SOCIALIST REPUBLIC OF VIETNAM

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NATIONAL TECHNICAL REGULATION ON THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS

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Preamble

National technical Regulation on the Control and Management of Ships' ballast water and sediments (Serial number QCVN 99: 2017/BGTVT) is compiled by Vietnam Register, verified by the Ministry of Science and Technology, promulgated by the Minister of Transport under Circular No. 15/2018/TT-BGTVT dated 4 April 2018.

NATIONAL TECHNICAL REGULATION ON THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS

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I GENERAL REGULATIONS

1.1 Application and Scope

1.1.1 Application

1 This national technical regulation (hereinafter referred to as “the Regulation”) applies to the installations for the control and management of ship’s ballast water and sediments of sea-going ships engaged in international voyages, surveyed and classed by Vietnam Register.

2 Notwithstanding the provisions in -1, the Regulation does not apply to the following ships:

(1) Ships not designed or constructed to carry ballast water;

(2) Ships which are not subject to discharge or permanently carry ballast water;

(3) Ships from which the discharge of ballast water and sediments is carried out at the same location where the whole of that ballast water and those sediments originated.

3 Ships which are not under the application of -1 and -2 above may apply this Regulation upon the request of ship owners.

1.1.2 Scope

The present Regulation is to apply to organizations and individuals involving activities relating to the installations for the control and management of ship’s ballast water and sediments and falling under the application as specified in 1.1.1 above, including Vietnam Register (hereinafter referred to as "VR"); ship owners; ship designers, builders, renovating and repairing yards; manufacturers of equipments for the control and management of ship’s ballast water and sediments which are installed onboard sea-going ships.

1.1.3 Exemption

This Regulation is not required for ships under the application in 1.1.1-1 provided these ships do not call the ports of states which are member states of International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004. The Regulation will become mandatory for those ships by the time Vietnam is a member of this Convention.

1.2 References and explanations

1.2.1 References in the Regulation

1 National Technical Regulation for the classification and construction of sea-going steel ships.

2 Circular No. 40/2016/TT-BGTVT, dated 07 December 2016: Regulations on the registration and verification of Vietnam's sea-going vessels.

3 Circular No. 41/2016/TT-BGTVT, dated 16 December 2016: providing for the list of certificates and documents of sea-going vessels, official duty sea-going vessels, submarines, submersibles, mobile offshore platforms of Vietnam.

4 Circular No. 25/2017/TT-BGTVT, dated 28 July 2017: Regulations on forms of certificates and register book of technical and environmental safety issued to sea-going and inland waterway ships and industrial products used for inland waterway ships.

5 International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004.

6 Relevant resolutions and guidelines of International Maritime Organization.

1.2.2 Explanation

For the purpose of the Regulation, the following definitions apply unless otherwise stated in each Part:

(1) “Ballast water” means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship.

(2) “Ballast water management” means mechanical, physical, chemical, and biological processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of harmful aquatic organisms and pathogens within ballast water and sediments.

(3) “Harmful aquatic organisms and pathogens” means aquatic organisms or pathogens which, if introduced into the sea, including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas.

(4) “Sediments” means matter settled out of ballast water within a ship.

(5) “Ship” means a vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating craft, floating platforms, FSUs and FPSOs.

(6) “Anniversary date” means the day and the month of each year corresponding to the date of expiry of the Certificate of Classification.

(7) “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 Code (ISM Code).

(8) “Constructed” in respect of a ship means a stage of construction where:

(a) the keel is laid; or

(b) construction identifiable with the specific ship begins; or

(c) 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

(d) the ship undergoes a major conversion.

(9) "Major conversion" means a conversion of a ship:

(a) which changes its ballast water carrying capacity by 15 percent or greater; or

(b) which changes the ship type; or

(c) which, in the opinion of the Society, is projected to prolong its life by ten years or more; or

(d) which results in modifications to its ballast water system other than component replacement-in-kind. Conversion of a ship to meet the provisions of 2.3, Part 3 of the Regulation is not to be deemed to constitute a major conversion.

(10) "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.

(11) "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.

(12) "Ballast tank" means 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.

(13) "Ballast water management system" (BWMS) means any system which processes ballast water such that it meets or exceeds the ballast water performance standards given in 3.2, Part 3 of the Regulation. The BWMS includes ballast water treatment equipment, all associated control equipment, monitoring equipment and sampling facilities.

(14) "Ballast water treatment equipment" means equipment which mechanically, physically, chemically, or biologically processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of harmful aquatic organisms and pathogens within ballast water and sediments.

(15) "Control equipment" means the installed equipment required to operate and control the ballast water treatment equipment.

(16) "Monitoring equipment" means the equipment installed for the assessment of the effective operation of the ballast water treatment equipment.

(17) "Sampling facilities" means the means provided for sampling treated or untreated ballast water.

(18) "Preparation" means any commercial formulation containing one or more active

substances including any additives.

