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PREVENTION OF POLLUTION OF THE SEA ACT
(CHAPTER 243)

PREVENTION OF POLLUTION OF THE SEA
(BALLAST WATER MANAGEMENT)
REGULATIONS 2017

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In exercise of the powers conferred by sections 10A(3), 13A and 34(1)(*ba*) of the Prevention of Pollution of the Sea Act, the Maritime and Port Authority of Singapore, with the approval of the Minister for Transport, makes the following Regulations:

Citation and commencement

1. These Regulations are the Prevention of Pollution of the Sea (Ballast Water Management) Regulations 2017 and come into operation on 8 September 2017.

Definitions

2. In these Regulations, unless the context otherwise requires —

“Administration”, in relation to any Contracting Party or to any State, has the same meaning as in Article 1 of the Ballast Water Management Convention;

“Annex” means the Annex to the Ballast Water Management Convention, the text of which is set out in the First Schedule;

“approved ballast water management plan” means a ballast water management plan that meets the requirements of regulation B-1 of the Annex that has been approved —

(a) in the case of a Singapore ship, by the Director or an authorised organisation; and

(b) in the case of any other ship, by or on behalf of the Administration;

“authorised organisation” means an organisation authorised by regulations made under section 116 of the Merchant Shipping Act (Cap. 179) for the purposes of surveying ships and issuing certificates under Part V of that Act;

“ballast water record book” means the ballast water record book of the ship that is required to be on board a ship under regulation B-2 of the Annex;

“Contracting Party” means any State Party to the Ballast Water Management Convention;

“FPSO” means a floating production storage and off-loading unit;

“FSU” means a floating storage unit;

“gross tonnage” means the gross tonnage calculated in accordance with the regulations in Annex 1 of the International Convention on Tonnage Measurement of Ships, 1969 and any amendment to it which has come into force and has been accepted by the Government, or any successor convention accepted by the Government;

“IBWM Certificate” means an international ballast water management certificate in the form prescribed in the Annex, that is —

- (a) issued by or on behalf of the Administration of any Contracting Party to the Ballast Water Management Convention under regulation E-2 of the Annex; or
- (b) issued by another Contracting Party at the request of the Administration of any Contracting Party under regulation E-3 of the Annex;

“IMO” or “Organization” means the International Maritime Organization;

“IOPP Certificate” has the same meaning as in regulation 2 of the Prevention of Pollution of the Sea (Oil) Regulations 2006 (G.N. No. S 685/2006);

“owner”, in relation to a ship, includes any organisation or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the International Safety Management Code;

“Port Master” means the Port Master appointed under the Maritime and Port Authority of Singapore Act (Cap. 170A) and includes any Deputy Port Master;

“relevant ship” means a ship other than any floating platform, FSU or FPSO that is fixed in position;

“ship” means a vessel of any type whatsoever operating in the marine environment, and includes a submersible, a floating craft, a fixed or floating platform, an FSU and an FPSO;

“Singapore ship” means a ship that is registered under Part II of the Merchant Shipping Act;

“Type Approval Certificate” means a certificate issued by or on behalf of an Administration to certify that a ballast water management system is approved under regulation D-3.1 of the Annex.

Application of Annex and Schedules

3.—(1) Subject to these Regulations, the Annex has the force of law in Singapore —

(a) except for regulations C-3 and D-5 of the Annex; and

(b) except that —

(i) regulation B-3 of the Annex is substituted with the revised regulation B-3 set out in the Second Schedule; and

(ii) regulations E-1 and E-5 of the Annex are substituted with the revised regulations E-1 and E-5, respectively, set out in the Third Schedule.

(2) Any reference to “ship” or “ships” in these Regulations, the Annex, the Second Schedule and the Third Schedule is a reference to —

(a) a Singapore ship or ships; and

(b) any other ship or ships while in Singapore waters.

(3) These Regulations apply to the ships mentioned in paragraph (2) unless the ships are excluded from the application of the Ballast Water Management Convention under Article 3(2) of the Convention.

(4) To avoid doubt, ships that are excluded from the application of the Ballast Water Management Convention under Article 3(2)(b) and (d) of the Convention are ships that only operate in Singapore waters, or that only operate in Singapore waters and on the high seas, unless the Director determines that the discharge of ballast water from such ships would impair or damage the environment, human health, property or resources, of Singapore or other States.

References to Administration and other terms

4.—(1) For the purposes of regulations A-5, D-4.1, D-4.2, E-2.1, E-2.2, E-3.1, E-3.2 and E-3.3 of the Annex, and regulations E-1.1.2, E-1.2, E-1.3, E-1.4, E-1.5, E-1.6, E-1.7, E-1.8, E-5.1, E-5.3, E-5.5, E-5.6, E-5.7 and E-5.9.1 of the Third Schedule, a reference to the Administration is a reference to the Director.

(2) For the purposes of regulations A-1.5.3, B-1, D-3.1 of the Annex, and E-1.10 of the Third Schedule, a reference to the Administration is a reference to the Director or an authorised organisation.

(3) For the purposes of regulation E-2.2 of the Annex and regulation E-5.4 of the Third Schedule, a reference to a person or organisation authorised or duly authorised by the Administration is a reference to an authorised organisation.

(4) In Appendix I of the Annex —

- (a) a reference to a competent person is a reference to the Director, a surveyor of ships or an authorised organisation; and
- (b) a reference to an authorised official or a duly authorised official is a reference to the Director, an inspector or an authorised organisation.

(5) In the Second Schedule, a reference to the renewal survey is a reference to the renewal survey associated with the IOPP Certificate under MARPOL Annex I.

(6) For the purposes of these Regulations, unless the context otherwise requires —

- (a) a reference to regulation B-3 of the Annex is a reference to regulation B-3 of the Second Schedule;
- (b) a reference to regulation B-3.3, B-3.4 and B-3.5 in regulation B-5.2 of the Annex is a reference to regulation B-3.3, B-3.4 and B-3.5, respectively, of the Second Schedule; and

- (c) a reference to regulation E-1 and E-5 of the Annex is a reference to regulation E-1 and E-5, respectively, of the Third Schedule.

Exemptions

5.—(1) The Director may exempt any person or ship, or class or description of persons or ships from all or any of these Regulations on such terms as the Director may specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

(2) In granting an exemption from any requirement of regulation C-1 (relating to Additional Measures) of the Annex or regulation B-3 (relating to Ballast Water Management for Ships) of the Second Schedule, the Director must comply with the requirements of regulation A-4.1 to A-4.4 of the Annex.

(3) The Port Master may exempt any ship, or description of ships within the port, from the operation of section 10A(1) of the Act, on such terms as the Port Master may specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

(4) The owner or master of a ship must ensure that any exemption granted under paragraph (1) or (3) is recorded in the ballast water record book of the ship.

Exemptions in certain circumstances

6.—(1) Section 10A(1) of the Act does not apply to the discharge of ballast water if the discharge is made into any part of the sea by a ship through ballast water management that meets the standard described in regulation D-2 of the Annex.

(2) Until such time as a ship is required to conduct ballast water management under regulation B-3 of the Second Schedule, the following discharges of ballast water by a Singapore ship into any sea, or by any ship into Singapore waters, are exempt from the operation of section 10A(1) of the Act:

- (a) a discharge made into Singapore waters by a ship (other than a ship that is exempted under regulation 7(1)) that has, prior to its entry into Singapore waters, conducted ballast

water exchange in accordance with the requirements of regulation B-4 of the Annex;

- (b) a discharge made into the waters of any State that is not party to the Ballast Water Management Convention, by a Singapore ship (other than a ship that is exempted under regulation 7(1)) that has, prior to its entry into such waters, conducted ballast water exchange in accordance with the requirements of regulation B-4 of the Annex;
- (c) a discharge made into the waters of a Contracting Party that is not Singapore, by a Singapore ship that has, prior to its entry into such waters, conducted ballast water exchange in accordance with the requirements of regulation B-4 of the Annex in the manner permitted by that Contracting Party;
- (d) a discharge made into the high seas by a ship in the course of conducting ballast water exchange in accordance with the requirements of regulation B-4 of the Annex;
- (e) a discharge made into Singapore waters, or the waters of any State not party to the Ballast Water Management Convention, by a ship exempted under regulation 7(1) from conducting ballast water exchange in accordance with the requirements of regulation B-4.1 of the Annex before the ship's entry into Singapore waters.

