 The PSCO should:

- .1 verify that seafarers are sufficiently rested and otherwise fit for duty for the first watch at the commencement of the intended voyage and for subsequent relieving watches; this may be done by comparing records of daily hours of rest with the requirements in STCW 1978 for an appropriate period, which should at least include, whenever possible, the seven-day period immediately prior to departure; the rest period must reflect actual hours worked;
- .2 verify a sufficient number of certificates from all departments to demonstrate that the vessel and the composition of the crew comply with the MSMD and requirements of STCW 1978; and
- .3 verify that navigational or engineering watch arrangements conform to the requirements specified for the ship in the MSMD by the flag State and the requirements of STCW 1978 regulation VIII/2 and STCW Code section A-VIII/2.

6.4.2 An assessment of seafarers can only be conducted by the port State if there are clear grounds for believing that the ability of the seafarers of the ship to maintain watchkeeping and security standards, as appropriate, as required by STCW 1978 is not being maintained because any of the situations mentioned in paragraphs 6.3.2.1 to 6.3.2.4 have occurred:

- .1 the assessment procedure provided in STCW 1978 regulation I/4, paragraph 1.3, should take the form of a verification that members of the crew who are required to be competent do in fact possess the necessary skills related to the occurrence;
- .2 it should be borne in mind when making this assessment that onboard procedures are relevant to the International Safety Management (ISM) Code and that the provisions of STCW 1978 are confined to the competence to safely execute those procedures;
- .3 control procedures under STCW 1978 should be confined to the standards of competence of the individual seafarers on board and their skills related to watchkeeping as defined in part A of the STCW Code. Onboard assessment of competency should commence with verification of the certificates of the seafarers;
- .4 notwithstanding verification of the certificate, the assessment under STCW 1978 regulation I/4, paragraph 1.3 can require the seafarer to demonstrate the related competency at the place of duty. Such demonstration may include verification that operational requirements in respect of watchkeeping standards have been met and that there is a proper response to emergency situations within the seafarer's level of competence;
- .5 in the assessment, only the methods for demonstrating competence together with the criteria for its evaluation and the scope of the standards given in part A of the STCW Code should be used. In cases where there is doubt about knowledge of operational use of equipment, the relevant officer or crew member should be asked to perform a functional test. Failure to perform a functional test could indicate the lack of familiarization or competency; and

- .6 assessment of competency related to security should be conducted for those seafarers with specific security duties only in case of clear grounds, as provided for in chapter XI-2 of SOLAS 1974, by the competent security authority. In all other cases, it should be confined to the verification of the certificates and/or endorsements of the seafarers.

7 FOLLOW-UP ACTION

7.1 Possible action

Possible action to be considered by the PSCO for the control in compliance with SOLAS 1974 or STCW 1978 may be dealt with in the following ways:

- .1 exercise of control with regard to the documentation concerning the ship; and
- .2 exercise of control with regard to the documentation for individual seafarers on board.

7.2 Possible deficiencies

The following is a non-exhaustive list of possible deficiencies:

Seafarers' documentation:

- .1 no CoC, CoP, flag State endorsements or proof that an application for an endorsement has been submitted (STCW 1978 regulations I/4.2.1 and I/10);
- .2 special training requirements: mandatory basic or advanced training or endorsement not presented;
- .3 no evidence of basic training, or other certificate of proficiency, if not included in a qualification certificate held (STCW 1978 regulations VI/1, VI/1.2, VI/3, VI/4 and VI/6); and
- .4 information or evidence that the master or crew is not familiar with essential shipboard operations relating to the safety of ships or the prevention of pollution, or that such operations have not been carried out;

Manning:

- .5 no MSMD or the manning (number or qualification) not in accordance with the MSMD (SOLAS 1974 regulation V/14 and STCW 1978 regulation I/4.2.2); and
- .6 unqualified person on duty (STCW 1978 regulation I/4.2.4);

Hours of rest:

- .7 watch schedule not posted or not being followed (STCW 1978 regulations I/4.2.3 and I/4.2.5 and STCW Code A-VIII/1.5);
- .8 the absence of a table of shipboard working arrangements or of records of rest of seafarers (STCW Code A-VIII/1.7);

- .9 the records of hours of rest are inaccurate or incomplete (STCW Code A-VIII/1.7); and
- .10 the watchkeeper is receiving less than 10 hours rest in any 24-hour period (i.e. working in excess of 14 hours) or 77 hours rest in any seven-day period (STCW Code A-VIII/1).

7.3 Deficiencies that may warrant detention

7.3.1 Deficiencies which may be deemed to pose a danger to persons, property or the environment, as specified in paragraph 2 of regulation I/4 of STCW 1978, as amended:

- .1 failure of seafarers to hold a certificate, to have an appropriate certificate, to have a valid dispensation or to provide documentary proof that an application for an endorsement has been submitted to the Administration in accordance with regulation I/10, paragraph 5;
- .2 failure to comply with the applicable safe manning requirement of the Administration;
- .3 failure of navigational or engineering watch arrangements to conform to the requirements specified for the ship by the Administration;
- .4 absence in a watch of a person qualified to operate equipment essential to safe navigation, safety radiocommunications or the prevention of marine pollution; and
- .5 inability to provide, for the first watch at the commencement of a voyage and for subsequent relieving watches, persons who are sufficiently rested and otherwise fit for duty.

7.3.2 Failure to correct any of the deficiencies, insofar as it has been determined by the PSCO that they pose a danger to persons, property or the environment, shall be the only grounds under STCW 1978, as amended, on which a ship may be detained.

7.3.3 Examples of detainable deficiencies according to SOLAS 1974 and STCW 1978 are listed below:

Ship-related:

- .1 MSMD or equivalent not presented (SOLAS 1974 regulation V/14.2); and
- .2 records of daily hours of rest are not on board (STCW Code A-VIII/1.7); and

Seafarers' documentation:

- .3 not available or serious discrepancy in the CoC (STCW 1978 regulation I/4.2.1);
- .4 absence in watch of a radio operator (general/restricted GMDSS); certificates and endorsement not available (STCW 1978 regulations I/4.2.1, I/4.2.2, I/4.2.3, I/4.2.4 and II/1.2.1);

- .5 documentation for personnel with designated safety, security and marine environmental duties not available (STCW 1978 regulations I/4.2.1, I/4.2.2, I/4.2.3 and I/4.2.4);
- .6 expired certificates (STCW 1978 regulation I/4.2.1), and for medical certificates also refer to STCW 1978 regulations I/9.6 and I/9.7; and
- .7 evidence that a certificate has been fraudulently obtained or the holder of a certificate is not the person to whom that certificate was originally issued.

7.4 Actions to be considered

Ship-related

7.4.1 If the actual number of crew or composition does not conform to the manning document, the port State should request the flag State for advice as to whether or not the ship should be allowed to sail with the actual number of crew and composition of crew. Such a request and response should be by the most expedient means and either party may request the communication in writing. If the actual crew number or composition is not brought into compliance with the MSMD or the flag State does not advise that the ship may sail, the ship may be considered for detention after the criteria set out in section 7.3 have been taken into account.

7.4.2 Before detaining the ship the PSCO should consider the following:

- .1 length and nature of the intended voyage or service;
- .2 whether or not the deficiency poses a danger to ships, persons on board or the environment;
- .3 whether or not appropriate rest periods of the crew can be observed;
- .4 size and type of ship and equipment provided; and
- .5 nature of cargo.

Deficiency-related

7.4.3 When the manning is not in accordance with the MSMD and no flag State endorsements or no "documentary proof of application" can be presented, the port State should consult the flag State whenever possible, taking into account time differences or other conditions. However, if it is not possible to establish contact with the flag State, the port State should forthwith inform, in writing, the master of the ship and the Consul or, in their absence, the nearest diplomatic representative or the maritime authority of the State whose flag the ship is entitled to fly, so that appropriate action may be taken.

7.4.4 In cases where an unqualified seafarer has been on duty and/or the watch schedule has not been followed, the flag State should be informed and this could be considered as an ISM deficiency.

7.4.5 In cases where there is a seafarer on duty who is not qualified to carry out an operation, that particular operation should be stopped immediately.

8 NOTE ON REPORTING DEFICIENCIES

The PSCO should be aware that, in addition to SOLAS 1974 and STCW 1978, there may be other applicable international instruments. The PSCO should decide which one is the most appropriate.

Annex

Table B-I/2

List of certificates or documentary evidence required under STCW 1978

Refer to table B-I/2 of the STCW Code, as amended

APPENDIX 12

LIST OF CERTIFICATES AND DOCUMENTS

PART A

List of certificates and documents which to the extent applicable should be checked as a minimum during the inspection referred to in paragraph 2.2.3 (as appropriate):

- 1 International Tonnage Certificate (TONNAGE 1969 article 7);
- 2 Reports of previous port State control inspections;
- 3 Passenger Ship Safety Certificate (SOLAS 1974 regulation I/12);
- 4 Cargo Ship Safety Construction Certificate (SOLAS 1974 regulation I/12);
- 5 Cargo Ship Safety Equipment Certificate (SOLAS 1974 regulation I/12);
- 6 Cargo Ship Safety Radio Certificate (SOLAS 1974 regulation I/12);
- 7 Cargo Ship Safety Certificate (SOLAS 1974 regulation I/12);
- 8 Exemption Certificate (SOLAS 1974 regulation I/12);
- 9 Minimum safe manning document (SOLAS 1974 regulation V/14.2);
- 10 International Load Line Certificate (1966) (LL 1966/LL PROT 1988 article 16.1);
- 11 International Load Line Exemption Certificate (LL 1966/LL PROT 1988 article 16.2);
- 12 International Oil Pollution Prevention Certificate (MARPOL Annex I regulation 7.1);
- 13 International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (NLS) (MARPOL Annex II regulation 9.1);
- 14 International Sewage Pollution Prevention Certificate (MARPOL Annex IV regulation 5.1 and MEPC.1/Circ.408);
- 15 International Air Pollution Prevention Certificate (MARPOL Annex VI regulation 6.1);
- 16 International Energy Efficiency Certificate (MARPOL Annex VI regulation 6);
- 17 International Ballast Water Management Certificate (BWM 2004 article 9.1(a) and regulation E-2);
- 18 International Anti-fouling System Certificate (AFS 2001 annex 4 regulation 2);
- 19 Declaration on AFS (AFS 2001 annex 4 regulation 5);
- 20 International Ship Security Certificate or Interim International Ship Security Certificate (ISPS Code part A/19 and appendices);