(19) "Dangerous gas" means any gas which may develop an explosive and/or toxic atmosphere being hazardous to the crew and/or the ship, e.g. hydrogen (H2), hydrocarbon gas, ozone (O_3), chlorine (Cl_2) and chlorine dioxide (ClO_2), etc.

(20) "Hazardous area" means an area in which an explosive gas atmosphere is or may be expected to be present, in quantities such as to require special precautions for the construction, installation and use of equipment. When a gas atmosphere is present, the following hazards may also be present: toxicity, asphyxiation, corrosivity and reactivity. Hazardous area classification is to be in accordance with 4.2.3 Part 4 of the National technical Regulation on the Survey and Construction of Sea-going Steel Ships.

(21) "Dangerous liquid" means any liquid that is identified as hazardous in the Material Safety Data Sheet (MSDS) or other documentation relating to this liquid.

1.2.3 Abbreviations

For the purpose of the Regulation, the following abbreviations apply:

(1) BWM Convention: The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004.

(2) BWMS: Ballast Water Management System.

(3) IMO: International Maritime Organization.

II TECHNICAL REGULATIONS

CHAPTER 1 GENERAL

1.1 General

1.1.1 General

1 In special case that any requirement in the Regulation is impossible to comply with, alternative requirements which are provided by VR based on requirements of this Regulation are to be complied with.

2 Relevant requirements in National technical regulation on classification and construction of sea-going steel ships and its amendments are to be applied to materials, equipments, installation and workmanship relating to ballast water systems on sea-going ships which are provided in this Regulation unless otherwise stated.

1.1.2 Equivalents

Ballast water management installations which do not comply with requirements of the Regulation may be accepted provided that they are deemed by VR to be equivalent to those specified in the Regulation

CHAPTER 2 SURVEYS

2.1 General

2.1.1 Application

The requirements in Chapter 2 through Chapter 5 apply to ships of 400 gross tonnage and above, excluding floating platforms, FSUs and FPSOs.

2.1.2 Kinds of Surveys

1 Surveys are to be of the following kinds:

(1) Registration Surveys:

(a) Registration Surveys during Construction:

Registration surveys carried out upon applications for those surveys submitted prior to any application of ballast water management installations with respect to those ships to in which ballast water management installations are to be provided during their Classification Surveys during Construction.

(b) Registration Surveys not Built under Survey:

Registration Surveys other than those specified in (a) above.

(2) Annual Surveys

(3) Intermediate Surveys

(4) Special Surveys

(5) Occasional Surveys

(6) Unscheduled Surveys.

For the purpose of this Regulation, Periodical Surveys consist of the surveys specified in (2) to (4) above.

2.1.3 Intervals of Surveys

1 Registration Surveys

(1) Registration Survey during Construction

Ballast water management installations of ships intended to be constructed and registered with VR under the survey by the Surveyors in accordance with the designs approved by VR are to undergo the Registration Survey during construction. The presence of the Surveyor is required at the following stages of the work:

(a) when materials are applied to the parts and the parts are installed in the ballast water management installations;

(b) when machining of the main parts is finished and at a proper time during

machining, if necessary;

(c) when important equipment is installed on board; and

(d) when performance tests are carried out.

(2) Registration Surveys not Built under Survey

The ballast water management installations of ships intended to be registered in a way other than that specified in (1) is to undergo the Registration Surveys not Built under Survey when an application for the survey is made.

2 Annual Surveys

Annual Surveys are to be carried out at intervals specified in 1.1.3-1(1) Part 1B Section II of the National technical Regulation on Classification and Construction of sea-going steel ships.

3 Intermediate Surveys

Intermediate Surveys are to be carried out at intervals specified in 1.1.3-1(2) Part 1B Section II of the National technical Regulation on Classification and Construction of sea-going steel ships.

4 Special Surveys

Special Surveys are to be carried out at intervals specified in 1.1.3-1(3)(a) Part 1B Section II of the National technical Regulation on Classification and Construction of sea-going steel ships.

5 Occasional Surveys

Occasional Surveys are to be carried out at the following occasions at times other than Registration Surveys or Periodical Surveys:

(1) when important parts of equipment subjected to a Registration Survey are repaired or modified; when a change in the purpose, service area, or another major change, etc. made to the ship requires a corresponding change in the important parts of the equipment; or when the equipment is damaged to such a degree that effects its performance.

(2) when the survey for verifying compliance with requirements of the Regulation is to be retroactively applied to a ship already constructed,

(3) when an Occasional Survey other than mentioned above is deemed necessary.

6 Unscheduled Surveys

The classed ships may be subject to Unscheduled Surveys when the confirmation of the status of the installations by survey is deemed necessary in cases where VR suspects installations of not being in continued compliance with the Regulation, and of not being properly maintained and operated by the ship owner.

2.1.4 Periodical Surveys Carried Out in Advance

The requirements for Periodical Surveys carried out in advance are to be in accordance with the provisions specified in 1.1.4 Part 1B Section II of the National technical Regulation on Classification and Construction of sea-going steel ships.