(3) For the purposes of section 10A(3) of the Act, a ship that discharges sediments into the sea is exempt from the operation of section 10A(1) of the Act in relation to that discharge, if the discharge was made —

- (a) into such part of the sea as is at least 200 nautical miles away from land;
- (b) in depths of over 200 metres; and
- (c) in accordance with the ship's approved ballast water management plan.

Ballast water exchange

7.—(1) Despite any other exemption under regulation B-4 of the Annex, a ship is exempted from conducting ballast water exchange in

accordance with the requirements of regulation B-4.1 of the Annex before the ship's entry into Singapore waters if it is not possible for that ship to conduct ballast water exchange in accordance with the requirements of regulation B-4.1 of the Annex.

(2) The requirements of regulation B-3 of the Second Schedule do not apply to a ship exempted under paragraph (1).

(3) A ship mentioned in paragraph (1) that does not conduct ballast water exchange must record the reasons for not conducting ballast water exchange in its ballast water record book.

Ballast water management

8.—(1) A ship must conduct ballast water management in accordance with regulation B-3 of the Second Schedule.

(2) For the purpose of regulation B-3.7 of the Second Schedule, other methods of ballast water management may be accepted as alternatives by the Director.

Surveys and certifications of ships 400 gross tonnage and above

9. A relevant ship that is 400 gross tonnage and above must comply with the survey and certification requirements in regulation E-1 of the Third Schedule.

International Ballast Water Management Certificates

10.—(1) The owner of a Singapore ship that is a relevant ship of 400 gross tonnage and above may apply to the Director or an authorised organisation for an IBWM Certificate.

(2) The Director or an authorised organisation may, upon an application under paragraph (1) and after a survey of the ship in accordance with the provisions of regulation E-1 of the Third Schedule, issue an IBWM Certificate in respect of the ship.

(3) For the purposes of these Regulations, the duration and validity of an IBWM Certificate issued in respect of a ship is determined in accordance with regulation E-5 of the Third Schedule.

Type Approval Certificates

11.—(1) The manufacturer of a ballast water management system may apply to the Director for approval of a ballast water management system for installation on board a Singapore ship.

(2) The Director or an authorised organisation may issue a Type Approval Certificate to the manufacturer if the Director or the authorised organisation, as the case may be, is satisfied that the ballast water management system meets the requirements of regulation D-3 of the Annex.

(3) Despite paragraph (2), where the ballast water management system has already been approved by the Administration of any State, the Director may, in respect of a ship on which the ballast water management system is installed, issue an IBWM Certificate to the owner of the ship.

Ballast water management plans

12.—(1) The owner of a Singapore ship may apply to the Director or an authorised organisation for approval of a ballast water management plan for that ship.

(2) The Director or an authorised organisation may approve the ballast water management plan if the Director or the authorised organisation, as the case may be, is satisfied that the plan meets the requirements of regulation B-1 of the Annex.

Prohibition on proceeding to sea

13.—(1) The owner, master or agent of a relevant ship that is of 400 gross tonnage and above must produce to the Port Master, at the time clearance for the ship under section 46 of the Maritime and Port Authority of Singapore Act (Cap. 170A) is demanded for a voyage from Singapore to a port or place outside Singapore waters —

- (a) in the case of a ship the flag State of which is a Contracting Party, an IBWM Certificate; or
- (b) in the case of a ship flagged by the Administration of a State which is not a Contracting Party, written evidence of

compliance with the requirements of regulation E-1 of the Third Schedule.

(2) Clearance for a ship may be refused and the ship may be detained until the certificate mentioned in paragraph (1)(a), or the evidence mentioned in paragraph (1)(b), is produced.

(3) The Port Master may, in the Port Master's discretion, exempt any ship from the requirements of paragraph (1).

Powers to inspect

14.—(1) A ship in Singapore waters is subject to inspection by an inspector taking into account guidelines for surveys developed by IMO.

(2) Subject to paragraph (4), any inspection under paragraph (1) of a ship of 400 gross tonnage and above is limited to one or more of the following:

(a) verifying —

- (i) in the case of a relevant ship the flag State of which is a Contracting Party, that the ship carries a valid IBWM Certificate; or
- (ii) in the case of a relevant ship the flag State of which is not a Contracting Party, that there is written evidence of compliance with the requirements of regulation E-1 of the Third Schedule;

(b) inspecting the ballast water record book;

(c) sampling the ship's ballast water taking into account ballast water sampling and analysis guidelines developed by IMO.

(3) Subject to paragraph (4) or (5), any inspection under paragraph (1) of a ship below 400 gross tonnage is limited to one or more of the following:

(a) verifying that the ship carries an approved ballast water management plan;

(b) inspecting the ballast water record book;

(c) sampling the ship's ballast water taking into account ballast water sampling and analysis guidelines developed by IMO.

(4) A detailed inspection of the ship may be carried out by an inspector in any of the circumstances in which a detailed inspection of a ship is permitted by the Ballast Water Management Convention.

(5) Without limiting paragraph (4), a detailed inspection may be carried out in any of the following circumstances:

- (a) the ship does not carry an approved ballast water management plan or a ballast water record book;
- (b) the master or the crew of the ship are not familiar with essential shipboard procedures relating to ballast water management, or have not implemented such procedures;
- (c) in the case of a relevant ship of 400 gross tonnage and above —
 - (i) if the flag State of the ship is a Contracting Party —
 - (A) the ship does not carry a valid IBWM Certificate; or
 - (B) the condition of the ship or its equipment does not correspond substantially with the particulars of the ship's IBWM Certificate or approved ballast water management plan;
 - (ii) if the flag State of the ship is not a Contracting Party —
 - (A) the ship does not carry any written evidence of compliance with the requirements of regulation E-1 of the Third Schedule; or
 - (B) the condition of the ship or its equipment does not correspond substantially with any written evidence of compliance with the requirements of regulation E-1 of the Third Schedule.

(6) Where the sampling mentioned in paragraph (2)(c) or (3)(c) leads to a result, or supports information received from another port or offshore terminal, indicating that the ship poses a threat to the environment, human health, property or resources, the Director may direct the owner, master or agent of the ship to take steps to prevent the ship from discharging ballast water until the threat is removed.

(7) In any case where a detailed inspection may be carried out under paragraph (4) or (5), the Director may direct the owner, master or agent of the ship to take such steps as will ensure that the ship will not discharge ballast water until it can do so without presenting a threat of harm to the environment, human health, property or resources.

(8) There must be readily available for inspection aboard each ship —

- (a) an approved ballast water management plan and a ballast water record book; and
- (b) in the case of a relevant ship of 400 gross tonnage and above, an IBWM Certificate or a written evidence of compliance with the requirements of regulation E-1 of the Third Schedule.

(9) The Director may cause any ship to be inspected by an inspector when it enters a port, a shipyard or an offshore terminal in Singapore waters, if the Director receives —

- (a) a request for an investigation from any Contracting Party;
or
- (b) evidence that the ship is operating or has operated in violation of the Ballast Water Management Convention in any place.

(10) Following a report of an inspection by an inspector under paragraph (9), the Director may send the report to —

- (a) the Contracting Party requesting the investigation; and
- (b) the competent authority of the Administration of the ship.

Powers to detain ships

15.—(1) A ship is liable to be detained under section 23 of the Act if an inspector has, following an inspection, determined —

- (a) in the case of a relevant ship of 400 gross tonnage and above the flag State of which is a Contracting Party, that the ship's IBWM Certificate is invalid;
- (b) in the case of a relevant ship of 400 gross tonnage and above the flag State of which is not a Contracting Party, that the written evidence of the ship's compliance with the requirements of regulation E-1 of the Third Schedule is inadequate; or
- (c) the ship has contravened any of the requirements of these Regulations.

(2) The Director may permit a ship detained under paragraph (1) to leave Singapore waters for the purpose of discharging ballast water or proceeding to the nearest repair yard or reception facility available, if doing so does not present a threat of harm to the environment, human health, property or resources.

Offences

16.—(1) The master and owner of a ship shall each be guilty of an offence —

- (a) if the owner or master of the ship fails to ensure that any exemption granted under regulation 5(1) or (3) is recorded in the ballast water record book of the ship as required under regulation 5(4);
- (b) if the owner or master of the ship refuses or fails to comply with a direction given by the Director under regulation 14(6) or (7);
- (c) if the ship fails to have on board for inspection an approved ballast water management plan or a ballast water record book as required under regulation 14(8)(a); or
- (d) if the ship, being a relevant ship of 400 gross tonnage and above, fails to have on board for inspection an IBWM

Certificate, or written evidence of compliance with the requirements of regulation E-1 of the Third Schedule, as required under regulation 14(8)(b).