- 21 Certificates for masters, officers or ratings (STCW 1978 article VI and regulation I/2, and STCW Code section A-I/2);
- 22 Copy of Document of Compliance or a copy of the Interim Document of Compliance (SOLAS 1974 regulation IX/4.2 and ISM Code paragraphs 13 and 14);
- 23 Safety Management Certificate or an Interim Safety Management Certificate (SOLAS 1974 regulation IX/4.3 and ISM Code paragraphs 13 and 14);
- 24 International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk, or the Certificate of Fitness for the Carriage of Liquefied Gases in Bulk, whichever is appropriate (IGC Code section 1.4 or GC Code section 1.6);
- 25 International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk, or the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk, whichever is appropriate (IBC Code section 1.5 or BCH Code section 1.6);
- 26 International Certificate of Fitness for the Carriage of INF Cargo (SOLAS 1974 regulation VII/16 and INF Code section 1.3);
- 27 Certificate of insurance or other financial security in respect of civil liability for oil pollution damage (CLC 69/92 article VII.2);
- 28 Certificate of insurance or other financial security in respect of civil liability for bunker oil pollution damage (BUNKERS 2001 article 7.2);
- 29 Certificate of insurance or other financial security in respect of liability for the removal of wrecks (Nairobi WRC 2007 article 12);
- 30 High-Speed Craft Safety Certificate and Permit to Operate High-Speed Craft (SOLAS 1974 regulation X/3.2 and 1994/2000 HSC Code paragraph 1.8.1 and section 1.9);
- 31 Document of Compliance with the special requirements for ships carrying dangerous goods (SOLAS 1974 regulation II-2/19.4);
- 32 Document of authorization for the carriage of grain and grain loading manual (SOLAS 1974 regulation VI/9 and Grain Code section 3);
- 33 Condition Assessment Scheme (CAS) Statement of Compliance, CAS Final Report and Review Record (MARPOL Annex I regulations 20 and 21; resolution MEPC.94(46), as amended by resolutions MEPC.99(48), MEPC.112(50), MEPC.131(53), MEPC.155(55) and MEPC.236(65));
- 34 Continuous Synopsis Record (SOLAS 1974 regulation XI-1/5);
- 35 Oil Record Book, parts I and II (MARPOL Annex I regulations 17 and 36);
- 36 Cargo Record Book (MARPOL Annex II regulation 15);
- 37 Garbage Record Book (MARPOL Annex V regulation 10);
- 38 Garbage Management Plan (MARPOL Annex V regulation 10 and resolution MEPC.220(63));

- 39 Logbook and the recordings of the tier and on/off status of marine diesel engines (MARPOL Annex VI regulation 13.5.3);
- 40 Logbook for fuel oil changeover (MARPOL Annex VI regulation 14.6);
- 41 Ozone-depleting Substances Record Book (MARPOL Annex VI regulation 12.6);
- 42 Ballast Water Record Book (BWM 2004 article 9.1 (b) and regulation B-2);
- 43 Fixed gas fire-extinguishing systems – cargo spaces Exemption Certificate and any list of cargoes (SOLAS 1974 regulation II-2/10.7.1.4);
- 44 Dangerous goods manifest or stowage plan (SOLAS 1974 regulations VII/4 and VII/7-2 and MARPOL Annex III regulation 5);
- 45 For oil tankers, the record of oil discharge monitoring and control system for the last ballast voyage (MARPOL Annex I regulation 31.2);
- 46 Search and rescue cooperation plan for passenger ships trading on fixed routes (SOLAS 1974 regulation V/7.3);
- 47 For passenger ships, List of operational limitations (SOLAS 1974 regulation V/30.2);
- 48 Nautical charts and nautical publications (SOLAS 1974 regulations V/19.2.1.4 and V/27);
- 49 Records of hours of rest and watch schedule (STCW Code sections A-VIII/1.5 and 1.7);
- 50 Unattended machinery spaces (UMS) evidence (SOLAS 1974 regulation II-I/46.3); and
- 51 Statement of Compliance¹ related to fuel oil consumption reporting and operational carbon intensity rating. Statements of Compliance should be retained on board for at least the last five years, as applicable (MARPOL Annex VI regulation 6).

PART B

List of other certificates and documents which to the extent applicable are required to be on board:

- 1 Construction drawings (SOLAS 1974 regulation II-1/3-7);
- 2 Ship Construction File (SOLAS 1974 regulation II-1/3-10);
- 3 Manoeuvring booklet and information (SOLAS 1974 regulation II-1/28);
- 4 Stability information (SOLAS 1974 regulations II-1/5 and II-1/5-1, and LL 1966/LL PROT 1988 regulation 10);
- 5 Subdivision and stability information (MARPOL Annex I regulation 28);

¹ New ships are not required to be furnished with Statements of Compliance until June of the following year.

- 6 Damage control plans and booklets (SOLAS 1974 regulation II-1/19 and MSC.1/Circ.1245, as amended);
- 7 Ship Structure Access Manual (SOLAS 1974 regulation II-1/3-6);
- 8 Enhanced survey report files (in case of bulk carriers or oil tankers) (SOLAS 1974 regulation XI-1/2 and 2011 ESP Code paragraphs 6.2 and 6.3 of annex A, part A and part B, and annex B, part A and part B);
- 9 Cargo Securing Manual (SOLAS 1974 regulation VI/5.6 and VII/5 and MSC.1/Circ.1353/Rev.1);
- 10 Bulk carrier booklet (SOLAS 1974 regulations VI/7.2 and XII/8 and BLU Code);
- 11 Loading/unloading plan for bulk cargoes (SOLAS 1974 regulation VI/7.3);
- 12 Cargo information (SOLAS 1974 regulations VI/2 and XII/10 and MSC/Circ.663);
- 13 Fire-control plan/booklet (SOLAS 1974 regulations II-2/15.2.4 and II-2/15.3.2);
- 14 Fire safety operational booklet (SOLAS 1974 regulation II-2/16.2);
- 15 Fire safety training manual (SOLAS 1974 regulation II-2/15.2.3);
- 16 Training manual (SOLAS 1974 regulation III/35);
- 17 Onboard training, drills and maintenance records (SOLAS 1974 regulations II-2/15.2.2.5, III/19.3, III/19.5, III/20.6 and III/20.7);
- 18 Ship-specific plans and procedures for recovery of persons from the water (SOLAS 1974 regulation III/17-1, resolution MSC.346(91) and MSC.1/Circ.1447);
- 19 Decision support system for masters (Passenger ships) (SOLAS 1974 regulation III/29);
- 20 International Code of Signals and a copy of Volume III of IAMSAR Manual (SOLAS 1974 regulation V/21);
- 21 Records of navigational activities (SOLAS 1974 regulations V/26 and V/28.1);
- 22 Ship Security Plan and associated records (SOLAS 1974 regulation XI-2/9 and ISPS Code part A/9 and 10);
- 23 Engine International Air Pollution Prevention Certificate (NOx Technical Code 2008 paragraph 2.1.1.1);
- 24 EEDI Technical File (MARPOL Annex VI regulation 22);
- 25 EEXI Technical File (MARPOL Annex VI regulation 23);
- 26 Onboard Management Manual (OMM) for Shaft Power Limitation (ShaPoLi) / Engine Power Limitation (EPL), if applicable (MARPOL Annex VI regulation 23 and resolution MEPC.335(76));

- 27 Technical Files (NOx Technical Code 2008 paragraph 2.3.4);
- 28 Record Book of Engine Parameters (NOx Technical Code paragraph 2.3.7);
- 29 Type approval certificate of incinerator (MARPOL Annex VI regulation 16.6);
- 30 Manufacturer's operating manual for incinerators (MARPOL Annex VI regulation 16.7);
- 31 Fuel oil changeover procedure (MARPOL Annex VI regulation 14.6);
- 32 Bunker delivery notes and representative sample (MARPOL Annex VI regulations 18.6 and 18.8.1);
- 33 Shipboard oil pollution emergency plan (SOPEP) (MARPOL Annex I regulation 37.1 and resolution MEPC.54(32), as amended by resolution MEPC.86(44));
- 34 Shipboard marine pollution emergency plan for noxious liquid substances (MARPOL Annex II regulation 17);
- 35 Ship Energy Efficiency Management Plan (SEEMP) (with a plan of corrective actions included - for a ship rated as D for 3 consecutive years or rated as E) and the associated confirmation of compliance (MARPOL Annex VI regulation 5, 26 and 28, MEPC.1/Circ.795, as may be amended);
- 36 STS operation plan and records of STS operations (MARPOL Annex I regulation 41);
- 37 Procedures and Arrangements Manual (chemical tankers) (MARPOL Annex II regulation 14.1; resolution MEPC.18(22), as amended by resolution MEPC.62(35));
- 38 VOC Management Plan (MARPOL Annex VI regulation 15.6);
- 39 Ballast Water Management Plan (BWM 2004 regulation B-1 and resolution MEPC.127(53), as amended);
- 40 LRIT conformance test report (SOLAS 1974 regulation V/19-1.6 and MSC.1/Circ.1307/Rev.1);
- 41 Copy of the certificate of compliance issued by the testing facility, stating the date of compliance and the applicable performance standards of VDR (voyage data recorder) (SOLAS 1974 regulation V/18.8);
- 42 AIS test report (SOLAS 1974 regulation V/18.9 and MSC.1/Circ.1252);
- 43 Noise survey report (SOLAS 1974 regulation II-1/3-12);
- 44 Oil discharge monitoring and control (ODMC) operational manual (MARPOL Annex I regulation 31; resolution A.496(XII); resolution A.586(14), as amended by resolution MEPC.24(22); and resolution MEPC.108(49), as amended by resolution MEPC.240(65));
- 45 Crude Oil Washing Operation and Equipment Manual (MARPOL Annex I regulation 35 and resolution MEPC.81(43));

- 46 Material Safety Data Sheets (MSDS) (SOLAS 1974 regulation VI/5-1 and resolution MSC.286(86));
- 47 Record of AFS (AFS 2001 annex 4 regulation 2);
- 48 Coating Technical File (SOLAS 1974 regulation II-1/3-2); and
- 49 Maintenance plans (SOLAS 1974 regulations II-2/14.2.2, II-2/14.3 and II-2/14.4).

For reference:

- 1 Certificate of Registry or other document of nationality (UNCLOS article 91);
- 2 Certificates as to the ship's hull strength and machinery installations issued by the classification society in question (only to be required if the ship maintains its class with a classification society);
- 3 Cargo Gear Record Book (ILO Convention No.32 article 9.2(4) and ILO Convention No.152 article 25);
- 4 Certificates loading and unloading equipment (ILO Convention No.134 article 4.3(e) and ILO Convention No.32 article 9(4));
- 5 Medical certificates (STCW convention regulation I/9 and MLC 2006 Standard A 1.2);
- 6 Records of hours of work or rest of seafarers (MLC 2006 Standard A 2.3.12);
- 7 Maritime Labour Certificate (MLC 2006 regulation 5.1.3);
- 8 Declaration of Maritime Labour compliance on board (parts I and II) (MLC 2006 regulation 5.1.3);
- 9 Seafarers' employment agreements (MLC 2006 Standard A 2.1);
- 10 Certificate of insurance or financial security for repatriation of seafarers (MLC 2006, regulation 2.5); and
- 11 Certificate of insurance or financial security for shipowners' liability (MLC 2006 regulation 4.2).