2.1.5 Postponement of Special Surveys

The requirements for postponement of Special Surveys are to be in accordance with the provisions specified in 1.1.5-1(1) or 1.1.5-1(2) Part 1B Section II of the National technical Regulation on Classification and Construction of sea-going steel ships.

2.1.6 Modification of the Requirements

1 With respect to Periodical Surveys in cases where considered appropriate by VR, the Surveyor may modify the requirements based on the size, service engaged, construction, age, service performance, results of previous surveys and actual condition of the ship.

2 At Intermediate Surveys, where examinations have been carried out during the period between the 2nd and the 3rd Annual Surveys according to the requirements for Intermediate Surveys, said examinations to be carried out as Intermediate Surveys may be omitted at the discretion of the Surveyor.

3 At Intermediate Surveys, as to the items which are considered necessary by the Surveyor or requested by the ship owner, examinations may be carried out according to the requirements for Special Surveys.

4 At Special Surveys, where examinations have been carried out during the period between the 4th Annual Survey and the Special Survey specified in 1.1.3-4 according to the requirements for Special Surveys, said examinations to be carried out as Special Surveys may be omitted at the discretion of the Surveyor. However, in case where Annual Surveys or Intermediate Surveys are carried out in advance in accordance with 1.1.4-2 Part 1B Section II of the National technical Regulation on Classification and Construction of sea-going steel ships, the Special Survey is to be carried out in accordance with the provisions specified otherwise by VR.

2.1.7 Laid-up Ships

1 Laid-up ships are not subject to Periodical Surveys. However, Occasional Surveys may be carried out at the request of owners.

2 When laid-up ships are about to be put into service, the following surveys and any surveys for specific matters which have been postponed due to being laid-up, if any, are to be carried out.

(1) When the due date for any Periodical Survey designated before lay-up has not yet passed, the next scheduled Periodical Survey is to be carried out.

(2) When the due date for any Periodical Survey designated before lay-up has already passed, said Periodical Survey is to be carried out.

(3) When the due dates for two or more kinds of Periodical Surveys designated before lay-up have already passed due, the superlative one is to be carried out.

2.2 Preparation for Surveys and Others

2.2.1 Notification

When a ship is to be surveyed in accordance with the Regulation, it is the responsibility of the owners to notify the Surveyor of the place where they wish to undergo the survey. Moreover, the Surveyor is to be advised of the survey a reasonable amount time in advance so that the survey can be carried out at the proper time.

2.2.2 Preparation for Surveys

1 All such preparations as required for registration, periodical and other surveys as well as those which may be required by the Surveyor in accordance with the provisions in Chapter 2 through Chapter 5 are the responsibility of the Owners or their representatives. The preparations are to include provisions of easy and safe access, necessary facilities and necessary records for the execution of the survey. Inspection, measuring and test equipment, which Surveyors rely on to make decisions affecting classification are to be individually identified and calibrated to a standard deemed appropriate by VR. However, the Surveyor may accept simple measuring equipment (e.g., rulers, measuring tapes, weld gauges, micrometers) without individual identification or confirmation of calibration, provided they are of standard commercial design, properly maintained and periodically compared to other similar equipment or test pieces. The Surveyor may also accept equipment fitted on board a ship and used in examination of shipboard equipment (e.g., pressure, temperature or rpm gauges and meters) based upon either calibration records or comparisons of readings with multiple instruments.

2 An applicant for survey(s) is to arrange a supervisor, who is well conversant with the survey items intended for the preparation of surveys, to provide the necessary assistance to the Surveyor according to his requests during the survey.

2.2.3 Suspension of Surveys

Surveys may be suspended where necessary preparations have not been made, an appropriate attendant is not present, or the Surveyor considers that the safety for execution of the survey is not ensured.

2.2.4 Disposition when Repairs are Considered Necessary as a Result of Surveys

When repairs are considered to be necessary as a result of surveys, the Surveyor notifies his findings to the applicant of surveys. The applicant, when he receives such notification, is to obtain the Surveyor’s verification after carrying out the necessary repairs.

2.2.5 Replacement of Fittings, Equipment and Parts, etc.

In cases where it is necessary to replace any fittings, equipment or parts, etc. used onboard, replacements are to comply with the regulations to be applied during ship construction. However, in cases where new requirements are specified or where deemed necessary by VR, VR may require that such replacements comply with any new

requirements in effect at the time the relevant replacement work is carried out. In addition, replacements are not to use any materials which contain asbestos

2.3 Verification Survey of Certificates

When Annual Surveys and Intermediate Surveys are carried out, the International Ballast Water Management Certificate is to be submitted to the Surveyor to obtain confirmation of the validity of the certificate as well as endorsement when necessary.