(2) The owner, master and agent of a ship shall each be guilty of an offence if the IBWM Certificate, or the written evidence of compliance with the requirements of regulation E-1 of the Third Schedule, mentioned in regulation 13(1) is not produced as required under that regulation.

(3) The owner and master of a ship shall each be guilty of an offence if any requirement relating to the ship under regulation B-1, B-2.1, B-2.3, B-2.4, B-2.5, B-4.1, B-4.5, B-5.1, B-6, D-1.1 or D-2.1 of the Annex is not complied with.

(4) The owner and master of a ship shall each be guilty of an offence if ballast water book entries are not maintained on board the ship for a minimum period of 2 years after the last entry as required under regulation B-2 of the Annex.

(5) The owner of a ship shall be guilty of an offence if ballast water book entries are not maintained in the Company's control for a minimum period of 3 years immediately after the 2-year period mentioned in paragraph (4) as required under regulation B-2 of Annex.

(6) The owner and master of a ship shall each be guilty of an offence if any requirement relating to the ship under regulation B-3 of the Second Schedule is not complied with.

(7) The owner and master of a ship shall each be guilty of an offence if any requirement relating to the ship under regulation E-1.1, E-1.7, E-1.9 or E-1.10 of the Annex is not complied with.

(8) An owner, master or agent of a ship who is guilty of an offence under this regulation shall each be liable on conviction to a fine not exceeding \$10,000.

Fees

17. The fees specified in the second column of the Fourth Schedule are payable to the Director for services set out in the first column of that Schedule.

FIRST SCHEDULE

Regulation 2

ANNEX OF THE BALLAST WATER MANAGEMENT CONVENTION REGULATIONS FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS

SECTION A — GENERAL PROVISIONS

Regulation A-1

Definitions

For the purposes of this Annex:

- 1 “Anniversary date” means the day and the month of each year corresponding to the date of expiry of the Certificate.
- 2 “Ballast Water Capacity” means the total volumetric capacity of any tanks, spaces or compartments on a ship used for carrying, loading or discharging Ballast Water, including any multi-use tank, space or compartment designed to allow carriage of Ballast Water.
- 3 “Company” means 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 owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the International Safety Management Code¹.
- 4 “Constructed” in respect of a ship means a stage of construction where:
 - .1 the keel is laid; or
 - .2 construction identifiable with the specific ship begins;
 - .3 assembly of the ship has commenced comprising at least 50 tonnes or 1 percent of the estimated mass of all structural material, whichever is less; or
 - .4 the ship undergoes a major conversion.
- 5 “Major conversion” means a conversion of a ship:
 - .1 which changes its ballast water carrying capacity by 15 percent or greater, or
 - .2 which changes the ship type, or
 - .3 which, in the opinion of the Administration, is projected to prolong its life by ten years or more, or

¹ Refer to the ISM Code adopted by the Organization by resolution A.741(18), as amended.

FIRST SCHEDULE — *continued*

- .4 which results in modifications to its ballast water system other than component replacement-in-kind. Conversion of a ship to meet the provisions of regulation D-1 shall not be deemed to constitute a major conversion for the purpose of this Annex.
- 6 “From the nearest land” means from the baseline from which the territorial sea of the territory in question is established in accordance with international law except that, for the purposes of the Convention, “from the nearest land” off the north-eastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in
- latitude 11°00′ S, longitude 142°08′ E
- to a point in latitude 10°35′ S, longitude 141°55′ E
- thence to a point latitude 10°00′ S, longitude 142°00′ E
- thence to a point latitude 9°10′ S, longitude 143°52′ E
- thence to a point latitude 9°00′ S, longitude 144°30′ E
- thence to a point latitude 10°41′ S, longitude 145°00′ E
- thence to a point latitude 13°00′ S, longitude 145°00′ E
- thence to a point latitude 15°00′ S, longitude 146°00′ E
- thence to a point latitude 17°30′ S, longitude 147°00′ E
- thence to a point latitude 21°00′ S, longitude 152°55′ E
- thence to a point latitude 24°30′ S, longitude 154°00′ E
- thence to a point on the coast of Australia
- in latitude 24°42′ S, longitude 153°15′ E.
- 7 “Active Substance” means a substance or organism, including a virus or a fungus, that has a general or specific action on or against Harmful Aquatic Organisms and Pathogens.

FIRST SCHEDULE — *continued*

Regulation A-2

General Applicability

Except where expressly provided otherwise, the discharge of Ballast Water shall only be conducted through Ballast Water Management in accordance with the provisions of this Annex.

Regulation A-3

Exceptions

The requirements of regulation B-3, or any measures adopted by a Party pursuant to Article 2.3 and Section C, shall not apply to:

- 1 the uptake or discharge of Ballast Water and Sediments necessary for the purpose of ensuring the safety of a ship in emergency situations or saving life at sea; or
- 2 the accidental discharge or ingress of Ballast Water and Sediments resulting from damage to a ship or its equipment:
 - .1 provided that all reasonable precautions have been taken before and after the occurrence of the damage or discovery of the damage or discharge for the purpose of preventing or minimizing the discharge; and
 - .2 unless the owner, Company or officer in charge wilfully or recklessly caused damage; or
- 3 the uptake and discharge of Ballast Water and Sediments when being used for the purpose of avoiding or minimizing pollution incidents from the ship; or
- 4 the uptake and subsequent discharge on the high seas of the same Ballast Water and Sediments; or
- 5 the discharge of Ballast Water and Sediments from a ship at the same location where the whole of that Ballast Water and those Sediments originated and provided that no mixing with unmanaged Ballast Water and Sediments from other areas has occurred. If mixing has occurred, the Ballast Water taken from other areas is subject to Ballast Water Management in accordance with this Annex.

FIRST SCHEDULE — *continued*

Regulation A-4

Exemptions

- 1 A Party or Parties, in waters under their jurisdiction, may grant exemptions to any requirements to apply regulations B-3 or C-1, in addition to those exemptions contained elsewhere in this Convention, but only when they are:
 - .1 granted to a ship or ships on a voyage or voyages between specified ports or locations; or to a ship which operates exclusively between specified ports or locations;
 - .2 effective for a period of no more than five years subject to intermediate review;
 - .3 granted to ships that do not mix Ballast Water or Sediments other than between the ports or locations specified in paragraph 1.1; and
 - .4 granted based on the Guidelines on risk assessment developed by the Organization.
- 2 Exemptions granted pursuant to paragraph 1 shall not be effective until after communication to the Organization and circulation of relevant information to the Parties.
- 3 Any exemptions granted under this regulation shall not impair or damage the environment, human health, property or resources of adjacent or other States. Any State that the Party determines may be adversely affected shall be consulted, with a view to resolving any identified concerns.
- 4 Any exemptions granted under this regulation shall be recorded in the Ballast Water record book.

Regulation A-5

Equivalent compliance

Equivalent compliance with this Annex for pleasure craft used solely for recreation or competition or craft used primarily for search and rescue, less than 50 metres in length overall, and with a maximum Ballast Water capacity of 8 cubic metres, shall be determined by the Administration taking into account Guidelines developed by the Organization.

FIRST SCHEDULE — *continued*SECTION B — MANAGEMENT AND CONTROL
REQUIREMENTS FOR SHIPS

Regulation B-1

Ballast Water Management Plan

Each ship shall have on board and implement a Ballast Water Management plan. Such a plan shall be approved by the Administration taking into account Guidelines developed by the Organization. The Ballast Water Management plan shall be specific to each ship and shall at least:

- 1 detail safety procedures for the ship and the crew associated with Ballast Water Management as required by this Convention;
- 2 provide a detailed description of the actions to be taken to implement the Ballast Water Management requirements and supplemental Ballast Water Management practices as set forth in this Convention;
- 3 detail the procedures for the disposal of Sediments:
 - .1 at sea; and
 - .2 to shore;
- 4 include the procedures for coordinating shipboard Ballast Water Management that involves discharge to the sea with the authorities of the State into whose waters such discharge will take place;
- 5 designate the officer on board in charge of ensuring that the plan is properly implemented;
- 6 contain the reporting requirements for ships provided for under this Convention; and
- 7 be written in the working language of the ship. If the language used is not English, French or Spanish, a translation into one of these languages shall be included.

Regulation B-2

Ballast Water Record Book

- 1 Each ship shall have on board a Ballast Water record book that may be an electronic record system, or that may be integrated into another record book or system and, which shall at least contain the information specified in Appendix II.