APPENDIX 13

**REPORT OF INSPECTION IN ACCORDANCE WITH
PROCEDURES FOR PORT STATE CONTROL ***

FORM A

(Reporting authority)
(Address)
(Telephone)
(Telefax)
(Email)

Copy to: Master
Head office
PSCO

If ship is detained, copy to:
Flag State
IMO
Recognized organization, if applicable

- | | | |
|---|---------------------------------------|------------------------------|
| 1 Name of reporting authority | 2 Name of ship | |
| 3 Flag of ship | 4 Type of ship | |
| 5 Call sign | 6 IMO number | |
| 7 Gross tonnage | 8 Deadweight (where applicable) | |
| 9 Year of build | 10 Date of inspection | |
| 11 Place of inspection | 12 Classification society | |
| 13 Date of release from detention** | | |
| 14 Particulars of ISM company (details or IMO Company Number)** | | |
| 15 Contact information of financial security provider | | |
| Expiry date*** | | |
| 16 Relevant certificate(s)** | | |
| a) Title | b) Issuing authority | c) Dates of issue and expiry |
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12

d) Information on last intermediate or annual survey**

	Date	Surveying authority	Place
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17 Deficiencies No Yes (see attached FORM B)

18 Penalty imposed No Yes Amount:

19 Ship detained No Yes ****

20 Supporting documentation No Yes (see annex)

Issuing office Name
(duly authorized PSCO of reporting authority)

Telephone Email

Telefax Signature

This report must be retained on board for a period of two years and must be available for consultation by port State control officers at all times.

* This inspection report has been issued solely for the purposes of informing the master and other port States that an inspection by the port State, mentioned in the heading, has taken place. This inspection report cannot be construed as a seaworthiness certificate in excess of the certificate the ship is required to carry.

** To be completed in the event of a detention.

*** As required by regulations 2.5 and 4.6 of MLC 2006.

**** Masters, shipowners and/or operators are advised that detailed information on a detention may be subject to future publication.

**REPORT OF INSPECTION IN ACCORDANCE WITH
PROCEDURES FOR PORT STATE CONTROL**

FORM B

(Reporting authority)
(Address)
(Telephone)
(Telefax)
(Email)

Copy to: Master
Head office
PSCO

If ship is detained, copy to:
Flag State
IMO
Recognized organization, if applicable

2 Name of ship **6** IMO number
10 Date of inspection **11** Place of inspection

21 Nature of deficiency ¹	Convention ²	22 Action taken ³	23 ISM-related
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Name
(duly authorized PSCO of reporting authority)
Signature

¹ This inspection was not a full survey and deficiencies listed may not be exhaustive. In the event of a detention, it is recommended that a full survey is carried out and all deficiencies are rectified before an application for re-inspection is made.
² To be completed in the event of a detention.
³ Actions taken include ship detained/released, flag State informed, classification society informed, next port informed.

APPENDIX 14

**REPORT OF DEFICIENCIES
NOT FULLY RECTIFIED OR ONLY PROVISIONALLY RECTIFIED**

**In accordance with the provision of paragraph 3.7.3 of
Procedures for Port State Control (resolution A. 1185(33))**

**(Copy to maritime authority of next port of call, flag Administration,
or other certifying authority as appropriate)**

- | | |
|---|---|
| 1 From (country/region) | 2 Port |
| 3 To (country/region) | 4 Port |
| 5 Name of ship | 6 Date departed |
| 7 Estimated place and time of arrival | |
| 8 IMO number | 9 Flag of ship and POR |
| 10 Type of ship | 11 Call sign |
| 12 Gross tonnage | 13 Year of build |
| 14 Issuing authority of relevant certificate(s) | |
| 15 Nature of deficiencies to be rectified | 16 Suggested action |
| | (including action at next port of call) |
| | |
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17 Action taken

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Reporting authority Office

Name
Telefax/email.....
(duly authorized PSCO of reporting authority)

Signature Date

APPENDIX 15

REPORT OF ACTION TAKEN TO THE NOTIFYING AUTHORITY

**In accordance with the provision of paragraph 3.7.3 of
Procedures for Port State Control (resolution A.1185(33))**

(by telefax/email and/or mail)

1 To: (Name)
(Position)
(Authority)
Telephone Telefax/email
Date:

2 From: (Name)
(Position)
(Authority)
Telephone Telefax/email

3 Name of ship

4 Call sign **5** IMO number

6 Port of inspection

7 Date of inspection

8 Action taken

a) Deficiencies

b) Action taken

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9 Next port (Date)

10 Supporting documentation No Yes (See attached)

Signature

APPENDIX 16

FORMAT FOR THE REPORT OF CONTRAVENTION OF MARPOL (article 6)

PROCEDURES FOR PORT STATE CONTROL

(Resolution A.1185(33))

(Issuing authority)
(Address)
(Telephone)
(Telefax)
(Email)

Copy to: Master

- 1** Reporting country
- 2** Name of ship
- 3** Flag of ship
- 4** Type of ship
- 5** Call sign **6** IMO number
- 7** Gross tonnage **8** Deadweight
(where appropriate)
- 9** Year of build **10** Classification society
- 11** Date of incident **12** Place of incident
- 13** Date of investigation

14 In case of contravention of discharge provisions, a report may be completed in addition to a port State report on deficiencies. This report should be in accordance with parts 2 and 3 of appendix 3 and/or parts 2 and 3 of appendix 4, as applicable, and should be supplemented by documents such as:

- .1 a statement by the observer of the pollution;
- .2 the appropriate information listed under section 1 of part 3 of appendices 3 and 4 to the Procedures; the statement should include considerations which lead the observer to conclude that none of any other possible pollution sources is in fact the source;
- .3 statements concerning the sampling procedures both of the slick and on board; these should include location where and time when samples were taken, identity of person(s) taking the samples and receipts identifying the persons having custody and receiving transfer of the samples;

- .4 reports of analyses of samples taken of the slick and on board; the reports should include the results of the analyses, a description of the method employed, reference to or copies of scientific documentation attesting to the accuracy and validity of the method employed and names of persons performing the analyses and their experience;
- .5 if applicable, a statement by the PSCO on board together with the PSCO's rank and organization;
- .6 statements by persons being questioned;
- .7 statements by witnesses;
- .8 photographs of the slick; and
- .9 copies or printouts of relevant pages of Oil/Cargo Record Books, logbooks, discharge recordings, etc.

Name and title (duly authorized contravention investigation official)

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.....
.....

Signature

APPENDIX 17

COMMENTS BY FLAG STATE ON DETENTION REPORT

Name of ship

IMO number/call sign

Flag State

Gross tonnage

Deadweight (where appropriate)

Date of report

Report by

Classification society

Recognized organization involved

.....

Did you receive the notification of detention? (tick the box if the answer is "yes")

Action taken

a) Deficiencies	b) Cause	c) Action taken
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Additional Information:

APPENDIX 18

GUIDELINES FOR PORT STATE CONTROL UNDER 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.

Chapter 2 INSPECTIONS OF SHIPS REQUIRED TO CARRY THE IAPP CERTIFICATE AND/OR THE IEE CERTIFICATE

2.1 Initial inspections

2.1.1 The PSCO should ascertain the status of the ship as regards application of regulations 22 and 24 of the Annex, the ship's tonnage, 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 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 BDN is set out in appendix V of MARPOL Annex VI), the master or officer in charge of the bunker operation may 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.

2.1.5 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.

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

2.1.7 As a preliminary check, the IEE Certificate's validity should be confirmed by verifying that the Certificate is properly completed and signed.

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

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

- .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 board¹ which 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 SO_x emission reduction and control technology research.

2.2.2 Where an EGCS is not in compliance with the relevant requirements for other than transitory periods and isolated spikes in the recorded output, 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 presented 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 washwater discharge to sea, the ship may have alternative documentation demonstrating compliance.²

2.3 Initial inspection within an ECA

2.3.1 When a ship is inspected in a port in an ECA designated for SO_x emission control, the PSCO should 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 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); 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 was being used while sailing in the entire ECA as required in regulation VI/14.6.

¹ Resolution MEPC.305(73) on *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.

² MEPC.1/Circ.883/Rev.1 on *Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the EGCS Guidelines (resolution MEPC.340(77))*: ships should have documented notification of system non-compliance to relevant authorities as in paragraph 2.2.2.

2.3.2 When a ship to which regulation VI/13.5.1 applies for a particular NO_x 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 NO_x 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 that NO_x 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, checking they have been logged as required by that exemption and that the terms and duration of that exemption have been complied with as required.

2.4 Initial inspection outside an ECA or first port after transiting an ECA

2.4.1 When a ship 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 should, in particular, look at:

- .1 evidence that the sulphur content of the fuel oil is in accordance with regulation VI/14.1² 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); and
- .2 evidence of a written procedure (in a working language or languages understood by the crew) 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 entire ECA.

2.4.2 When a ship to which regulation VI/13.5.1 applies for a particular NO_x Tier III emission control area is inspected in a port outside that area, the PSCO should look at the records required by 2.3.2.1 and 2.3.2.2 or 2.3.2.3 to ensure that the relevant requirements were complied with for the whole period of time the ship was operating in that area.

2.5 Outcome of initial inspection

2.5.1 If the certificates and documents are valid and appropriate and, after an inspection of the ship to check that the overall condition of the ship 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.

¹ Unified interpretation of regulation 13.5.3 set out in MEPC.1/Circ.795/Rev.8.

² Resolution MEPC.305(73) on *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.

2.5.2 If, however, the PSCO's general impressions or observations on board give clear grounds (see paragraph 2.5.3) for believing that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificates or the documents, the PSCO should proceed to a more detailed inspection.

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

- .1 evidence that certificates required by the Annex are missing or clearly invalid;
- .2 evidence that documents required by the Annex are missing or clearly invalid;
- .3 the absence or malfunctioning 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 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 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 SO_x emissions or portable fuel oil sulphur content measurement devices indicating that a ship appears to use non-compliant fuel while in operation/under way;
- .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 NO_x Tier III emission control area;
- .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;

- .14 information or evidence that the master or crew are not familiar with essential shipboard operations relating to implementation of the SEEMP (with a plan of corrective actions included - for a ship rated as D for 3 consecutive years or rated as E) in accordance with regulation 28 of MARPOL Annex VI, or that such operations have not been carried out; and
- .15 evidence that the Overridable Shaft Power Limitation (ShaPoLi) / Overridable Engine Power Limitation (EPL) system has been overridden without proper notifications in accordance with the EEXI ShaPoLi / EPL Guidelines.

2.6 More detailed inspections

2.6.1 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.

2.6.2 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 NO_x emission have been made to the marine diesel engines;
- .3 in the case of an installed marine diesel engine certified to Tier III, check that the required records, if applicable, in accordance with regulation VI/13.5.1 or in the Technical File, including those required by 2.3.6 of the NO_x Technical Code, have been maintained as necessary and that the marine diesel engine, including any NO_x 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 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;
- .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.

2.6.3 The PSCO should check and verify whether fuel oil complies with the provisions of regulation VI/14 taking into account appendix VI¹ of MARPOL Annex VI.

2.6.4 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 by the ship 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 regulation VI/14 to reach the next port destination.

2.6.5 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.

2.6.6 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,² if applicable, and the records demonstrate the necessary compliance when set against the limits given in the approved documentation and that apply 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.

2.6.7 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 Administration, taking into account MSC/Circ.585, is installed, if required under regulation VI/15.

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

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

2.6.10 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).

2.6.11 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 at all times the unit is in operation (regulation VI/16.9).

¹ Amendments to MARPOL VI, appendix VI, *Verification procedures for a MARPOL Annex VI fuel oil sample*.

² 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.

2.6.12 The PSCO should verify whether the ship has been subject to a major conversion (regulation VI/2.2.17) or there have been changes to the ship in respect of aspects which are covered by the EEDI Technical File or EEXI Technical File.