CHAPTER 3 REGISTRATION SURVEYS

3.1 Registration Surveys during Construction

3.1.1 General

At Registration Surveys during Construction, the ballast water management installations and their workmanship are to be examined in detail in order to ascertain that they meet the relevant requirements in each Part of the Regulation.

3.1.2 Submission of Plans and Documents for Approval

1 For any ship intending to undergo a Registration Survey, the following plans and documents specified in (1) and (2) are to be submitted to VR for approval. The document specified in (3) is to be submitted to VR for approval before delivery of the ship:

(1) For ships conducting the ballast water exchange specified in Chapter 7, the following plans and document specified in (a) to (e):

(a) Arrangement of ballast tanks;

(b) Plans and documents relevant to air pipes and sounding pipes for ballast tanks;

(c) Capacities of ballast pumps;

(d) Arrangement of ballast piping; and

(e) Plans and documents relevant to sampling facilities.

(2) For ships conducting the ballast water management specified in Chapter 8, the following plans and document specified in (a) to (g):

(a) Plans showing ballast water management systems;

(b) Arrangements of ballast water management systems;

(c) Arrangements of ballast tanks;

(d) Capacities of ballast pumps;

(e) Arrangement of ballast piping;

(f) Plans and documents specified in 1.1.6(1)(e), (1)(f), (2)(b), (2)(d) and (2)(e) Part 4 Section II of the National technical Regulation on Classification and Construction of sea-going steel ships; and

(g) Other plans and documents deemed necessary by VR

(3) Ballast water management plan.

2 The following documents are to be submitted to VR for reference, in addition to the approval plans and documents specified in the preceding -1. The document specified in (2) is to be submitted before onboard testing.

(1) A copy of the certificate for type approval of ballast water management system

recognized by VR, in accordance with IMO Res. MEPC. 174(58) “Guidelines for Approval of Ballast Water Management Systems (G8)”, as amended

(2) On-board test procedures

3 Notwithstanding the requirements of the preceding -1 and -2, where the ballast water management installations are installed according to plans and documents already approved, the submission of a part of or all of the plans and documents specified in the preceding -1 and -2 may be omitted under the requirements separately specified by VR.

3.1.3 Inspections of Equipment

1 For ships conducting the ballast water exchange specified in Chapter 7, it is to be confirmed that the ballast piping, ballast pump and air pipes and sounding pipes for ballast tanks are located in their proper positions based upon approved drawings, and other inspections deemed necessary by VR are to be carried out.

2 For ships conducting the ballast water management specified in Chapter 8, the following inspections are to be carried out:

(1) Confirmation that installations for ballast water treatment (ballast water management system, ballast pump and ballast piping, etc.) are located in their proper positions based upon approved drawings;

(2) Confirmation that the BWMS is in good working order (in principle, includes operation tests associated with ballasting and de-ballasting at rated capacity);

(3) Confirmation that any consumables such as active substances and preparations necessary for conducting ballast water treatment are provided on board under appropriate controls;

(4) Confirmation that the BWMS is the same as that listed on the certificate for type approval specified in 3.1.2-2 (1);

(5) For BWMS which make use of active substances or preparations, confirmation that the type of said BWMS complies with 8.3-1(1)(b);

(6) Confirmation that the recording devices for control equipment and monitoring equipment are operable and that sufficient supply of any consumables necessary for the recording devices is provided on board;

(7) For BWMS generating by-products such as sediments, dedicated installations to store such by-products are provided on board; and

(8) Other inspections deemed necessary by VR.

3 For the tests specified in -2(2) above, the applicant is to prepare test plans for review by VR prior to testing. Test records and measurement records are to be submitted to VR, as required.

3.1.4 Inspections of Ballast Water Management Plans

Ballast water management plans are to be confirmed to comply with the requirements specified in Chapter 9.

3.1.5 Documents to be maintained On Board

Upon completion of a Registration Survey, the Surveyor confirms that the following documents, etc., are maintained on board:

(1) Ballast water management plan;

(2) Ballast water record book;

(3) For ships conducting the ballast water management specified in Chapter 8, the following documents:

(a) A copy of the certificate for type approval specified in 3.1.2-2(1);

(b) A statement confirming that the electrical and electronic components of the ballast water management system have been tested in accordance with the specifications for environmental testing specified in IMO Res. MEPC. 174(58) “Guidelines for Approval of Ballast Water Management Systems (G8)”, as amended;

(c) Equipment manuals for the major components of the ballast water management system;

(d) An operations and technical manual for the ballast water management system, containing a technical description of the ballast water management system, operational and maintenance procedures, and backup procedures in case of equipment malfunction;

(e) Installation specifications for the ballast water management system;

(f) Installation and test operation procedures for the ballast water management system;

(g) Initial calibration procedures of the ballast water management system; and

(h) Dosage and storage instructions for active substances or preparation of the ballast water management system.

3.2 Registration Surveys Not Built under Survey

3.2.1 General

At Registration Surveys not Built under Survey, inspections are to be carried out on ballast water management installations, and it is to be ensured that they comply with the requirements specified in the Regulation.