FIRST SCHEDULE — *continued*

- 2 Ballast Water record book entries shall be maintained on board the ship for a minimum period of two years after the last entry has been made and thereafter in the Company's control for a minimum period of three years.
- 3 In the event of the discharge of Ballast Water pursuant to regulations A-3, A-4 or B-3.6 or in the event of other accidental or exceptional discharge of Ballast Water not otherwise exempted by this Convention, an entry shall be made in the Ballast Water record book describing the circumstances of, and the reason for, the discharge.
- 4 The Ballast Water record book shall be kept readily available for inspection at all reasonable times and, in the case of an unmanned ship under tow, may be kept on the towing ship.
- 5 Each operation concerning Ballast Water shall be fully recorded without delay in the Ballast Water record book. Each entry shall be signed by the officer in charge of the operation concerned and each completed page shall be signed by the master. The entries in the Ballast Water record book shall be in a working language of the ship. If that language is not English, French or Spanish the entries shall contain a translation into one of those languages. When entries in an official national language of the State whose flag the ship is entitled to fly are also used, these shall prevail in case of a dispute or discrepancy.
- 6 Officers duly authorized by a Party may inspect the Ballast Water record book on board any ship to which this regulation applies while the ship is in its port or offshore terminal, and may make a copy of any entry, and require the master to certify that the copy is a true copy. Any copy so certified shall be admissible in any judicial proceeding as evidence of the facts stated in the entry. The inspection of a Ballast Water record book and the taking of a certified copy shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

Regulation B-3

Ballast Water Management for Ships

- 1 A ship constructed before 2009:
 - .1 with a Ballast Water Capacity of between 1,500 and 5,000 cubic metres, inclusive, shall conduct Ballast Water Management that at least meets the standard described in regulation D-1 or regulation D-2 until 2014, after which time it shall at least meet the standard described in regulation D-2;
 - .2 with a Ballast Water Capacity of less than 1,500 or greater than 5,000 cubic metres shall conduct Ballast Water Management that at least meets the standard described in regulation D-1 or regulation D-2

FIRST SCHEDULE — *continued*

until 2016, after which time it shall at least meet the standard described in regulation D-2.

- 2 A ship to which paragraph 1 applies shall comply with paragraph 1 not later than the first intermediate or renewal survey, whichever occurs first, after the anniversary date of delivery of the ship in the year of compliance with the standard applicable to the ship.
- 3 A ship constructed in or after 2009 with a Ballast Water Capacity of less than 5,000 cubic metres shall conduct Ballast Water Management that at least meets the standard described in regulation D-2.
- 4 A ship constructed in or after 2009, but before 2012, with a Ballast Water Capacity of 5,000 cubic metres or more shall conduct Ballast Water Management in accordance with paragraph 1.2.
- 5 A ship constructed in or after 2012 with a Ballast Water Capacity of 5,000 cubic metres or more shall conduct Ballast Water Management that at least meets the standard described in regulation D-2.
- 6 The requirements of this regulation do not apply to ships that discharge Ballast Water to a reception facility designed taking into account the Guidelines developed by the Organization for such facilities.
- 7 Other methods of Ballast Water Management may also be accepted as alternatives to the requirements described in paragraphs 1 to 5, provided that such methods ensure at least the same level of protection to the environment, human health, property or resources, and are approved in principle by the Committee.

Regulation B-4

Ballast Water Exchange

- 1 A ship conducting Ballast Water exchange to meet the standard in regulation D-1 shall:
 - .1 whenever possible, conduct such Ballast Water exchange at least 200 nautical miles from the nearest land and in water at least 200 metres in depth, taking into account the Guidelines developed by the Organization;
 - .2 in cases where the ship is unable to conduct Ballast Water exchange in accordance with paragraph 1.1, such Ballast Water exchange shall be conducted taking into account the Guidelines described in paragraph 1.1 and as far from the nearest land as possible, and in all cases at least

FIRST SCHEDULE — *continued*

50 nautical miles from the nearest land and in water at least 200 metres in depth.

- 2 In sea areas where the distance from the nearest land or the depth does not meet the parameters described in paragraph 1.1 or 1.2, the port State may designate areas, in consultation with adjacent or other States, as appropriate, where a ship may conduct Ballast Water exchange, taking into account the Guidelines described in paragraph 1.1.
- 3 A ship shall not be required to deviate from its intended voyage, or delay the voyage, in order to comply with any particular requirement of paragraph 1.
- 4 A ship conducting Ballast Water exchange shall not be required to comply with paragraphs 1 or 2, as appropriate, if the master reasonably decides that such exchange would threaten the safety or stability of the ship, its crew, or its passengers because of adverse weather, ship design or stress, equipment failure, or any other extraordinary condition.
- 5 When a ship is required to conduct Ballast Water exchange and does not do so in accordance with this regulation, the reasons shall be entered in the Ballast Water record book.

Regulation B-5

Sediment Management for Ships

- 1 All ships shall remove and dispose of Sediments from spaces designated to carry Ballast Water in accordance with the provisions of the ship's Ballast Water Management plan.
- 2 Ships described in regulation B-3.3 to B-3.5 should, without compromising safety or operational efficiency, be designed and constructed with a view to minimize the uptake and undesirable entrapment of Sediments, facilitate removal of Sediments, and provide safe access to allow for Sediment removal and sampling, taking into account guidelines developed by the Organization. Ships described in regulation B-3.1 should, to the extent practicable, comply with this paragraph.

Regulation B-6

Duties of Officers and Crew

Officers and crew shall be familiar with their duties in the implementation of Ballast Water Management particular to the ship on which they serve and shall, appropriate to their duties, be familiar with the ship's Ballast Water Management plan.

FIRST SCHEDULE — *continued*

SECTION C — SPECIAL REQUIREMENTS IN CERTAIN AREAS

Regulation C-1

Additional Measures

- 1 If a Party, individually or jointly with other Parties, determines that measures in addition to those in Section B are necessary to prevent, reduce, or eliminate the transfer of Harmful Aquatic Organisms and Pathogens through ships' Ballast Water and Sediments, such Party or Parties may, consistent with international law, require ships to meet a specified standard or requirement.
- 2 Prior to establishing standards or requirements under paragraph 1, a Party or Parties should consult with adjacent or other States that may be affected by such standards or requirements.
- 3 A Party or Parties intending to introduce additional measures in accordance with paragraph 1 shall:
 - .1 take into account the Guidelines developed by the Organization.
 - .2 communicate their intention to establish additional measure(s) to the Organization at least 6 months, except in emergency or epidemic situations, prior to the projected date of implementation of the measure(s). Such communication shall include:
 - .1 the precise co-ordinates where additional measure(s) is/are applicable;
 - .2 the need and reasoning for the application of the additional measure(s), including, whenever possible, benefits;
 - .3 a description of the additional measure(s); and
 - .4 any arrangements that may be provided to facilitate ships' compliance with the additional measure(s).
 - .3 to the extent required by customary international law as reflected in the United Nations Convention on the Law of the Sea, as appropriate, obtain the approval of the Organization.
- 4 A Party or Parties, in introducing such additional measures, shall endeavour to make available all appropriate services, which may include but are not limited to notification to mariners of areas, available and alternative routes or ports, as far as practicable, in order to ease the burden on the ship.
- 5 Any additional measures adopted by a Party or Parties shall not compromise the safety and security of the ship and in any circumstances not conflict with any other convention with which the ship must comply.

FIRST SCHEDULE — *continued*

- 6 A Party or Parties introducing additional measures may waive these measures for a period of time or in specific circumstances as they deem fit.

Regulation C-2

*Warnings Concerning Ballast Water Uptake in
Certain Areas and Related Flag State Measures*

- 1 A Party shall endeavour to notify mariners of areas under their jurisdiction where ships should not uptake Ballast Water due to known conditions. The Party shall include in such notices the precise coordinates of the area or areas, and, where possible, the location of any alternative area or areas for the uptake of Ballast Water. Warnings may be issued for areas:
- .1 known to contain outbreaks, infestations, or populations of Harmful Aquatic Organisms and Pathogens (e.g., toxic algal blooms) which are likely to be of relevance to Ballast Water uptake or discharge;
 - .2 near sewage outfalls; or
 - .3 where tidal flushing is poor or times during which a tidal stream is known to be more turbid.
- 2 In addition to notifying mariners of areas in accordance with the provisions of paragraph 1, a Party shall notify the Organization and any potentially affected coastal States of any areas identified in paragraph 1 and the time period such warning is likely to be in effect. The notice to the Organization and any potentially affected coastal States shall include the precise coordinates of the area or areas, and, where possible, the location of any alternative area or areas for the uptake of Ballast Water. The notice shall include advice to ships needing to uptake Ballast Water in the area, describing arrangements made for alternative supplies. The Party shall also notify mariners, the Organization, and any potentially affected coastal States when a given warning is no longer applicable.