2.6.13 On ships subject to chapter 4 of MARPOL Annex VI the PSCO should examine:

- .1 If the ShaPoLi system or the EPL system is used to comply with EEXI requirements, the PSCO may confirm whether the ShaPoLi / EPL system has been certified by Administration or RO and is installed and used in accordance with such certification.
- .2 The PSCO may inspect whether the Ship Energy Efficiency Management Plan (SEEMP) is duly implemented by the ship in accordance with regulation 28 of MARPOL Annex VI.
- .3 If the ship is rated as D for 3 consecutive years or rated as E, the PSCO may inspect whether the plan of corrective actions in accordance with the SEEMP is duly implemented by the ship.

2.6.14 If there are clear grounds as defined in paragraph 2.5.3, the PSCO may examine operational or reporting 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 oil bunkering procedures in connection to the respective bunker delivery notes and onboard records including the Oil Record Book Part 1 (regulations 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 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 emissions of VOCs 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/2.1.31);
- .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 requirements related to the implementation of the SEEMP (the plan of corrective actions where applicable) in accordance with regulation 28 of MARPOL Annex VI; and
- .11 the overridden ShaPoLi/EPL system has been properly reactivated or replaced.

2.7 Detainable deficiencies

2.7.1 In exercising his or her functions, the PSCO should use professional judgement 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 addressed in a timely manner. 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, navigational safety or human health and that departure from these requirements could constitute an unreasonable threat of harm to the protection aspects mentioned and should be avoided.

2.7.2 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 International Air Pollution Prevention Certificate (IAPP Certificate), Engine International Air Pollution Prevention Certificates (EIAPP Certificates) or Technical Files if applicable;
- .2 absence of International Energy Efficiency Certificate (IEE Certificate), the EEDI Technical File or EEXI Technical File; or the Ship Energy Efficiency Management Plan (SEEMP);
- .3 in relation to the absence of a valid Statement of Compliance¹ for:
 - .1 fuel Oil Consumption Reporting from 2019 and onwards of 1 June of each following year (regulation 27); and/or
 - .2 carbon Intensity Rating from 2023 and onwards of each following year (regulation 28),

a pragmatic approach should be applied if a ship has changed the flag and/or the company and there is evidence the losing Administration has not acted in accordance with regulation/s or data was not provided by the previous company when the ship was transferred;

¹ New ships are not required to be furnished with Statements of Compliance until June of the following year.

- .4 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 NO_x Tier III emission control area in which it is operating;
- .5 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;
- .6 on ships not equipped with equivalent means of SO_x compliance, based on the methodology of sample analysis in accordance with appendix VI¹ of MARPOL Annex VI, 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 the appendix);
- .7 on ships equipped with equivalent means of SO_x compliance:
 - .1 absence of an appropriate approval for the equivalent means, which applies to relevant fuel combustion units on board;
 - .2 EGCS systems installed on board fail to provide effective equivalence to the requirements of regulations VI/14 and 14.4; and
 - .3 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 limit stipulated in regulation VI/14, taking into account the provisions of regulation VI/18.2 (see the appendix).
- .8 non-compliance with the relevant requirements while operating within an emission control area for SO_x and particulate matter control;
- .9 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) as amended by MEPC.93(45), or resolution MEPC.244(66), as amended by resolution MEPC.368(79), as appropriate); and
- .10 the master or crew are not familiar with essential procedures regarding the operation of air pollution prevention equipment or reporting requirements as defined in paragraph 2.6.14 above.

¹ Amendments to MARPOL VI, appendix VI, Verification procedures for a MARPOL Annex VI fuel oil sample.

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

3.1 Ships of non-Parties and ships not required to carry the IAPP Certificate.

3.1.1 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 chapter 3 of the Annex. In this respect, the PSCO should take into account that, in accordance with article 5(4) of MARPOL, no more favourable treatment is to be given to ships of non-Parties.

3.1.2 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.

3.1.3 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.

3.2 Ships of non-Parties and ships not required to carry the IEE Certificate.

3.2.1 As ships of non-Parties are not provided with the IEE Certificate, the PSCO may examine equivalent documentation issued by that non-Party showing that the ship is of a design no less energy-efficient than that required by chapter 4 of the Annex. In addition, the ship should have on board an energy efficiency management plan equivalent to that required for the SEEMP. Such ships are not required to have documentation and procedures covering fuel oil consumption reporting and operational carbon intensity rating and hence will not have a Statement of Compliance – Fuel Oil Consumption Reporting and operational carbon intensity rating.

3.2.2 Ships of Parties which are not required to carry the IEE Certificate are not required to have a SEEMP or to have documentation and procedures covering fuel oil consumption reporting and operational carbon intensity rating and hence will not have a Statement of Compliance – Fuel Oil Consumption Reporting and operational carbon intensity rating.

Appendix

NON-AVAILABILITY OF COMPLIANT FUEL OIL CLAIMED

If 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 en 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);
- .4 the cost of compliant fuel is not considered to be a valid basis for claiming non-availability of fuel;
- .5 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, identification and description of any operational constraints that prevented use of compliant fuel oil, e.g. with respect to viscosity or other fuel oil parameters.

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).

APPENDIX 19

GUIDELINES FOR INSPECTION OF ANTI-FOULING SYSTEMS ON SHIPS¹

1 INTRODUCTION

1.1 The right of the port State to conduct inspections of anti-fouling systems on ships is laid down in article 11 of the AFS Convention. The guidelines for conducting these inspections are described below.

1.2 Ships of 400 gross tonnage and above engaged in international voyages (excluding fixed or floating platforms, FSUs and FPSOs) will be required to undergo an initial survey before the ship is put into service or before the International Anti-fouling System Certificate (IAFS) is issued for the first time; and a survey should be carried out when the anti-fouling systems are changed or replaced.

1.3 Ships of 24 metres in length or more but less than 400 gross tonnage engaged in international voyages (excluding fixed or floating platforms, FSUs and FPSOs) will have to carry a Declaration on Anti-fouling Systems signed by the owner or authorized agent. Such declaration shall be accompanied by appropriate documentation (such as a paint receipt or a contractor invoice) or contain appropriate endorsement.

2 INITIAL INSPECTION

2.1 Ships required to carry an IAFS Certificate or Declaration on Anti-Fouling Systems (Parties of the AFS Convention)

2.1.1 The PSCO should check the validity of the IAFS Certificate or Declaration on Anti-Fouling Systems, and the attached Record of Anti-fouling Systems, if appropriate.

2.1.2 The only practical way to apply paint to the ship's bottom (underwater part) is in a dry dock. This means that the date of application of paint on the IAFS Certificate should be checked by comparing the period of dry-docking with the date on the certificate.

2.1.3 If the paint has been applied during a scheduled dry-dock period, it has to be registered in the ship's logbook. Furthermore, this scheduled dry-docking can be verified by the endorsement date on the (statutory) Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate (SOLAS, regulation I/12(a)(v)) and Passenger Ship Safety Certificate (SOLAS, regulation I/7).

2.1.4 In case of an unscheduled dry-dock period, it could be verified by the registration in the ship's logbook.

2.1.5 It can be additionally verified by the endorsement date on the (Class) Hull Certificate, the dates on the Manufacturer's Declaration or by confirmation of the shipyard.

¹ The Guidelines are a duplicate dissemination of the annex to resolution MEPC.357(78) on *2022 Guidelines for inspection of anti-fouling systems on ships*.

2.1.6 The IAFS Certificate includes a series of tick boxes indicating for each of the anti-fouling systems, describing the following situations:

- .1 if an anti-fouling system controlled under Annex 1 to the AFS Convention has not been applied during or after construction of this ship;
- .2 if an anti-fouling system controlled under Annex 1 to the AFS Convention has been applied on this ship previously, but has been removed;
- .3 if an anti-fouling system controlled under Annex 1 to the AFS Convention has been applied on this ship previously, but has been covered with a sealer coat;
- .4 if an anti-fouling system controlled under Annex 1 of the AFS Convention has been applied on this ship previously, but is not in the external coating layer of the hull or external parts or surfaces on 1 January 2023 (not applicable for organotin); and
- .5 if an anti-fouling system controlled under Annex 1 of the AFS Convention was applied on this ship prior to 1 January 2023, but must be removed or covered with a sealer coat no later than 60 months following the last application to the ship of an anti-fouling systems containing cybutryne (not applicable for organotin).

2.1.7 Particular attention should be given to verifying that the survey for issuance of the current IAFS Certificate matches the dry-dock period listed in the ship's log(s)¹ and that only one tick box is marked for each of the substances controlled under Annex 1.

2.1.8 The Record of Anti-fouling Systems should be attached to the IAFS Certificate and be up to date. The most recent record should agree with the tick box on the front of the IAFS Certificate. The issuing of the IAFS Certificate should be in accordance with regulation 2(3) of Annex 4 of the AFS Convention.

2.2 Ships of non-Parties to the AFS Convention

2.2.1 Ships of non-Parties to the AFS Convention are not entitled to be issued with an IAFS Certificate. Therefore, the PSCO should ask for documentation that contains the same information as in an IAFS Certificate and take this into account in determining compliance with the requirements.

2.2.2 If the existing anti-fouling system is declared not to be controlled under Annex 1 to the Convention, without being documented by an International Anti-fouling System Certificate, verification should be carried out to confirm that the anti-fouling system complies with the requirements of the Convention. This verification may be based on sampling and/or testing and/or reliable documentation, as deemed necessary, based on experience gained and the existing circumstances. Documentation for verification could be, for example, MSDS (Material Safety Data Sheets), or similar, a declaration of compliance from the anti-fouling system manufacturer, or invoices from the shipyard and/or the anti-fouling system manufacturer.

¹ This provision, regarding the matching of the survey with the dry-dock period, is not applicable for the survey referred to in operative paragraph 4 of resolution MEPC.331(76).

2.2.3 Ships of non-Parties may have Statements of Compliance issued in order to comply with regional requirements, for example, Regulation (EC) 782/2003 as amended by Regulation (EC) 536/2008, which could be considered as providing sufficient evidence of compliance for organotin compounds.

2.2.4 In all other aspects the PSCO should be guided by the procedures for ships required to carry an IAFS Certificate.

2.2.5 The PSCO should ensure that no more favourable treatment is applied to ships of non-Parties to the AFS Convention.

3 MORE DETAILED INSPECTION

3.1 Clear grounds

3.1.1 A more detailed inspection may be carried out when there have been clear grounds to believe that the ship does not substantially meet the requirements of the AFS Convention. Clear grounds for a more detailed inspection may be when:

- .1 the ship is from a flag of a non-Party to the Convention and there is no AFS documentation;
- .2 the ship is from a flag of a Party to the Convention but there is no valid IAFS Certificate;
- .3 the painting date shown on the IAFS Certificate does not match the dry-dock period of the ship;
- .4 the ship's hull shows excessive patches of different paints; and
- .5 the IAFS Certificate is not properly completed.

3.1.2 If the IAFS Certificate is not properly completed, the following questions may be pertinent:

- .1 "When was the ship's anti-fouling system last applied?";
- .2 "If the anti-fouling system is controlled under Annex 1 to the AFS Convention and was removed, what was the name of the facility and date of the work performed?";
- .3 "If the anti-fouling system is controlled under Annex 1 to the AFS Convention and has been covered by a sealer coat, what was the name of the facility and date applied?";
- .4 "What is the name of the anti-fouling/sealer products and the manufacturer or distributor for the existing anti-fouling system?"; and
- .5 "If the current anti-fouling system was changed from the previous system, what was the type of anti-fouling system and name of the previous manufacturer or distributor?".