3.2.2 Submission of Plans and Documents for Approval

For any ships intending to undergo Registration Surveys not Built under Survey, the plans and documents specified in 3.1.2 are to be submitted as necessary.

3.2.3 Inspections of Equipment

At Registration Surveys not Built under Survey, relevant inspections are to be carried out mutatis mutandis according to the requirements specified in 3.1.3. However, for ships in possession of an International Ballast Water Management Certificate or an equivalent thereto, inspections corresponding to those specified in 4.3 are to be carried out.

3.2.4 Inspections of Ballast Water Management Plans

It is to be confirmed that the ballast water management plan is in accordance with Chapter 9.

3.2.5 Documents to be Maintained On Board

Upon completion of a Registration Survey, the Surveyor confirms that the documents, etc., specified in 3.1.5 are maintained on board.

CHAPTER 4 REGISTRATION MAINTENANCE SURVEYS

4.1 Annual Surveys

4.1.1 General

At Annual Surveys, inspections are to be carried out on the relevant items of the requirements specified in 4.1.2 and 4.1.3. In addition, the general condition of the relevant equipment is to be inspected.

4.1.2 Inspections of Equipment

1 For ships conducting the ballast water exchange specified in Chapter 7 of the Regulation, it is to be confirmed that the ballast piping, ballast pump and air pipes and sounding pipes for ballast tanks are in good condition. In addition, other inspections deemed necessary by VR are to be carried out.

2 For ships conducting the ballast water management specified in Chapter 8, the following inspections are to be carried out:

(1) Visual inspections and function tests of BWMS, as far as practicable;

(2) Confirmation that any consumables such as active substances and preparations necessary for conducting ballast water treatment are provided in sufficient supply on board under appropriate controls; and

(3) Other inspections deemed necessary by VR.

4.1.3 Documents to be Maintained On Board

1 It is to be confirmed that the documents, etc., specified in 3.1.5 are maintained on board.

2 It is to be confirmed that the ballast water record book is filled out appropriately in accordance with 6.2.

3 The records of control equipment and monitoring equipment are to be confirmed.

4.2 Intermediate Surveys

4.2.1 General

At Intermediate Surveys, inspections are to be carried out on the relevant items of 4.2.2 and 4.2.3. In addition, the general condition of the relevant equipment is to be inspected.

4.2.2 Inspections of Equipment

In addition to inspections specified in 4.1.2, it is to be confirmed that there are no defects, such as corrosion, wastage and damage, in the BWMS, ballast pump and ballast piping for ships conducting the ballast water management specified in Chapter 8.

4.2.3 Documents to be Maintained On Board

Inspections specified in 4.1.3 are to be carried out.

4.3 Special Surveys

4.3.1 General

At Special Surveys, inspections are to be carried out on the relevant items of 4.3.2 and 4.3.3. In addition, the general condition of the relevant equipment is to be inspected.

4.3.2 Inspections of Equipment

In addition to inspections specified in 4.2.2, it is to be confirmed that the BWMS is in good working order.

4.3.3 Documents to be Maintained On Board

In addition to inspections specified in 4.1.3, the Surveyor is to confirm the calibration certificates, which certifies the date of the most recent calibration inspection, for any measuring systems which are part of the BWMS.

CHAPTER 5 OCCASIONAL SURVEYS

5.1 General

5.1.1 General

At Occasional Surveys, inspections are to be carried out on the relevant items of the requirements specified in 4.1.2 and 4.1.3. In addition, Registration Surveys for such installations are to be carried out mutatis mutandis according to the degree of repairs or modifications made to the ballast water management installation and its relevant equipment.

CHAPTER 6 EQUIPMENT FOR THE BALLAST WATER MANAGEMENT

6.1 General

6.1.1 Application

The requirements in this Part apply to installations for the control and management of ship's ballast water and sediments as well as to ships conducting ballast water exchange.

6.2 Ballast Water Record Book

1 The ballast water record book is to contain at least the information specified in Appendix II of Annex to the Convention and keep record of the following operations. The ballast water record book may be an electronic recording system, or it may be integrated into another record book or system.

(1) Operations for uptake of ballast water:

(a) Date, time and location port or facility of uptake (port or lat/long), depth if outside port;

(b) Estimated volume of uptake (m^3);

(c) Signature of the officer in charge of the operation.

(2) Operations for circulation and treatment of ballast water:

(a) Date and time of operation;

(b) Estimated volume circulated or treated (m^3);

(c) Whether conducted in accordance with the ballast water management plan;

(d) Signature of the officer in charge of the operation.

(3) Operations for discharge into the sea:

(a) Date, time and location port or facility of discharge (port or lat/long);

(b) Estimated volume discharged plus remaining volume (m^3);

(c) Whether approved ballast water management plan had been implemented prior to discharge;

(d) Signature of the officer in charge of the operation.