Regulation C-3

Communication of Information

The Organization shall make available, through any appropriate means, information communicated to it under regulations C-1 and C-2.

FIRST SCHEDULE — *continued*SECTION D — STANDARDS FOR BALLAST
WATER MANAGEMENT

Regulation D-1

Ballast Water Exchange Standard

- 1 Ships performing Ballast Water exchange in accordance with this regulation shall do so with an efficiency of at least 95 percent volumetric exchange of Ballast Water.
- 2 For ships exchanging Ballast Water by the pumping-through method, pumping through three times the volume of each Ballast Water tank shall be considered to meet the standard described in paragraph 1. Pumping through less than three times the volume may be accepted provided the ship can demonstrate that at least 95 percent volumetric exchange is met.

Regulation D-2

Ballast Water Performance Standard

- 1 Ships conducting Ballast Water Management in accordance with this regulation shall discharge less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension and less than 10 viable organisms per millilitre less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimension; and discharge of the indicator microbes shall not exceed the specified concentrations described in paragraph 2.
- 2 Indicator microbes, as a human health standard, shall include:
 - .1 Toxicogenic *Vibrio cholerae* (O1 and O139) with less than 1 colony forming unit (cfu) per 100 millilitres or less than 1 cfu per 1 gram (wet weight) zooplankton samples;
 - .2 *Escherichia coli* less than 250 cfu per 100 millilitres;
 - .3 Intestinal Enterococci less than 100 cfu per 100 millilitres.

Regulation D-3

Approval requirements for Ballast Water Management systems

- 1 Except as specified in paragraph 2, Ballast Water Management systems used to comply with this Convention must be approved by the Administration taking into account Guidelines developed by the Organization.

FIRST SCHEDULE — *continued*

- 2 Ballast Water Management systems which make use of Active Substances or preparations containing one or more Active Substances to comply with this Convention shall be approved by the Organization, based on a procedure developed by the Organization. This procedure shall describe the approval and withdrawal of approval of Active Substances and their proposed manner of application. At withdrawal of approval, the use of the relevant Active Substance or Substances shall be prohibited within 1 year after the date of such withdrawal.
- 3 Ballast Water Management systems used to comply with this Convention must be safe in terms of the ship, its equipment and the crew.

Regulation D-4

Prototype Ballast Water Treatment Technologies

- 1 For any ship that, prior to the date that the standard in regulation D-2 would otherwise become effective for it, participates in a programme approved by the Administration to test and evaluate promising Ballast Water treatment technologies, the standard in regulation D-2 shall not apply to that ship until five years from the date on which the ship would otherwise be required to comply with such standard.
- 2 For any ship that, after the date on which the standard in regulation D-2 has become effective for it, participates in a programme approved by the Administration, taking into account Guidelines developed by the Organization, to test and evaluate promising Ballast Water technologies with the potential to result in treatment technologies achieving a standard higher than that in regulation D-2, the standard in regulation D-2 shall cease to apply to that ship for five years from the date of installation of such technology.
- 3 In establishing and carrying out any programme to test and evaluate promising Ballast Water technologies, Parties shall:
 - .1 take into account Guidelines developed by the Organization, and
 - .2 allow participation only by the minimum number of ships necessary to effectively test such technologies.
- 4 Throughout the test and evaluation period, the treatment system must be operated consistently and as designed.

FIRST SCHEDULE — *continued*

Regulation D-5

Review of Standards by the Organization

- 1 At a meeting of the Committee held no later than three years before the earliest effective date of the standard set forth in regulation D-2, the Committee shall undertake a review which includes a determination of whether appropriate technologies are available to achieve the standard, an assessment of the criteria in paragraph 2, and an assessment of the socio-economic effect(s) specifically in relation to the developmental needs of developing countries, particularly small island developing States. The Committee shall also undertake periodic reviews, as appropriate, to examine the applicable requirements for ships described in regulation B-3.1 as well as any other aspect of Ballast Water Management addressed in this Annex, including any Guidelines developed by the Organization.
- 2 Such reviews of appropriate technologies shall also take into account:
 - .1 safety considerations relating to the ship and the crew;
 - .2 environmental acceptability, i.e., not causing more or greater environmental impacts than they solve;
 - .3 practicability, i.e., compatibility with ship design and operations;
 - .4 cost effectiveness, i.e., economics; and
 - .5 biological effectiveness in terms of removing, or otherwise rendering not viable, Harmful Aquatic Organisms and Pathogens in Ballast Water.
- 3 The Committee may form a group or groups to conduct the review(s) described in paragraph 1. The Committee shall determine the composition, terms of reference and specific issues to be addressed by any such group formed. Such groups may develop and recommend proposals for amendment of this Annex for consideration by the Parties. Only Parties may participate in the formulation of recommendations and amendment decisions taken by the Committee.
- 4 If, based on the reviews described in this regulation, the Parties decide to adopt amendments to this Annex, such amendments shall be adopted and enter into force in accordance with the procedures contained in Article 19 of this Convention.

FIRST SCHEDULE — *continued*SECTION E — SURVEY AND CERTIFICATION REQUIREMENTS
FOR BALLAST WATER MANAGEMENT

Regulation E-1

Surveys

- 1 Ships of 400 gross tonnage and above to which this Convention applies, excluding floating platforms, FSUs and FPSOs, shall be subject to surveys specified below:
 - .1 An initial survey before the ship is put in service or before the Certificate required under regulation E-2 or E-3 is issued for the first time. This survey shall verify that the Ballast Water Management plan required by regulation B-1 and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the requirements of this Convention.
 - .2 A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation E-5.2, E-5.5, E-5.6, or E-5.7 is applicable. This survey shall verify that the Ballast Water Management plan required by regulation B-1 and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the applicable requirements of this Convention.
 - .3 An intermediate survey within three months before or after the second Anniversary date or within three months before or after the third Anniversary date of the Certificate, which shall take the place of one of the annual surveys specified in paragraph 1.4. The intermediate surveys shall ensure that the equipment, associated systems and processes for Ballast Water Management fully comply with the applicable requirements of this Annex and are in good working order. Such intermediate surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.
 - .4 An annual survey within three months before or after each Anniversary date, including a general inspection of the structure, any equipment, systems, fittings, arrangements and material or processes associated with the Ballast Water Management plan required by regulation B-1 to ensure that they have been maintained in accordance with paragraph 9 and remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.

FIRST SCHEDULE — *continued*

- .5 An additional survey either general or partial, according to the circumstances, shall be made after a change, replacement, or significant repair of the structure, equipment, systems, fittings, arrangements and material necessary to achieve full compliance with this Convention. The survey shall be such as to ensure that any such change, replacement, or significant repair has been effectively made, so that the ship complies with the requirements of this Convention. Such surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.
- 2 The Administration shall establish appropriate measures for ships that are not subject to the provisions of paragraph 1 in order to ensure that the applicable provisions of this Convention are complied with.
- 3 Surveys of ships for the purpose of enforcement of the provisions of this Convention shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.
- 4 An Administration nominating surveyors or recognizing organizations to conduct surveys, as described in paragraph 3 shall, as a minimum, empower such nominated surveyors or recognized organizations² to:
 - .1 require a ship that they survey to comply with the provisions of this Convention; and
 - .2 carry out surveys and inspections if requested by the appropriate authorities of a port State that is a Party.
- 5 The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties for the information of their officers.
- 6 When the Administration, a nominated surveyor, or a recognized organization determines that the ship's Ballast Water Management does not conform to the particulars of the Certificate required under regulation E-2 or E-3 or is such that the ship is not fit to proceed to sea without presenting a threat of harm to the environment, human health, property or resources such surveyor or organization shall immediately ensure that corrective action is taken to bring the ship into compliance. A surveyor or organization shall be notified immediately, and it shall ensure that the Certificate is not issued or is withdrawn as appropriate. If the ship is in the port of another Party, the

² Refer to the guidelines adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the specifications adopted by the Organization by resolution A.789(19), as may be amended by the Organization.

FIRST SCHEDULE — *continued*

appropriate authorities of the port State shall be notified immediately. When an officer of the Administration, a nominated surveyor, or a recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this regulation, including any action described in Article 9.