3.2 Sampling

3.2.1 A more detailed inspection may include sampling and analysis of the ship's anti-fouling system, if necessary, to establish whether or not the ship complies with the AFS Convention. Such sampling and analysis may involve the use of laboratories and detailed scientific testing procedures.

3.2.2 If sampling is carried out, the time to process the samples cannot be used as a reason to delay the ship.

3.2.3 Any decision to carry out sampling should be subject to practical feasibility or to constraints relating to the safety of persons, the ship or the port (see appendix 1 for sampling procedures; an AFS Inspection Report template for sampling and analysis is attached to the Guidelines).

3.3 Action taken under the AFS Convention

Detention

3.3.1 The port State could decide to detain the ship following detection of deficiencies during an inspection on board.

3.3.2 Detention could be appropriate in any of the following cases:

- .1 certification is invalid or missing;
- .2 the ship admits it does not comply (thereby removing the need to prove by sampling); and
- .3 sampling proves it is non-compliant within the port's jurisdiction.

3.3.3 Further action would depend on whether the problem is with the certification or the anti-fouling system itself.

3.3.4 If there are no facilities in the port of detention to bring the ship into compliance, the port State could allow the ship to sail to another port to bring the anti-fouling system into compliance. This would require an agreement of that port.

Dismissal

3.3.5 The port State could dismiss the ship, meaning that the port State demands that the ship leave port – for example if the ship chooses not to bring the AFS into compliance but the port State is concerned that the ship is leaching tributyltin (TBT) or cybutryne into its waters.

3.3.6 Dismissal could be appropriate if the ship admits it does not comply or sampling proves it is non-compliant while the ship is still in port. Since this would also be a detainable deficiency the PSCO can detain first and require rectification before release. However, there may not be available facilities for rectification in the port of detention. In this case the port State could allow the ship to sail to another port to bring the anti-fouling system into compliance. This could require the agreement of that port.

3.3.7 Dismissal could be appropriate in any of the following cases:

- .1 certification is invalid or missing;
- .2 the ship admits it does not comply (thereby removing the need to collect proof by sampling); and
- .3 sampling proves that the ship is non-compliant within the port's jurisdiction.

3.3.8 In these cases the ship will probably already have been detained. However, detention does not force the ship to bring the AFS into compliance (only if it wants to depart). In such a situation the port State may be concerned that the ship is leaching TBT or cybutryne while it remains in its waters.

Exclusion

3.3.9 The port State could decide to exclude the ship to prevent it entering its waters. Exclusion could be appropriate if sampling proves that the ship is non-compliant but the results have been obtained after it has sailed or after it has been dismissed.

3.3.10 Exclusion could be appropriate if sampling proves that the ship is non-compliant but the results have been obtained after it has sailed or after it has been dismissed. Article 11(3) of the AFS Convention only mentions that the "party carrying out the inspection" may take such steps. This means that, if a port State excludes a ship, the exclusion cannot be automatically applied by other port States.

3.3.11 In accordance with the Procedures for Port State Control (resolution A.1185(33), as amended), where deficiencies cannot be remedied at the port of inspection, the PSCO may allow the ship to proceed to another port, subject to any appropriate conditions determined. In such circumstances, the PSCO should ensure that the competent authority of the next port of call and the flag State are notified.

Reporting to the flag State

3.3.12 Article 11(3) of the AFS Convention requires that, when a ship is detained, dismissed or excluded from a port for violation of the Convention, the Party taking such action shall immediately inform the flag Administration of the ship and any recognized organization which has issued a relevant certificate.

4 AFS REPORT TO FLAG STATE IN RESPONSE TO ALLEGED CONTRAVENTIONS

4.1 Article 11(4) of the AFS Convention allows Parties to inspect ships at the request of another Party, if sufficient evidence that the ship is operating or has operated in violation of the Convention is provided. Article 12(2) permits port States conducting the inspection to send the Administration (flag State) of the ship concerned any information and evidence it has that a violation has occurred. Information sent to the flag State is often inadequate for a prosecution. The following paragraphs detail the sort of information needed.

4.2 The report to the authorities of the port or coastal State should include as much as possible the information listed in section 3. The information in the report should be supported by facts which, when considered as a whole, would lead the port or coastal State to believe a contravention had occurred.

- 4.3 The report should be supplemented by documents such as:
- .1 the port State report on deficiencies;
 - .2 a statement by the PSCO, including their rank and organization, about the suspected non-conforming anti-fouling system. In addition to the information required in section 3, the statement should include the grounds the PSCO had for carrying out a more detailed inspection;
 - .3 a statement about any sampling of the anti-fouling system including:
 - .1 the ship's location;
 - .2 where the sample was taken from the hull, including the vertical distance from the boot topping;
 - .3 the time of sampling;
 - .4 person(s) taking the samples; and
 - .5 receipts identifying the persons having custody and receiving transfer of the samples;
 - .4 reports of the analyses of any samples including:
 - .1 the results of the analyses;
 - .2 the method employed;
 - .3 reference to or copies of scientific documentation attesting the accuracy and validity of the method employed;
 - .4 the names of persons performing the analyses and their experience; and
 - .5 a description of the quality assurance measures of the analyses;
 - .5 statements of persons questioned;
 - .6 statements of witnesses;
 - .7 photographs of the hull and sample areas; and
 - .8 a copy of the IAFS Certificate, including copies of relevant pages of the Record of Anti-fouling Systems, logbooks, MSDS or similar, declaration of compliance from the anti-fouling system manufacturer, invoices from the shipyard and other dry-dock records pertaining to the anti-fouling system.

4.4 All observations, photographs and documentation should be supported by a signed verification of their authenticity. All certifications, authentications or verifications should be in accordance with the laws of the State preparing them. All statements should be signed and dated by the person making them, with their name printed clearly above or below the signature.

4.5 The reports referred to under paragraphs 2 and 3 of this section should be sent to the flag State. If the coastal State observing the contravention and the port State carrying out the investigation on board are not the same, the port State carrying out the investigation should also send a copy of its findings to the coastal State.

APPENDIX 1

SAMPLING

Considerations related to brief sampling may be found in section 2.1 of the *Guidelines for brief sampling of anti-fouling systems on ships* (resolution MEPC.356(78)).

Any obligation to take a sample should be subject to practical feasibility or to constraints relating to the safety of persons, the ship or the port.

The PSCO should consider the following:

- liaise with the ship on the location and time needed to take samples; the PSCO should verify that the time required will not unduly prevent the loading/unloading, movement or departure of the ship;
- do not expect the ship to arrange safe access but liaise with the ship over the arrangements that the port State competent authority has made, for example boat, cherry picker, staging;
- select sampling points covering representative areas;
- take photographs of the hull, sample areas and sampling process;
- avoid making judgements on the quality of the paint (e.g. surface, condition, thickness, application);
- the need to invite the ship representative's presence during brief sampling to ensure that the evidence is legally obtained;
- complete and sign the inspection report form together with the included sampling record sheets (to be filled in by the sampler), as far as possible, and leave a copy with the ship as proof of inspection/sampling;
- inform the next port State where the inspected ship is to call;
- agree with or advise the ship on to whom the ship's copy of the finalized inspection report will be sent in cases when it cannot be completed in the course of the inspection; and
- ensure that receipts identifying the persons having custody and receiving transfer of the samples accompany the samples are filled in to reflect the transfer chain of the samples. PSCOs are reminded that the procedures set in national legislation regarding custody of evidence are not affected by the regulation. These Guidelines therefore do not address this issue in detail.

1 Sampling methodologies

It is at the discretion of the port State to choose the sampling methodology. The *Guidelines for brief sampling of anti-fouling systems on ships* adopted by resolution MEPC.356(78) allow that any other scientifically recognized method of sampling and analysis of AFS controlled under the Convention than those described in the appendix to the Guidelines may be used (subject to the satisfaction of the Administration or the port State). The sampling methodology will depend, inter alia, on the surface hardness of the paint, which may vary considerably. The amount of paint mass removed may vary correspondingly.

Based on the onboard International Anti-fouling System Certificate or a Declaration on Anti-fouling System, the port State competent authority would decide if the brief sampling analysis should focus on only organotin, cybutryne or both and apply the appropriate methodology including the number of samples, analysis, and definition of compliance.

Sampling procedures, based on the removal of paint material from the hull, require the determination of paint mass. It is important that procedures used are validated, produce unambiguous results and contain adequate control.

The competent port State authority can decide to contract specialist companies to carry out sampling. In this case the PSCO should attend the ship during the sampling procedure to ensure the liaison and arrangements mentioned above are in place.

If a specialist company is not used, the port State competent authority should provide appropriate training to the PSCO in the available sampling methods and procedures and ensure that agreed procedures are followed.

The following general terms should be observed:

- the PSCO should choose a number of sample points preferably covering all the representative areas of the hull, but it is desirable to have at least eight (8) sample points equally spaced down and over the length of the hull, if possible divided over PS and SB (keeping in mind that different parts of the hull may be treated with different anti-fouling systems);
- triplicate specimens of paint at each sampling point should be taken in close proximity to each other on the hull (e.g. within 10 cm of each other);
- contamination of the samples should be avoided, which normally includes the wearing of non-sterilized non-powdered disposable gloves of suitable impervious material – e.g. nitrile rubber;
- the samples should be collected and stored in an inert container (e.g. containers should not consist of materials containing organotins and cybutryne or have the capacity to absorb organotins and cybutryne);
- samples should be taken from an area where the surface of the anti-fouling system is intact, clean and free of fouling;
- loose paint chips coming from detached, peeled or blistered hull areas should not be used for sampling;
- samples should not be taken from a heated area or area where the paint is otherwise softened (e.g. heavy fuel tanks);
- the underlying layers (primers, sealers, TBT containing AFS) should not be sampled if there is no clear evidence of exposure of extended areas; and
- ships bearing an anti-fouling system that does not contain cybutryne in the external coating layer are not required to be controlled under Annex 1 of the Convention. Such ships carrying an IAFS Certificate indicating the situation described in paragraph 2.1.6.4 of these Guidelines should be deemed compliant with the Convention except if there is doubt about the validity of the IAFS Certificate.

2 Validity of the sampling

In order to safeguard the validity of the sampling as evidence of non-compliance, the following should be considered:

- only samples taken directly from the hull and free of possible contamination should be used;
- all samples should be stored in containers, marked and annotated on the record sheet. This record sheet should be submitted to the Administration;
- the receipts identifying the persons having custody and receiving transfer of the samples should be filled in and accompany the samples to reflect the transfer chain of the samples;
- the PSCO should verify the validity of the instrument's calibration validity date (according to the manufacturer instruction);
- in cases when a contracted specialist company is used for carrying out sampling, the PSCO should accompany its representative to verify sampling; and
- photographs of the hull, sample areas and sampling process could serve as additional proof.

It is also the case that sampling companies and/or procedures can be certified.

3 Health and safety when sampling

Any obligation to take a sample should be subject to practical feasibility or any constraints relating to the safety of persons, the ship or the port.