(4) Operations for discharge to a reception facility:

(a) Date, time and location of uptake;

(b) Date, time and location of discharge;

(c) Port or facility;

(d) Estimated volume discharged or taken up (m^3);

(e) Whether approved ballast water management plan had been implemented prior to

discharge;

(f) Signature of the officer in charge of the operation.

(5) Accidental or other exceptional operations for uptake or discharge of ballast water:

(a) Date and time of occurrence;

(b) Port or position of the ship at time of occurrence;

(c) Estimated volume of ballast water discharged (m^3);

(d) Circumstances of uptake, discharge, escape or loss, the reason therefore and general remarks;

(e) Whether approved ballast water management plan had been implemented prior to discharge;

(f) Signature of the officer in charge of the operation.

(6) Additional operational procedure and general remarks.

2 Ballast water record book entries are to 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 Ballast water record books are to be kept readily available for inspection at all reasonable times and, in the case of an unmanned ship under tow, may be kept onboard the towing ship.

4 Each operation concerning ballast water is to be fully recorded without delay in the ballast water record book. Each entry is to be signed by the officer in charge of the operation concerned and each completed page is to be signed by the master.

5 Ballast water record book entries are to be written in the working language of the ship. If the language used is not English, French or Spanish, the entries are to contain a translation into one of those languages.

6.3 Ballast Water Management Scheme

1 Ships constructed before 8 September 2017 (the date of entry into force of the BWM Convention) (hereinafter referred to as "Existing Ships") are to conduct the ballast water exchange or ballast water management specified in Chapter 7 or Chapter 8 until the dates below, after which time it is to conduct the ballast water management specified in Chapter 8.

(1) Ships required to be provided with the International Oil Pollution Prevention Certificate:

(a) For ships which have completed the renewal survey associated with the International Oil Pollution Prevention Certificate on or after 8 September 2014 but prior to 8 September 2017, the completion date of the first renewal survey associated with the International Oil Pollution Prevention Certificate on or after 8

September 2017.

(b) For ships other than those specified in (a) above, the completion date of the second renewal survey associated with the International Oil Pollution Prevention Certificate on or after 8 September 2017, or the completion date of the first renewal survey associated with the International Oil Pollution Prevention Certificate on or after 8 September 2019, whichever comes first.

(2) Ships not required to be provided with the International Oil Pollution Prevention Certificate: 8 September 2024.

2 Ships constructed on or after 8 September 2017 (the date of entry into force of the BWM Convention) are to conduct the ballast water management specified in Chapter 8.

6.4 Sediment Management

1 All ships are to 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 constructed on or after 1 January 2009 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 IMO Res. MEPC. 209(63) "2012 Guidelines on Design and Construction to Facilitate Sediment Control on Ships (G12)", as amended. Ships constructed before 1 January 2009 should, to the extent practicable, comply with this requirement.

6.5 Sampling Facilities

1 Ships conducting the ballast water exchange specified in Chapter 7 are to be provided with facilities to collect samples in ballast tanks. In such cases, in-tank samples may be taken via sounding or air pipes and manholes by using pumps, sampling bottles or other water containers.

2 Ships conducting the ballast water management specified in Chapter 8 are to be provided with facilities for collecting ballast water from discharge lines, as near to the point of discharge as practicable, during ballast water discharge whenever possible. However, in cases where tanks, such as upper side wing tanks, are emptied through direct overboard discharge valves instead of through ballast pumps, the openings, etc. of such tanks may be used as a sampling facilities provided that ballast water can be easily collected through such facilities.

3 Sampling facilities are to comply with the requirements of IMO resolution MEPC.173(58) "Guidelines for Ballast Water Sampling (G2)", as amended.

CHAPTER 7 BALLAST WATER EXCHANGE

7.1 General

7.1.1 Application

The requirements in this chapter apply to ships conducting ballast water exchange.

7.2 Ballast Water Exchange

1 Whenever possible, ballast water exchange is to be conducted at least 200 nautical miles from the nearest land and in water at least 200 metres in depth, taking into account IMO Res.MEPC124(53) “Guidelines for Ballast Water Exchange (G6)”, as amended.

2 In cases where a ship is unable to conduct ballast water exchange in accordance with -1, ballast water exchange is to be conducted taking into account IMO Res.MEPC124(53) “Guidelines for Ballast Water Exchange (G6)”, as amended. In all such cases, the exchange is to be conducted at least 50 nautical miles from the nearest land and in water at least 200 metres in depth.

3 Existing ships intended for operations in sea areas other than those specified in -1 and -2 above are to record the relevant reasons for which carrying out ballast water exchange is impossible in the Ballast Water Record Book specified in 6.2. In addition, such ships are to comply with the special requirements of Port States in cases where such requirements are in effect.

7.3 Ballast Water Exchange Standard

1 Ships performing ballast water exchange are to 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 is to be considered to meet the standard described in -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.