- 7 Whenever an accident occurs to a ship or a defect is discovered which substantially affects the ability of the ship to conduct Ballast Water Management in accordance with this Convention, the owner, operator or other person in charge of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph 1 is necessary. If the ship is in a port of another Party, the owner, operator or other person in charge shall also report immediately to the appropriate authorities of the port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.
- 8 In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and shall undertake to ensure the necessary arrangements to satisfy this obligation.
- 9 The condition of the ship and its equipment, systems and processes shall be maintained to conform with the provisions of this Convention to ensure that the ship in all respects will remain fit to proceed to sea without presenting a threat of harm to the environment, human health, property or resources.
- 10 After any survey of the ship under paragraph 1 has been completed, no change shall be made in the structure, any equipment, fittings, arrangements or material associated with the Ballast Water Management plan required by regulation B-1 and covered by the survey without the sanction of the Administration, except the direct replacement of such equipment or fittings.

Regulation E-2

Issuance or Endorsement of a Certificate

- 1 The Administration shall ensure that a ship to which regulation E-1 applies is issued a Certificate after successful completion of a survey conducted in accordance with regulation E-1. A Certificate issued under the authority of a Party shall be accepted by the other Parties and regarded for all purposes covered by this Convention as having the same validity as a Certificate issued by them.

FIRST SCHEDULE — *continued*

- 2 Certificates shall be issued or endorsed either by the Administration or by any person or organization duly authorized by it. In every case, the Administration assumes full responsibility for the Certificate.

Regulation E-3

Issuance or Endorsement of a Certificate by Another Party

- 1 At the request of the Administration, another Party may cause a ship to be surveyed and, if satisfied that the provisions of this Convention are complied with, shall issue or authorize the issuance of a Certificate to the ship, and where appropriate, endorse or authorize the endorsement of that Certificate on the ship, in accordance with this Annex.
- 2 A copy of the Certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.
- 3 A Certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as a Certificate issued by the Administration.
- 4 No Certificate shall be issued to a ship entitled to fly the flag of a State which is not a Party.

Regulation E-4

Form of the Certificate

The Certificate shall be drawn up in the official language of the issuing Party, in the form set forth in Appendix I. If the language used is neither English, French nor Spanish, the text shall include a translation into one of these languages.

Regulation E-5

Duration and Validity of the Certificate

- 1 A Certificate shall be issued for a period specified by the Administration that shall not exceed five years.
- 2 For renewal surveys:
 - .1 Notwithstanding the requirements of paragraph 1, when the renewal survey is completed within three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.

FIRST SCHEDULE — *continued*

- .2 When the renewal survey is completed after the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.
 - .3 When the renewal survey is completed more than three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of completion of the renewal survey.
- 3 If a Certificate is issued for a period of less than five years, the Administration may extend the validity of the Certificate beyond the expiry date to the maximum period specified in paragraph 1, provided that the surveys referred to in regulation E-1.1.3 applicable when a Certificate is issued for a period of five years are carried out as appropriate.
- 4 If a renewal survey has been completed and a new Certificate cannot be issued or placed on board the ship before the expiry date of the existing Certificate, the person or organization authorized by the Administration may endorse the existing Certificate and such a Certificate shall be accepted as valid for a further period which shall not exceed five months from the expiry date.
- 5 If a ship at the time when the Certificate expires is not in a port in which it is to be surveyed, the Administration may extend the period of validity of the Certificate but this extension shall be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed, and then only in cases where it appears proper and reasonable to do so. No Certificate shall be extended for a period longer than three months, and a ship to which such extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.
- 6 A Certificate issued to a ship engaged on short voyages which has not been extended under the foregoing provisions of this regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.
- 7 In special circumstances, as determined by the Administration, a new Certificate need not be dated from the date of expiry of the existing Certificate as required by paragraph 2.2, 5 or 6 of this regulation. In these

FIRST SCHEDULE — *continued*

special circumstances, the new Certificate shall be valid to a date not exceeding five years from the date of completion of the renewal survey.

- 8 If an annual survey is completed before the period specified in regulation E-1, then:
- .1 the Anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than three months later than the date on which the survey was completed;
 - .2 the subsequent annual or intermediate survey required by regulation E-1 shall be completed at the intervals prescribed by that regulation using the new Anniversary date;
 - .3 the expiry date may remain unchanged provided one or more annual surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by regulation E-1 are not exceeded.
- 9 A Certificate issued under regulation E-2 or E-3 shall cease to be valid in any of the following cases:
- .1 if the structure, equipment, systems, fittings, arrangements and material necessary to comply fully with this Convention is changed, replaced or significantly repaired and the Certificate is not endorsed in accordance with this Annex;
 - .2 upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Party issuing the new Certificate is fully satisfied that the ship is in compliance with the requirements of regulation E-1. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Party whose flag the ship was formerly entitled to fly shall, as soon as possible, transmit to the Administration copies of the Certificates carried by the ship before the transfer and, if available, copies of the relevant survey reports;
 - .3 if the relevant surveys are not completed within the periods specified under regulation E-1.1; or
 - .4 if the Certificate is not endorsed in accordance with regulation E-1.1.

FIRST SCHEDULE — *continued*

APPENDIX I

FORM OF INTERNATIONAL BALLAST
WATER MANAGEMENT CERTIFICATE

INTERNATIONAL BALLAST WATER MANAGEMENT CERTIFICATE

Issued under the provisions of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (hereinafter referred to as "the Convention") under the authority of the Government of

.....
(*full designation of the country*)

by
(*full designation of the competent person or organization authorized under the provisions of the Convention*)

Particulars of ship¹

Name of ship

Distinctive number or letters

Port of registry

Gross Tonnage

IMO number²

Date of construction

Ballast Water Capacity (in cubic metres)

Details of Ballast Water Management Method(s) Used

Method of Ballast Water Management used

Date installed (if applicable)

Name of manufacturer (if applicable)

¹ Alternatively, the particulars of the ship may be placed horizontally in boxes.

² IMO Ship Identification Number Scheme adopted by the Organization by resolution A.600(15).

FIRST SCHEDULE — *continued*

The principal Ballast Water Management method(s) employed on this ship is/are:

- in accordance with regulation D-1
- in accordance with regulation D-2
(describe)
- the ship is subject to regulation D-4

THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with regulation E-1 of the Annex to the Convention; and
- 2 That the survey shows that Ballast Water Management on the ship complies with the Annex to the Convention.

This certificate is valid until subject to surveys in accordance with regulation E-1 of the Annex to the Convention.

Completion date of the survey on which this certificate is based: dd/mm/yyyy

Issued at
(Place of issue of certificate)

.....
(Date of issue)

.....
(Signature of authorized official
issuing the certificate)

(Seal or stamp of the authority, as appropriate)

FIRST SCHEDULE — *continued*

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEY(S)

THIS IS TO CERTIFY that a survey required by regulation E-1 of the Annex to the Convention the ship was found to comply with the relevant provisions of the Convention:

Annual survey: Signed.....
(Signature of duly authorized official)
Place.....
Date.....
(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed.....
(Signature of duly authorized official)
Place.....
Date.....
(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed.....
(Signature of duly authorized official)
Place.....
Date.....
(Seal or stamp of the authority, as appropriate)

Annual survey: Signed.....
(Signature of duly authorized official)
Place.....
Date.....
(Seal or stamp of the authority, as appropriate)

* Delete as appropriate.

FIRST SCHEDULE — *continued*ANNUAL/INTERMEDIATE SURVEY
IN ACCORDANCE WITH REGULATION E-5.8.3

THIS IS TO CERTIFY that, at an annual/intermediate* survey in accordance with regulation E-5.8.3 of the Annex to the Convention, the ship was found to comply with the relevant provisions of the Convention:

Signed.....

(Signature of authorized official)

Place.....

Date.....

*(Seal or stamp of the authority, as appropriate)*ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID
FOR LESS THAN 5 YEARS WHERE REGULATION E-5.3 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation E-5.3 of the Annex to the Convention, be accepted as valid until.....

Signed.....

(Signature of authorized official)

Place.....

Date.....

*(Seal or stamp of the authority, as appropriate)*ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN
COMPLETED AND REGULATION E-5.4 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation E-5.4 of the Annex to the Convention, be accepted as valid until.....

Signed.....

(Signature of authorized official)

Place.....

Date.....

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate.

FIRST SCHEDULE — *continued*

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE
UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD
OF GRACE WHERE REGULATION E-5.5 OR E-5.6 APPLIES

This Certificate shall, in accordance with regulation E-5.5 or E-5.6* of the Annex to the Convention, be accepted as valid until

Signed.....
(Signature of authorized official)

Place.....