The PSCO is advised to ensure their safety taking the following points into account:

- general requirements enforced by the terminal or port authority and national health, safety and environmental policy;
- condition of the ship (ballast condition, ship's operations, mooring, anchorage, etc.);
- surroundings (position of ship, traffic, ship's movement, quay operations, barges or other floating vessels alongside);
- safety measures for the use of access equipment (platforms, cherry picker, staging, ladders, railings, climbing harness, etc.), e.g. ISO 18001;
- weather (sea state, wind, rain, temperature, etc.); and
- precautions to avoid falling into the water between the quay and the ship. If in doubt, a lifejacket and if possible a safety line should be worn when sampling.

Any adverse situation encountered during sampling that could endanger the safety of personnel shall be reported to the safety coordinator.

Care should be taken to avoid contact between the removed paint and the skin and the eyes, and no particles should be swallowed or come into contact with foodstuffs. Eating or drinking during sampling is prohibited and hands should be cleaned afterwards. Persons carrying out sampling should be aware that the AFS and solvents or other materials used for sampling may be harmful and appropriate precautions should be taken. Personal protection should be considered by using long sleeve solvent-resistant gloves, dust mask, safety glasses, etc.

Standard (and specific, if applicable) laboratory safety procedures should be followed at all times when undertaking the sampling procedures and subsequent analysis.

4 Conducting analyses

The *Guidelines for brief sampling of anti-fouling systems on ships* envisage a two-stage analysis for organotin analysis for both methods presented in the appendix to the Guidelines. The first stage is a basic test, which can be carried out on-site as in the case of Method 2. The second stage is carried out when the first stage results are positive. It is noted that in the IMO Guidelines these stages are referred to as Steps 1 and 2 as in the case of Method 1. It is at the discretion of the port State competent authorities to choose which analysis methods are used.

The method for cybutryne determination is based on a one-step analysis.

The following points are presented for port State consideration:

- approval procedure for the recognition of laboratories meeting ISO 17025 standards or other appropriate facilities should be set up by the port State competent authorities. These procedures should define the recognition criteria. Exchange of information between port States on these procedures, criteria and laboratories/facilities would be beneficial, i.e. for the purposes of exchange of best practices and possible cross-border recognition and provision of services;
- the company that undertakes the analysis and/or samples should comply with national regulations and be independent from paint manufacturers;
- the PSCO carrying out the AFS inspection of a ship should verify the validity of the ISO 17025 certificate and/or the recognition of the laboratory;
- if more time is needed for analysis than available considering the ship's scheduled time of departure, the PSCO shall inform the ship and report the situation to the port State competent authority. However, the time needed for analysis does not warrant undue delay of the ship; and
- PSCOs should ensure completion of the record sheets for the sampling procedure as proof of analysis. In cases where the laboratory procedures prescribe presentation of the results of the analyses in a different format, this technical report could be added to the record sheets.

5 The first-stage analysis for organotin

The first-stage analysis serves to detect the total amount of tin in the AFS applied.

It is at the discretion of the port State competent authority to choose the first-stage analysis methodology. However, the use of a portable X-ray fluorescence analyser (mentioned under Method 2) or any other scientifically justified method allowing the conduction of first-stage analyses on-site could be considered best practice.

The port State competent authority has to decide whether the first-stage analysis should be carried out by PSCOs or by contracted companies.

The port State competent authority could provide PSCOs with this equipment (e.g. portable X-ray fluorescence analyser) and provide the appropriate training.

6 The second-stage analysis for organotin

The second-stage (final) analysis is used to verify whether or not the AFS system complies with the Convention requirements, i.e. whether organotin compounds are present in the AFS at a level which would act as a biocide.

The port State could consider implementing only a second-stage analysis.

It is at the discretion of the Authority to choose the second-stage analysis methodology. In this respect it is hereby noted that the second-stage analysis methodology for sampling Method 2 provided in the Guidelines is only tentative and "should be thoroughly reviewed by experts based on scientific evidence" (section 5.1 of Method 2).

7 One-stage analysis for cybutryne

For cybutryne, a one-stage analysis is described in both Method 1 and Method 2 of the brief sampling guidelines. The specimens are to be analysed in a GC-MS analysis. The procedure is the same for both methods.

8 One-stage analysis for cybutryne and organotin

For cybutryne and organotin a one-stage analysis is described in both Method 1 and Method 2 of the brief sampling guidelines. The specimens are to be analysed in a GC-MS analysis.

9 Conclusions on compliance

The Authority should only make conclusions on compliance based on the second-stage analysis of the sample (organotin). In case the results indicate non-compliance at that stage, there are clear grounds to take further steps.

For cybutryne, the authority could make conclusions on compliance based on the one-stage analysis.

If considered necessary, more thorough sampling can also be carried out in addition or instead of brief sampling.

Sampling results should be communicated as soon as possible to the ship (as part of the inspection report) and in the case of non-compliance also to the flag State and recognized organization acting on behalf of the flag State if relevant.

Authorities should, in accordance with section 5.2 of the *Guidelines for brief sampling of anti-fouling systems on ships*, develop and adopt procedures to be followed for those cases where compliance with acceptable limits or lack thereof is unclear, considering additional sampling or other methodologies for sampling.

FORM S/1

REPORT OF INSPECTION OF A SHIP'S ANTI-FOULING SYSTEM (AFS)

SHIP PARTICULARS

1. Name of ship: _____ 2. IMO number: _____
3. Type of ship: _____ 4. Call sign: _____
5. Flag of ship: _____ 6. Gross tonnage: _____
7. Date keel laid / major conversion commenced: _____

INSPECTION PARTICULARS

8. Date & time: _____
9. Name of facility: _____
(dry dock, quay, location)
Place & country: _____
10. Areas inspected Ship's logbook Certificates Ship's hull
11. Relevant certificate(s)
(a) title (b) issuing authority (c) dates of issue
1. *IAFS Certificate* _____
2. *Record of AFS* _____
3. *Declaration of AFS* _____
4. _____
12. Dry-dock period AFS applied: _____
13. Name of facility AFS applied: _____
14. Place & country AFS applied: _____
15. AFS samples taken No Yes Nature of sampling: Brief Extent
16. Reason for sampling of AFS: _____
17. Record sheet attached: _____
(country-code / IMO number / dd-mm-yy)
18. Copy to: PSCO Flag State Recognized organization
 Head office Master Other: _____

PORT STATE PARTICULARS

Reporting authority: _____ District office _____

Address: _____

Telephone/Fax/Mobile: _____

Email: _____

Name: _____
*(duly authorized
inspector of reporting
authority)*

Date: _____ Signature: _____

FORM S/2

RECORD SHEET FOR THE SAMPLING PROCEDURE FOR COMPLIANCE WITH THE
CONVENTION IN TERMS OF THE PRESENCE OF ORGANOTIN AND/OR CYBUTRYNE
ACTING AS A BIOCIDES IN ANTI-FOULING SYSTEMS ON SHIP HULLS

RECORD NUMBER	(country-code / IMO number / dd-mm-yy)
---------------	--

Name of ship _____ IMO number: _____

SAMPLING PARTICULARS

- | | |
|--|---|
| <p>1. Date & time initiated:</p> <p>3. Name of paint manufacturer:</p> <p>4. AFS product name & colour:</p> <p>5. Reason for sampling:</p> | <p>2. Date & time completed</p> <p><input type="checkbox"/> Port State control <input type="checkbox"/> Survey & certification <input type="checkbox"/> Other flag State compliance inspection</p> |
| <p>6. Sampling method</p> | |
| <p>7. Hull areas sampled:</p> | <p><input type="checkbox"/> Port side <input type="checkbox"/> Starboard side <input type="checkbox"/> Bottom</p> |
| <p>Number of sampling points: _____</p> | |
| <p>8. Backup samples' storage location:
<i>(e.g. port State inspection office)</i></p> | |
| <p>9. <input type="checkbox"/> Photos taken of the sample points</p> | <p>Comments: _____</p> |
| <p>10. <input type="checkbox"/> Paint samples (wet)</p> | <p>Comments: _____</p> |
| <p>11. Case A – Analysis of organotin only</p> | |
| <p><input type="checkbox"/> First-stage analysis for organotin</p> | <p>Comments: _____</p> |
| <p><input type="checkbox"/> Second-stage analysis for organotin</p> | <p>Comments: _____</p> |
| <p>12. Case B – Analysis of cybutryne only</p> | |
| <p>One-stage analysis for cybutryne</p> | |
| <p>Comments: _____</p> | |
| <p>13. Case C – Simplified approach to detect organotin and cybutryne</p> | |
| <p>One-stage analysis for organotin and cybutryne</p> | |
| <p>Comments: _____</p> | |
| <p>14. Comments concerning sampling procedure</p> | |
| <p>15. Sampling company</p> | |
| | <p>Name</p> <p>Date</p> <p>Signature</p> |

PORT STATE PARTICULARS

Reporting authority: _____ **District office:** _____

Address: _____

**Telephone/Fax/
Mobile:** _____

Email: _____

Name:
*(duly authorized
inspector of reporting
authority)* _____

Date:

Signature:

FORM S/3

RECORD NUMBER	
---------------	--

Name of ship _____ IMO number: _____

METHOD 1 ANALYSIS

Case A – Analysis of organotin only

1.	Instrument I.D.:		Calibration expiry date:			
2.	Specimens 'A' results		Total number of specimens 'A' analysed:			
3.	No.	Sample location (frame & distance from boot topping)	mg Sn/kg	No.	Sample location (frame & distance from boot topping)	mg Sn/kg
	1			9		
	2			10		
	3			11		
	4			12		
	5			13		
	6			14		
	7			15		
	8			16		
4.	Results Number of specimens exceeding 2,500 mg/kg: 1 or more specimens exceeding 3,000 mg/kg <input type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Step 2 required <input type="checkbox"/> Compliance, no further analysis	
5.	Additional comments concerning analysis of results from Specimens 'A'					
6.	Company		Name: Date: Signature:			

7.	Instrument I.D.:		Calibration expiry date:					
8.	Specimens 'B' results		Total number of specimens "B" analysed:					
9.	No.	organotin (mg Sn/kg) as Sn	No.	organotin (mg Sn/kg) as Sn	No.	organotin (mg Sn/kg) as Sn	No.	organotin (mg Sn/kg) as Sn
	1		5		9		13	
	2		6		10		14	
	3		7		11		15	
	4		8		12		16	
10.	Results						<input type="checkbox"/> Non-compliance assumed <input type="checkbox"/> Compliance assumed	
	Number of specimens exceeding 2,500 mg/kg:							
	1 or more specimens exceeding 3,000 mg/kg <input type="checkbox"/> Yes <input type="checkbox"/> No							
11.	Additional comments concerning analysis of results from Specimens 'B'							
12.	Company				Name: Date: Signature:			

Case B – Analysis of cybutryne only

Gas chromatography/mass spectrophotometry (GC/MS) analysis

1.	Instrument I.D.:		Calibration expiry date:	
2.	Specimens 'C' results			
	Total number of specimens 'C' analysed by GC-MS:			
	Average concentration of cybutryne (mg of cybutryne per kg of dry paint):			
3.	Conclusions			<input type="checkbox"/> Yes <input type="checkbox"/> No. Compliance assumed.
	The average concentration of cybutryne exceeds the threshold of 1,250 mg of cybutryne per kg of dry paint			
4.	Additional comments concerning analysis of results from Specimens 'C'			
5.	Company		Name: Date: Signature:	