CHAPTER 8 BALLAST WATER MANAGEMENT

8.1 General

8.1.1 Application

The requirements in this chapter apply to ships conducting ballast water management.

8.2 Ballast Water Performance Standard

For ballast water discharge, the following requirements are to be met:

(1) less than 10 viable organisms per cubic metre greater than or equal to 50 μm in minimum dimension;

(2) less than 10 viable organisms per millilitre less than 50 μm in minimum dimension and greater than or equal to 10 μm in minimum dimension;

(3) toxicogenic vibrio cholerae (O-1 and O-139) with less than 1 colony forming unit (cfu) per 100 ml or less than 1 cfu per 1 g (wet weight) zooplankton samples;

(4) escherichia coli less than 250 cfu per 100 ml; and

(5) intestinal enterococci less than 100 cfu per 100 ml.

8.3 Ballast Water Management Systems

1 BWMS used to comply with 8.2 above is to satisfy the following requirements:

(1) General requirements

(a) The BWMS is to be type approved by VR in accordance with IMO Res.MEPC.174(58), MEPC.279(70): “Guidelines for Approval of Ballast Water Management Systems (G8)”, as amended.

(b) Any BWMS using active substances or preparations is to be approved by the IMO in accordance with IMO Res.MEPC.169(57) “Procedure for Approval of Ballast Water Management Systems that Make Use of Active Substances (G9)”, as amended.

(c) The BWMS is to be safe in terms of the ship, its equipment and the crew.

(2) Construction and performance requirements

(a) The BWMS is not to contain or use any substance of a dangerous nature, unless adequate arrangements for storage, application, mitigation, and safe handling, acceptable to VR, are provided to mitigate any hazards introduced thereby.

(b) In case of any failure compromising the proper operation of the BWMS, audible and visual alarm signals are to be given in all stations from which ballast water operations are controlled.

(c) All working parts of the BWMS that are liable to wear or to be damaged are to be

easily accessible for maintenance.

(d) Every access of BWMS beyond the essential requirements of (c) above is to require the breaking of a seal.

(e) The BWMS is to be so constructed that a visual alarm is always activated whenever BWMS is in operation for purposes of cleaning, calibration or repair, and these events are to be recorded by the control equipment.

(f) In the event of an emergency, suitable by-passes or overrides to protect the safety of the ship and personnel are to be installed.

(g) The installations specified (f) above are to activate an audible and visual alarm, and the event is to be recorded by the control equipment.

(h) Ballast water treatment equipment is to be robust and suitable for working in the shipboard environment, is to be of a design and construction adequate for the service for which it is intended and is to be so installed and protected as to reduce to a minimum any danger to persons onboard, due regard being paid to hot surfaces and other hazards. The design is to have regard to materials used in construction, the purpose for which the equipment is intended, the working conditions to which it will be subjected and the environmental conditions on board.

(i) Ballast water treatment equipment is to be provided with simple and effective means for its operation and control. It is to be provided with a control system that is to be such that the services needed for the proper operation of the ballast water treatment equipment are ensured through the necessary automatic arrangements.

(j) Ballast water treatment equipment and its relevant electrical equipment are to be of explosion-protected type, if intended to be fitted in locations where flammable atmospheres may be present. Any moving parts fitted in such locations are to be arranged so as to avoid the formation of static electricity.

(k) The BWMS is to incorporate control equipment that automatically monitors and adjusts necessary treatment dosages or intensities or other aspects of BWMS of the vessel, which while not directly effecting treatment, are nonetheless required for proper administration of the necessary treatment.

(l) Control equipment is to incorporate a continuous self-monitoring function during the period in which the BWMS is in operation.

(m) Monitoring equipment is to record the proper functioning or failure of the BWMS.

(n) Control equipment is to be able to store data for at least 24 months, and is to be able to display or print a record for inspections. In the event the control equipment is replaced, means is to be provided to ensure the data recorded prior to replacement remains available on board for 24 months.

(o) Control equipment is to be provided with the ability to correct and re-zero the control equipment meters and the repeatability of the values obtained from

measurements.

(3) Other requirements deemed necessary by VR.

2 The requirements of this section from -3 to -7 apply to (1) or (2) below:

(1) BWMS of which an application for approval for the plans is made on or after 1 January 2017; or

(2) BWMS which is installed in ships contracted for construction on or after 1 January 2017.

3 Where the system uses chemical substances indicating possible unacceptable adverse effects to human health and the equipment in "BWMS using active substances or preparations" specified in -1(1)(b), the following requirements (1) to (9) are to be satisfied. The following requirements may be appropriately relaxed depending of the chemical substances.

(1) For the space where the system is installed, at least two sets of full protective clothing, gloves, boots, and tight-fitting goggles or face shields are to be provided. The equipment is to be kept in readily accessible places.

(2) Underneath chemical storage tanks, piping flange joints connected to the tanks and pumps, drain pans are to be provided.

(3) The materials used for the chemical storage tanks, piping and fittings are to be resistant to such chemicals.