Date.....

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE
WHERE REGULATION E-5.8 APPLIES

In accordance with regulation E-5.8 of the Annex to the Convention the new Anniversary date is

Signed.....
(Signature of authorized official)

Place.....

Date.....

(Seal or stamp of the authority, as appropriate)

In accordance with regulation E-5.8 of the Annex to the Convention the new Anniversary date is

Signed.....
(Signature of authorized official)

Place.....

Date.....

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate.

FIRST SCHEDULE — *continued*

APPENDIX II

FORM OF BALLAST WATER RECORD BOOK

INTERNATIONAL CONVENTION FOR THE CONTROL AND
MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS

Period From: To:

Name of Ship

IMO number

Gross tonnage

Flag

Total Ballast Water capacity (in cubic metres)

The ship is provided with a Ballast Water Management plan

Diagram of ship indicating ballast tanks:

1 Introduction

In accordance with regulation B-2 of the Annex to the International Convention for the Control and Management of Ships' Ballast Water and Sediments, a record is to be kept of each Ballast Water operation. This includes discharges at sea and to reception facilities.

2 Ballast Water and Ballast Water Management

“Ballast Water” means water with its suspended matter taken on board a ship to control trim, list, draught, stability, or stresses of a ship. Management of Ballast Water shall be in accordance with an approved Ballast Water Management plan and taking into account Guidelines³ developed by the Organization.

³ Refer to the Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens adopted by the Organization by resolution A.868(20).

FIRST SCHEDULE — *continued***3 Entries in the Ballast Water Record Book**

Entries in the Ballast Water record book shall be made on each of the following occasions:

- 3.1 When Ballast Water is taken on board:
 - .1 Date, time and location port or facility of uptake (port or lat/long), depth if outside port
 - .2 Estimated volume of uptake in cubic metres
 - .3 Signature of the officer in charge of the operation.
- 3.2 Whenever Ballast Water is circulated or treated for Ballast Water Management purposes:
 - .1 Date and time of operation
 - .2 Estimated volume circulated or treated (in cubic metres)
 - .3 Whether conducted in accordance with the Ballast Water Management plan
 - .4 Signature of the officer in charge of the operation
- 3.3 When Ballast Water is discharged into the sea:
 - .1 Date, time and location port or facility of discharge (port or lat/long)
 - .2 Estimated volume discharged in cubic metres plus remaining volume in cubic metres
 - .3 Whether approved Ballast Water Management plan had been implemented prior to discharge
 - .4 Signature of the officer in charge of the operation.
- 3.4 When Ballast Water is discharged to a reception facility:
 - .1 Date, time, and location of uptake
 - .2 Date, time, and location of discharge
 - .3 Port or facility
 - .4 Estimated volume discharged or taken up, in cubic metres
 - .5 Whether approved Ballast Water Management plan had been implemented prior to discharge
 - .6 Signature of officer in charge of the operation

FIRST SCHEDULE — *continued*

- 3.5 Accidental or other exceptional uptake or discharges of Ballast Water:
- .1 Date and time of occurrence
 - .2 Port or position of the ship at time of occurrence
 - .3 Estimated volume of Ballast Water discharged
 - .4 Circumstances of uptake, discharge, escape or loss, the reason therefore and general remarks.
 - .5 Whether approved Ballast Water Management plan had been implemented prior to discharge
 - .6 Signature of officer in charge of the operation
- 3.6 Additional operational procedure and general remarks

4 Volume of Ballast Water

The volume of Ballast Water onboard should be estimated in cubic metres. The Ballast Water record book contains many references to estimated volume of Ballast Water. It is recognized that the accuracy of estimating volumes of ballast is left to interpretation.

FIRST SCHEDULE — *continued*
RECORD OF BALLAST WATER OPERATIONS
SAMPLE BALLAST WATER RECORD BOOK PAGE

Name of Ship:

Distinctive number or letters

Date	Item (number)	Record of operations/signature of officers in charge

Signature of master

SECOND SCHEDULE

Regulations 3(1)(b) and (2), 4(5), (6)(a)
and (b), 5(2), 6(2), 7(2), 8(1) and (2)
and 16(6)

Regulation B-3

Ballast Water Management for Ships

- 1 A ship constructed before 2009:
 - .1 with a ballast water capacity of between 1,500 and 5,000 cubic metres, inclusive, shall conduct ballast water management that at least meets the standard described in regulation D-1 or regulation D-2 until the renewal survey described in paragraph 10, after which time it shall at least meet the standard described in regulation D-2;
 - .2 with a ballast water capacity of less than 1,500 or greater than 5,000 cubic metres shall conduct ballast water management that at least meets the standard described in regulation D-1 or regulation D-2 until the renewal survey described in paragraph 10 after which time it shall at least meet the standard described in regulation D-2.
- 2 A ship constructed in or after 2009 and before 8 September 2017 with a ballast water capacity of less than 5,000 cubic metres shall conduct ballast water management that at least meets the standard described in regulation D-2 from the date of the renewal survey described in paragraph 10.
- 3 A ship constructed in or after 2009, but before 2012, with a ballast water capacity of 5,000 cubic metres or more shall conduct ballast water management in accordance with paragraph 1.2.
- 4 A ship constructed in or after 2012 and before 8 September 2017 with a ballast water capacity of 5,000 cubic metres or more shall conduct ballast water management that at least meets the standard described in regulation D-2 from the date of the renewal survey described in paragraph 10.
- 5 A ship constructed on or after 8 September 2017 shall conduct ballast water management that at least meets the standard described in regulation D-2.
- 6 The requirements of this regulation do not apply to ships that discharge ballast water to a reception facility designed taking into account the Guidelines developed by the Organization for such facilities.

SECOND SCHEDULE — *continued*

- 7 Other methods of ballast water management may also be accepted as alternatives to the requirements described in paragraphs 1 to 5 and paragraph 8, provided that such methods ensure at least the same level of protection to the environment, human health, property or resources, and are approved in principle by the Committee.
- 8 A ship constructed before 8 September 2017 to which the renewal survey described in paragraph 10 does not apply, shall conduct ballast water management that at least meets the standard described in regulation D-2 from the date decided by the Administration, but not later than 8 September 2024.
- 9 A ship subject to paragraphs 2, 4 or 8 will be required to comply with either regulation D-1 or regulation D-2, until such time as it is required to comply with regulation D-2.
- 10 Notwithstanding regulation E-1.1.2, the renewal survey referred to in paragraph 1.1, 1.2, 2 or 4 is:
 - .1 the first renewal survey as determined by the Committee following the date of entry into force of the Ballast Water Management Convention if:
 - .1 this survey is completed on or after 8 September 2019; or
 - .2 a renewal survey is completed on or after 8 September 2014 but prior to 8 September 2017; and
 - .2 the second renewal survey as determined by the Committee following the date of entry into force of the Ballast Water Management Convention if the first renewal survey following the date of entry into force of the Ballast Water Management Convention is completed prior to 8 September 2019, provided that the conditions of paragraph 10.1.2 are not met.

THIRD SCHEDULE

Regulations 3(1)(b) and (2), 4(1), (2),
(3) and (6)(c), 9, 10(2) and (3), 13(1)(b),
14(2)(a), (5)(c)(ii) and (8)(b), 15(1)(b)
and 16(1)(d) and (2)

Regulation E-1

Surveys

- 1 Ships of 400 gross tonnage and above to which this Convention applies, excluding floating platforms, FSUs and FPSOs, shall be subject to surveys specified below:
 - .1 An initial survey before the ship is put in service or before the Certificate required under regulation E-2 or E-3 is issued for the first time. This survey shall verify that the Ballast Water Management plan required by regulation B-1 and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the requirements of this Convention.
 - .2 A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation E-5.2, E-5.5, E-5.6, or E-5.7 is applicable. This survey shall verify that the Ballast Water Management plan required by regulation B-1 and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the applicable requirements of this Convention.
 - .3 An intermediate survey within three months before or after the second Anniversary date or within three months before or after the third Anniversary date of the Certificate, which shall take the place of one of the annual surveys specified in paragraph 1.4. The intermediate surveys shall ensure that the equipment, associated systems and processes for Ballast Water Management fully comply with the applicable requirements of this Annex and are in good working order. Such intermediate surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.
 - .4 An annual survey within three months before or after each Anniversary date, including a general inspection of the structure, any equipment, systems, fittings, arrangements and material or processes associated with the Ballast Water Management plan required by regulation B-1 to ensure that they have been maintained in accordance with paragraph 9 and remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.