Case C – Simplified approach to detect organotin and cybutryne

Gas chromatography/mass spectrophotometry (GC/MS) analysis

1.	Instrument I.D.:		Calibration expiry date:	
2.	Specimens 'C' results			
	Total number of specimens 'C' analysed by GC-MS:			
	Average concentration of organotin (mg Sn/kg of dry paint)			
	Average concentration of cybutryne (mg of cybutryne per kg of dry paint):			
3.	Conclusions			
	The average concentration of organotin exceeds the threshold of 3,000 mg Sn per kg of dry paint		<input type="checkbox"/> Yes <input type="checkbox"/> No. Compliance assumed.	
	The average concentration of cybutryne exceeds the threshold of 1,250 mg of cybutryne per kg of dry paint		<input type="checkbox"/> Yes <input type="checkbox"/> No. Compliance assumed.	
4.	Additional comments concerning analysis of results from Specimens 'C'			
5.	Company		Name: Date: Signature:	

FORM S/4

RECORD NUMBER	
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Name of ship _____ IMO number: _____

METHOD 2 ANALYSIS

Case A – Analysis of organotin only

First stage

1.	Instrument I.D.:	Calibration expiry date:
----	------------------	--------------------------

2.	Sample location (frame & distance from boot topping)	Specimen I.D.	Sample disc	Content of tin (mg/kg)	max	min	Average
A		A1	<input type="checkbox"/> abrasive				
		A2	<input type="checkbox"/> metal				
		A3	<input type="checkbox"/> others				Average
		A4	<input type="checkbox"/> abrasive				
		A5	<input type="checkbox"/> metal				mg/kg
		A6	<input type="checkbox"/> others				<input type="checkbox"/> >2,500 mg/kg
		A7	<input type="checkbox"/> abrasive				<input type="checkbox"/> >3,000 mg/kg
		A8	<input type="checkbox"/> metal				
		A9	<input type="checkbox"/> others				
B		B1	<input type="checkbox"/> abrasive				
		B2	<input type="checkbox"/> metal				
		B3	<input type="checkbox"/> others				Average
		B4	<input type="checkbox"/> abrasive				
		B5	<input type="checkbox"/> metal				mg/kg
		B6	<input type="checkbox"/> others				<input type="checkbox"/> >2,500 mg/kg
		B7	<input type="checkbox"/> abrasive				<input type="checkbox"/> >3,000 mg/kg
		B8	<input type="checkbox"/> metal				
		B9	<input type="checkbox"/> others				
C		C1	<input type="checkbox"/> abrasive				
		C2	<input type="checkbox"/> metal				
		C3	<input type="checkbox"/> others				Average
		C4	<input type="checkbox"/> abrasive				
		C5	<input type="checkbox"/> metal				mg/kg
		C6	<input type="checkbox"/> others				<input type="checkbox"/> >2,500 mg/kg
		C7	<input type="checkbox"/> abrasive				<input type="checkbox"/> >3,000 mg/kg
		C8	<input type="checkbox"/> metal				
		C9	<input type="checkbox"/> others				

D	D1	<input type="checkbox"/> abrasive				
	D2	<input type="checkbox"/> metal				
	D3	<input type="checkbox"/> others				Average
	D4	<input type="checkbox"/> abrasive				
	D5	<input type="checkbox"/> metal				mg/kg
	D6	<input type="checkbox"/> others				<input type="checkbox"/> >2,500 mg/kg
	D7	<input type="checkbox"/> abrasive				<input type="checkbox"/> >3,000 mg/kg
	D8	<input type="checkbox"/> metal				
	D9	<input type="checkbox"/> others				
3.	Results first-stage analysis					
	<input type="checkbox"/> ___ samples out of ___ are above 2,500 mg/kg <input type="checkbox"/> sample(s) ___ is (are) above 3,000 mg/kg				<input type="checkbox"/> Compliant <input type="checkbox"/> Second stage required	
4.	Comments					
5.	Company			Name Date Signature		

Second stage

1.	Instrument I.D.:	Calibration expiry date:				
2.	Specimen used <i>(Specimen I.D.)</i>	Content of tin first stage <i>(XRF analysis)</i> <i>(mg Sn/kg)</i>	Content of tin second stage <i>(as organotin) (mg Sn/kg)</i>	Compliance		
A						
				<input type="checkbox"/> >2,500 mg/kg		
				<input type="checkbox"/> >3,000 mg/kg		
B						
				<input type="checkbox"/> >2,500 mg/kg		
				<input type="checkbox"/> >3,000 mg/kg		
C						
				<input type="checkbox"/> >2,500 mg/kg		
				<input type="checkbox"/> >3,000 mg/kg		
D						
				<input type="checkbox"/> >2,500 mg/kg		
				<input type="checkbox"/> >3,000 mg/kg		
3.	Results second-stage analysis					
	<input type="checkbox"/> ___ samples out of ___ are above 2,500 mg/kg (dry paint) <input type="checkbox"/> sample(s) ___ is (are) above 3,000 mg/kg (dry paint)				<input type="checkbox"/> Compliant <input type="checkbox"/> Not compliant	

4.	Comments	
5.	Company	Name Date Signature

Case B – Analysis of cybutryne only

Gas chromatography/mass spectrophotometry (GC/MS) analysis for cybutryne determination

1.	Instrument I.D.:	Calibration expiry date:
2.	Results of GC-MS analysis	
	Average concentration (mg of cybutryne per kg of dry paint)	<input type="checkbox"/> Compliant <input type="checkbox"/> Not compliant
3.	Comments	
4.	Company	Name Date

Case C – Simplified approach to detect organotin and cybutryne

Gas chromatography/mass spectrophotometry (GC/MS) analysis for cybutryne and organotin determination

1.	Instrument I.D.:	Calibration expiry date:
2.	Results of GC-MS analysis	
	Average concentration of organotin (mg Sn/kg)	<input type="checkbox"/> Compliant <input type="checkbox"/> Not compliant
	Average concentration of cybutryne (mg of cybutryne per kg of dry paint)	<input type="checkbox"/> Compliant <input type="checkbox"/> Not compliant
3.	Comments	
4.	Company	Name Date

PORT STATE PARTICULARS

Reporting authority:

District office:

Address:

Telephone/Fax/Mobile:

Email:

Name:

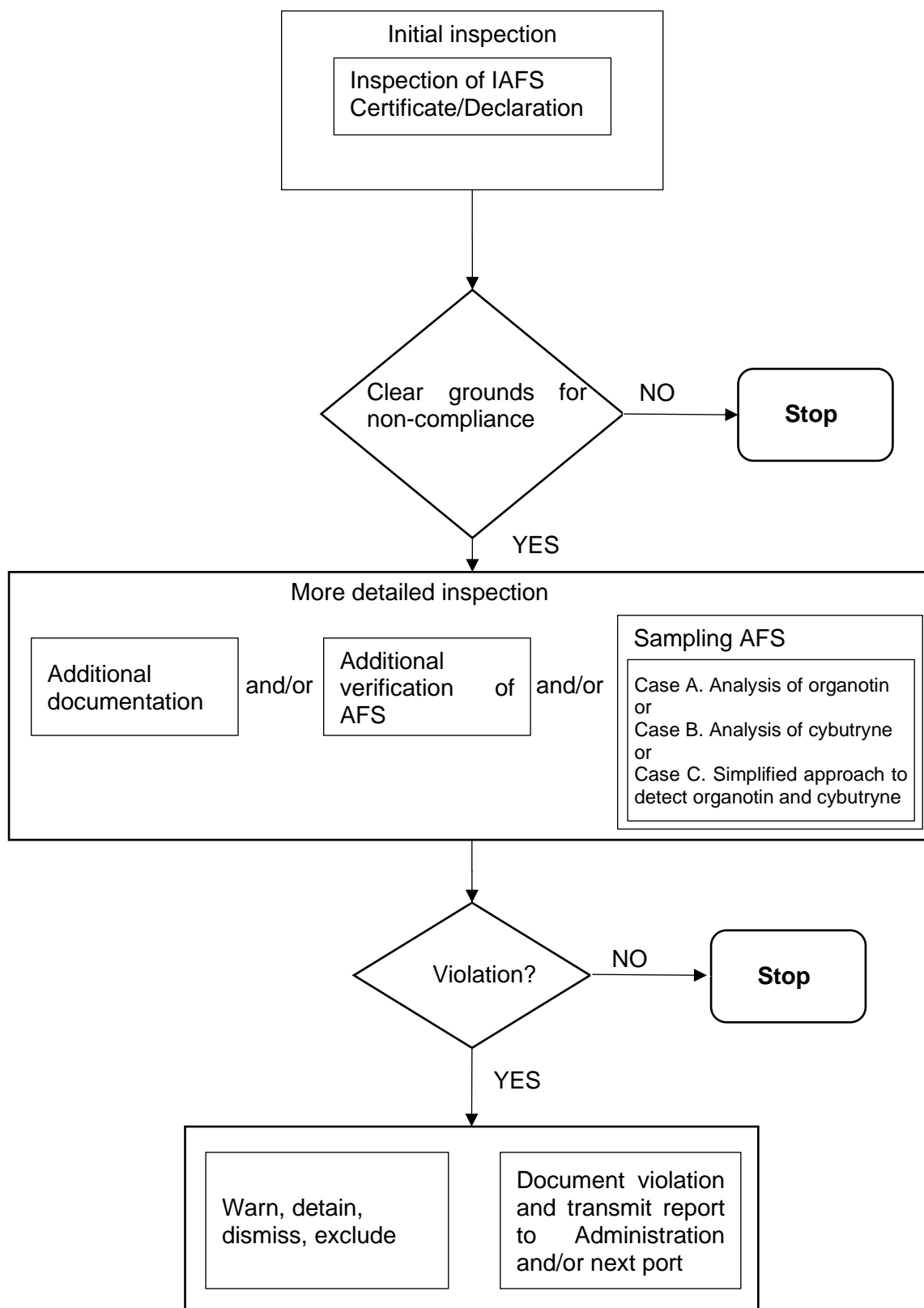
*(duly authorized
inspector of reporting
authority)*

Date:

Signature:

APPENDIX 2

AFS INSPECTION PROCESS



APPENDIX 20

LIST OF INSTRUMENTS RELEVANT TO PORT STATE CONTROL PROCEDURES

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
<i>AFS</i>				
MEPC.356(78)	2022 Guidelines for brief sampling of anti-fouling systems on ships	III	Revokes MEPC.104(49)	10 June 2022
<i>Ballast water</i>				
MEPC.173(58)	Guidelines for ballast water sampling (G2)	MEPC/PPR	To be read in conjunction with MEPC.252(67) and BWM.2/Circ.42/Rev. 1	10 October 2008
MEPC.252(67)	Guidelines for port State control under the BWM Convention	MEPC/III	To be read in conjunction with MEPC.173(58) and BWM.2/Circ.42/Rev. 1	17 October 2014
MEPC.279(70)	2016 Guidelines for approval of ballast water management systems (G8)	MEPC		28 October 2016
MEPC.297(72)	Amendments to regulation B-3 (Implementation schedule of ballast water management for ships)	MEPC		13 April 2018
BWM.2/Circ.42/Rev.2	Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)	MEPC/PPR	To be read in conjunction with MEPC.173(58) and MEPC.252(67)	9 December 2020

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
Bulk				
A.797(19)	Safety of ships carrying solid bulk cargoes	CCC		23 November 1995
A.862(20)	Code of practice for safe loading and unloading of bulk carriers	CCC	As amended by MSC.238(82) and MSC.304(87)	27 November 1997
MSC/Circ.656	Safety of ships carrying solid bulk cargoes	CCC		6 June 1994
MSC/Circ.1117	Guidance for checking the structure of bulk carriers	SDC		24 June 2004
MSC.1/Circ.1464/Rev.1, Corr.1 and Corr.2	Unified interpretations of the provisions of SOLAS chapters II-1 and XII, of the Technical provisions for means of access for inspections (resolution MSC.158(78)) and of the Performance standards for water level detectors on bulk carriers and single hold cargo ships other than bulk carriers (resolution MSC.188(79))	SDC	As amended by MSC.1/Circ.1507 of 5 June 2015	24 October 2013 14 November 2013 9 June 2017
Certificates				
A.1162(32)	Encouragement of Member States and all relevant stakeholders to promote actions for the prevention and suppression of fraudulent registration and fraudulent registries and other fraudulent acts in the maritime sector	LEG		28 January 2022
MSC/Circ.606	Port State concurrence with SOLAS exemptions	III		12 February 1993
MSC/Circ.1012 MEPC/Circ.384	Endorsement of certificates with the date of completion of the survey on which they are based	III		26 June 2001

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
FAL.2/Circ.133- MEPC.1/Circ.902- MSC.1/Circ.1646- LEG.2/Circ.4	List of certificates and documents required to be carried on board ships, 2022	III	Supersedes FAL.2/Circ.131- MEPC.1/Circ.873- MSC.1/Circ.1586- LEG.2/Circ.3	27 June 2022
MSC-MEPC.4/Circ.1	Retention of original records/documents on board ships	III		26 September 2005
MSC-MEPC.5/Circ.6	Guidance on the timing of replacement of existing certificates by the certificates issued after the entry into force of amendments to certificates in IMO instruments	III		6 August 2009
MARPOL				
MEPC.346(78)	2022 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)	MEPC	Revokes MEPC.282(70)	10 June 2022
MEPC.347(78)	Guidelines for the verification and company audits by the Administration of part III of the Ship Energy Efficiency Management Plan (SEEMP)	MEPC		10 June 2022
MEPC.348(78)	2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity	MEPC	Revokes MEPC.292(71)	10 June 2022
MEPC.349(78)	2022 Guidelines for the development and management of the IMO Ship Fuel Oil Consumption Database	MEPC	Revokes MEPC.293(71)	10 June 2022
MEPC.350(78)	2022 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI)	MEPC	Revokes MEPC.333(76)	10 June 2022

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
MEPC.351(78)	2022 Guidelines on survey and certification of the attained Energy Efficiency Existing Ship Index (EEXI)	MEPC	Revokes MEPC.334(76)	10 June 2022
MEPC.352(78)	2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII Guidelines, G1)	MEPC	Revokes MEPC.336(76)	10 June 2022
MEPC.353(78)	2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2)	MEPC	Revokes MEPC.337(76)	10 June 2022
MEPC.354(78)	2022 Guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4)	MEPC	Revokes MEPC.339(76)	10 June 2022
MEPC.355(78)	2022 Interim Guidelines on correction factors and voyage adjustments for CII calculations (CII Guidelines, G5)	MEPC		10 June 2022
MEPC.340(77)	2021 Guidelines for exhaust gas cleaning systems	MEPC/PPR	Supersedes MEPC.259(68)	26 November 2021
MSC.286(86)	Recommendations for material safety data sheets (MSDS) for MARPOL Annex I oil cargo and oil fuel	PPR		5 June 2009
MEPC.312(74)	Guidelines for the use of electronic record books under MARPOL	MEPC		17 May 2019
MEPC.320(74)	2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI	MEPC		17 May 2019
MSC.465(101)	Recommended interim measures to enhance the safety of ships relating to the use of oil fuel	MSC		14 June 2019

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
MEPC/Circ.479 and Corr.1	Guidelines for port State control officers while checking compliance with the Condition Assessment Scheme (CAS)	MEPC/III		24 August 2005 6 October 2005
MEPC.1/Circ.508	Bunker delivery note and fuel oil sampling	MEPC/III		9 May 2006
MEPC.1/Circ.516	Public access to the condition assessment scheme (CAS) database	MEPC		5 May 2006
MEPC.1/Circ.637	Fuel oil availability and quality	MEPC		17 November 2008
MEPC.1/Circ.640	Interim Guidance on the use of the Oil Record Book concerning voluntary declaration of quantities retained on board in oily bilge water holding tanks and heating of oil residue (sludge)	SSE		4 November 2008
MEPC.1/Circ.675/Rev.1	Discharge of cargo hold washing water in the Gulfs area, Mediterranean Sea area and wider Caribbean Region under MARPOL Annex V	MEPC		26 March 2010
MEPC.1/Circ.834/Rev.1	Consolidated guidance for port reception facility providers and users	MEPC		1 March 2018
MEPC.1/Circ.864/Rev.1	2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships	MEPC		21 May 2019
MEPC.1/Circ.881	Guidance for port State control on contingency measures for addressing non-compliant fuel oil	MEPC		21 May 2019

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
MEPC.1/Circ.882	Early application of the verification procedures for a MARPOL Annex VI fuel oil sample (regulation 18.8.2 or regulation 14.8)	MEPC		16 July 2019
MEPC.1/Circ.883/Rev.1	Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the EGCS Guidelines (resolution MEPC.340(77))	PPR	Revokes MEPC.1/Circ.883	15 December 2021
MEPC.1/Circ.899	2022 Guidelines for risk and impact assessments of the discharge water from exhaust gas cleaning systems	MEPC		10 June 2022
MSC-MEPC.4/Circ.3	Blanking of bilge discharge piping systems in port	MSC/MEPC		19 December 2008
PSC activities				
MSC.1/Circ.1191	Further reminder of the obligation to notify flag States when exercising control and compliance measures	MSC/III		30 May 2006
MSC.1/Circ.1199	Interim Guidance on compliance of ships carrying dry cargoes in bulk with requirements of SOLAS chapters II-1, III, IX, XI-1 and XII	SDC		31 May 2006
MSC.1/Circ.1221	Validity of type approval certification for marine products	III		11 December 2006
MSC.1/Circ.1565	Guidelines on the voluntary early implementation of amendments to the 1974 SOLAS Convention and related mandatory instruments	III		15 June 2017

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
MSC/Circ.1011 MEPC/Circ.383	Measures to improve port State control procedures	III		26 June 2001
MSC-MEPC.2/Circ.2	IMO requirements on carriage of publications on board ships	III/NCSR		1 June 2006
MSC-MEPC.4/Circ.2	Code of good practice for port State control officers	III		1 November 2007
Security				
MSC.159(78)	Interim Guidance on control and compliance measures to enhance maritime security	MSC/III		21 May 2004
MSC/Circ.1097	Guidance relating to the implementation of SOLAS chapter XI-2 and the ISPS Code	MSC		6 June 2003
MSC/Circ.1113	Guidance to port State control officers on the non-security-related elements of the 2002 SOLAS amendment	III	Automatic identification systems (AIS) and ship's identification number, and Continuous Synopsis Record (CSR) Read in conjunction with A.959(23), adopted on 5 December 2003, Format and guidelines for the maintenance of the Continuous	7 June 2004

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
			Synopsis Record (CSR), as amended by MSC.198(80), adopted on 20 May 2005	
MSC/Circ.1156	Guidance on the access of public authorities, emergency response services and pilots on board ships to which SOLAS chapter XI-2 and the ISPS Code apply	MSC	Read in conjunction with MSC.1/Circ.1342 of 27 May 2010, Reminder in connection with shore leave and access to ships (and MSC.1/Circ.1194 of 30 May 2006)	23 May 2005
MSC.1/Circ.1235	Guidelines on security-related training and familiarization for shipboard personnel	HTW		21 October 2007
MSC.1/Circ.1342	Reminder in connection with shore leave and access to ships	MSC		27 May 2010
SOLAS				
A.1047(27)	Principles of minimum safe manning	MSC/HTW		30 November 2011
MSC/Circ.592	Carriage of dangerous goods – Acceptance of the document of compliance	CCC		21 April 1992
MSC/Circ.811	Identification of float-free arrangements for liferafts	SSE		8 July 1997

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
MSC/Circ.887	Interpretation of the term "other strategic points" in SOLAS regulation III/50 and LSA Code section VII/7.2	SSE		21 December 1998
MSC/Circ.907	Application of SOLAS regulation III/28.2 concerning helicopter landing areas on non-ro-ro passenger ships	SSE		17 June 1999
MSC/Circ.955	Servicing of life-saving appliances and radiocommunication equipment under the Harmonized System of Survey and Certification (HSSC)	III		23 June 2000
MSC/Circ.1016	Application of SOLAS regulation III/26 concerning fast rescue boats and means of rescue systems on ro-ro passenger ships	SSE	Complemented by MSC/Circ.1094 of 17 June 2003, Application of SOLAS regulation III/26 concerning fast rescue boat systems on ro-ro passenger ships	26 June 2001
MSC/Circ.1107	Application of SOLAS regulation II-1/3-6 on Access to and within spaces in, and forward of, the cargo area of oil tankers and bulk carriers and application of the Technical provisions for means of access for inspections	SDC		25 May 2004
MSC.1/Circ.1326 and Corr.1	Clarification of SOLAS regulation III/19	SSE	Note: SOLAS regulation III/19.3.3.3 as referred to in the circular should be read as SOLAS regulation	11 June 2009 13 August 2009

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
			III/19.3.4.3 as the 2013 amendments to SOLAS renumbered paragraph 19.3.3.3 as 19.3.4.3	
MSC.1/Circ.1331	Guidelines for construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation	SSE		11 June 2009
MSC.1/Circ.1402	Safety of pilot transfer arrangements	III		14 June 2011
MSC.1/Circ.1676	Delays affecting the availability of new GMDSS equipment compliant with the revised performance standards set out in resolutions MSC.511(105), MSC.512(105) and MSC.513(105)	MSC		31 May 2023 9 June 2023
MSC.1/Circ.1460/Rev.4	Guidance on the validity of radiocommunications equipment installed and used on ships	MSC		31 May 2023 9 June 2023
STCW				
STCW.7/Circ.22	Advice for port State control officers, recognized organizations and recognized security organizations clarifying training and certification requirements for ship security officers and seafarers with designated security duties	MSC/HTW		25 February 2014
STCW.7/Circ.24/Rev.1	Guidance for Parties, Administrations, port State control authorities, recognized organizations and other relevant parties on the requirements under the STCW Convention, 1978, as amended	III/HTW		16 June 2017

Instrument (related to)	Name	IMO body	Remark	Year (adopted/ approved)
MSC/Circ.635	Tonnage measurement of certain ships relevant to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978	HTW/SDC		15 June 1994
MSC/Circ.1089	Guidance on recommended anti-fraud measures and forgery prevention measures for seafarers' certificate	III/HTW		6 June 2003
MSC.1/Circ.1208	Promoting and verifying continued familiarization of GMDSS operators on board ships	HTW		22 May 2006