THIRD SCHEDULE — *continued*

- .5 An additional survey, either general or partial, according to the circumstances, shall be made after a change, replacement, or significant repair of the structure, equipment, systems, fittings, arrangements and material necessary to achieve full compliance with this Convention. The survey shall be such as to ensure that any such change, replacement, or significant repair has been effectively made, so that the ship complies with the requirements of this Convention.
- 2 The Administration shall establish appropriate measures for ships that are not subject to the provisions of paragraph 1 in order to ensure that the applicable provisions of this Convention are complied with.
- 3 Surveys of ships for the purpose of enforcement of the provisions of this Convention shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.
- 4 An Administration nominating surveyors or recognizing organizations to conduct surveys, as described in paragraph 3 shall, as a minimum, empower such nominated surveyors or recognized organizations to:
 - .1 require a ship that they survey to comply with the provisions of this Convention; and
 - .2 carry out surveys and inspections if requested by the appropriate authorities of a port State that is a Party.
- 5 The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties for the information of their officers.
- 6 When the Administration, a nominated surveyor, or a recognized organization determines that the ship's Ballast Water Management does not conform to the particulars of the Certificate required under regulation E-2 or E-3 or is such that the ship is not fit to proceed to sea without presenting a threat of harm to the environment, human health, property or resources, such surveyor or organization shall immediately ensure that corrective action is taken to bring the ship into compliance. A surveyor or organization shall be notified immediately, and it shall ensure that the Certificate is not issued or is withdrawn as appropriate. If the ship is in the port of another Party, the appropriate authorities of the port State shall be notified immediately. When an officer of the Administration, a nominated surveyor, or a recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or

THIRD SCHEDULE — *continued*

organization any necessary assistance to carry out their obligations under this regulation, including any action described in Article 9.

- 7 Whenever an accident occurs to a ship or a defect is discovered which substantially affects the ability of the ship to conduct Ballast Water Management in accordance with this Convention, the owner, operator or other person in charge of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph 1 is necessary. If the ship is in a port of another Party, the owner, operator or other person in charge shall also report immediately to the appropriate authorities of the port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.
- 8 In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and shall undertake to ensure the necessary arrangements to satisfy this obligation.
- 9 The condition of the ship and its equipment, systems and processes shall be maintained to conform with the provisions of this Convention to ensure that the ship in all respects will remain fit to proceed to sea without presenting a threat of harm to the environment, human health, property or resources.
- 10 After any survey of the ship under paragraph 1 has been completed, no change shall be made in the structure, any equipment, fittings, arrangements or material associated with the Ballast Water Management plan required by regulation B-1 and covered by the survey without the sanction of the Administration, except the direct replacement of such equipment or fittings.

Regulation E-5

Duration and Validity of the Certificate

- 1 A Certificate shall be issued for a period specified by the Administration that shall not exceed five years.
- 2 For renewal surveys:
 - .1 Notwithstanding the requirements of paragraph 1, when the renewal survey is completed within three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.

THIRD SCHEDULE — *continued*

- .2 When the renewal survey is completed after the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.
 - .3 When the renewal survey is completed more than three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of completion of the renewal survey.
- 3 If a Certificate is issued for a period of less than five years, the Administration may extend the validity of the Certificate beyond the expiry date to the maximum period specified in paragraph 1, provided that the surveys referred to in regulation E-1.1.3 applicable when a Certificate is issued for a period of five years are carried out as appropriate.
- 4 If a renewal survey has been completed and a new Certificate cannot be issued or placed on board the ship before the expiry date of the existing Certificate, the person or organization authorized by the Administration may endorse the existing Certificate and such a Certificate shall be accepted as valid for a further period which shall not exceed five months from the expiry date.
- 5 If a ship at the time when the Certificate expires is not in a port in which it is to be surveyed, the Administration may extend the period of validity of the Certificate, but this extension shall be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed, and then only in cases where it appears proper and reasonable to do so. No Certificate shall be extended for a period longer than three months, and a ship to which such extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.
- 6 A Certificate issued to a ship engaged on short voyages which has not been extended under the foregoing provisions of this regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.

THIRD SCHEDULE — *continued*

- 7 In special circumstances, as determined by the Administration, a new Certificate need not be dated from the date of expiry of the existing Certificate as required by paragraph 2.2, 5 or 6 of this regulation. In these special circumstances, the new Certificate shall be valid to a date not exceeding five years from the date of completion of the renewal survey.
- 8 If an annual or intermediate survey(s) is completed before the period specified in regulation E-1, then:
- .1 the Anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than three months later than the date on which the survey was completed;
 - .2 the subsequent annual or intermediate survey required by regulation E-1 shall be completed at the intervals prescribed by that regulation using the new Anniversary date;
 - .3 the expiry date may remain unchanged provided one or more annual or intermediate surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by regulation E-1 are not exceeded.
- 9 A Certificate issued under regulation E-2 or E-3 shall cease to be valid in any of the following cases:
- .1 upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Party issuing the new Certificate is fully satisfied that the ship is in compliance with the requirements of regulation E-1. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Party whose flag the ship was formerly entitled to fly shall, as soon as possible, transmit to the Administration copies of the Certificates carried by the ship before the transfer and, if available, copies of the relevant survey reports;
 - .2 if the relevant surveys are not completed within the periods specified under regulation E-1.1; or
 - .3 if the Certificate is not endorsed in accordance with regulation E-1.1.

FOURTH SCHEDULE

Regulation 17

FEES

*First column**Second column*

1. Conducting —

- (a) review of plans, drawings, records, manuals, specifications, calculations, arrangements and details of ballast water management systems, materials, machinery, equipment, and processing of applications for exemption, for IBWM Certificates and extension of certificates, and for ballast water management plans:
- (i) per hour or part thereof; \$100
 - (ii) transport for each visit by the inspector within Singapore, if required; \$40
- (b) inspection or survey (initial, annual, intermediate, renewal and additional) full or partial, conducted in Singapore during office hours:
- (i) per hour or part thereof; \$100
 - (ii) transport for each visit by the inspector within Singapore, if required; \$40
- (c) type approval of ballast water management systems conducted within Singapore (in addition to the fee prescribed under item 6):
- (i) per hour or part thereof; \$100
 - (ii) transport for each visit by the inspector within Singapore, if required; or \$40

FOURTH SCHEDULE — *continued*

<i>First column</i>	<i>Second column</i>
(d) type approval of ballast water management systems conducted abroad (in addition to the fee prescribed under item 6):	
(i) first 24 hours or part thereof during which the inspector is absent from Singapore on account of such type approval;	\$1,000
(ii) each subsequent hour or part thereof after the first 24 hours, subject to a maximum charge of \$1,000 for each period of 24 hours;	\$100
(iii) travelling, taxation, fee for a visa if required and any expenses incurred arising from the type approval abroad;	Actual cost
(iv) board, lodging, insurance coverage and reasonable subsistence for the inspector	Sum to be determined by the Director in accordance with Government Instruction Manual
2. Inspection or survey (initial, annual, intermediate, renewal and additional) full or partial conducted in Singapore outside office hours:	
(a) first hour or part thereof;	\$200
(b) each additional 30 minutes or part thereof;	\$100
(c) transport for each visit by the inspector within Singapore, if required	\$40
3. Inspection or survey (initial, annual, intermediate, renewal and additional) full or partial conducted abroad:	
(a) first 24 hours or part thereof during which the inspector is absent from Singapore on account of such survey or inspection;	\$1,000
(b) each subsequent hour or part thereof after the first 24 hours, subject to a maximum charge of \$1,000 for each period of 24 hours;	\$100

FOURTH SCHEDULE — *continued*

<i>First column</i>	<i>Second column</i>
(c) travelling, taxation, fee for a visa if required and any expenses incurred arising from the survey or inspection abroad;	Actual cost
(d) board, lodging, insurance coverage and reasonable subsistence for the inspector	Sum to be determined by the Director in accordance with Government Instruction Manual
4. Issue of an IBWM Certificate or report, or a new certificate on strength of an existing certificate	\$65
5. Amendment of any particulars on any IBWM Certificate or Type Approval Certificate (if any inspection or survey is required, charges in accordance with item 1 shall be added)	\$14
6. Issue of a Type Approval Certificate on strength of certificate/report issued by other Contracting Party (per ballast water management system)	\$180

Made on 7 September 2017.

NIAM CHIANG MENG
Chairman,
Maritime and Port Authority of
Singapore.

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