(4) Chemical storage tanks are to have sufficient strength and be constructed such that maintenance and inspection can be easily performed.

(5) Chemical storage tank air pipes are to be led to a safe area on open deck.

(6) High water level alarms are to be provided in chemical storage tanks, audible and visual alarm signals are to be given at near chemical storage tanks, in addition to the spaces mentioned in -1(2)(b).

(7) An operation manual containing chemical injection procedures, alarm systems, measures in case of emergency, etc., is to be kept onboard.

(8) Handling procedures are to be in accordance with the Material Safety Data Sheet (MSDS) and BWM.2/Circ.20.

(9) Additional requirements may be required, when VR considers such necessary.

4 Where the system generates dangerous gas in "BWMS using active substances or preparations" specified in -1(1)(b), the following requirements (1) to (9) are to be satisfied.

(1) The system is, in general, not to be located in any spaces where crews normally work.

(2) Gas detection equipment is to be fitted in the spaces where dangerous gas could be present.

The gas detection equipment is to be designed and tested in accordance with IEC

60079-29-1 or recognized standards acceptable to VR. In the event of leakage, an audible and visual alarm is to be activated at the following spaces:

(a) BWMS control station; and

(b) The local manual control of the system.

(3) As far as practicable, pipes flowed dangerous gas is to be joined by welding.

(4) The arrangements used for gas relieving, i.e. degas equipment or equivalent, are to be provided with monitoring measures with independent shutdown. The open end of the gas relieving device is to be led to a safe area on open deck.

(5) The pipes for dangerous gas are not to pass through accommodation spaces and control stations.

(6) Operation of BWMS in the spaces is to be interlocked with ventilation such that the ventilation is to be in operation at all times.

(7) The ventilation line of a space where dangerous gas could be present is to be led to a safe area on open deck.

(8) At least two portable instruments for measuring gas concentrations are to be provided.

(9) Additional requirements may be required, when VR considers such requirements necessary.

5 In applying -1(2), BWMS is to be operated at a flow rate within the Treatment Rated Capacity (TRC) range specified in the type approval certificate.

6 In applying -1(2)(f), the valves in the by-pass line which trigger the by-pass operation are to be remote-controllable by control equipment or fitted with open/close indicator for automatic detection of the by-pass event.

7 In applying -1(3), design and installation of BWMS are to comply with followings in addition to the relevant requirements of the National technical Regulation on Classification and Construction of sea-going steel ships.

(1) Related piping of BWMS is to comply with followings:

(a) Piping is to be designed in accordance with approval conditions for BWMS in -1(1)(a) and (b).

(b) BWMS and related piping and equipment are to be installed in such a way that cleaning, inspection, maintenance and operation can be easily performed.

(c) When fresh water is supplied to the system for treatment or maintenance, etc., measures are to be adopted to ensure that sea water does not contaminate the fresh water system.

(d) Where a vacuum may occur in the ballast line due to the height difference, a suitable protection means is to be provided, e.g. P/V valves or breather valves, and their outlets are to be led to safe area on open deck.

(e) The length of pipe and the number of connections are to be minimized in piping system containing dangerous gases/liquids in high concentration.

(f) Pipe joints specified in above (e) are to be of welded type except for connections to shut off valves, double walled pipes or pipes in ducts equipped with mechanical exhaust ventilation. Alternatively it is to be demonstrated that risk of leakage is minimized and the formation of toxic or flammable atmosphere is prevented.

(g) Location of pipe system specified in above (e) is to be away from heat sources and protected from mechanical damage.

(2) For ships fitted with dangerous ballast tanks, where the ballast water is passed through a system for measuring total residual oxidants (TRO) or total residual chlorine (TRC) before discharge, the requirements for the system in non-hazardous area such as engine room are as given below:

(a) The sampling facility (for BWMS monitoring/control) is to be located within a gas tight enclosure (hereinafter, referred to as a cabinet), and the following i) to iii) are to be complied.

(i) In the cabinet, a stop valve is to be installed in each sample pipe.

(ii) Gas detection equipment is to be installed in the cabinet and the valves specified in i) above are to be automatically closed upon activation of the gas detection equipment.

(iii) Audible and visual alarm signals are to be activated at the spaces specified in -4(2)(a) and (b) when the concentration of explosive gases reaches a pre-set value, which should not be higher than 30% of the lower flammable limit (LFL) of the concerned product.

(b) The standard internal diameter of pipe penetrating a bulkhead is not exceeded 12 mm.

(c) Pipes penetrating a bulkhead are to be constructed of corrosion resistant material.

(d) The penetration of pipes between hazardous area and non-hazardous area is to be welded on both sides.

(e) The measuring system is to be installed as close to the bulkhead as possible, and the length of measuring pipe is to be as short as possible.

(f) Stop valves are to be located in the non-hazardous area, in both the suction and return pipes close to the bulkhead penetrations. A warning plate stating “Keep valve closed when not performing measurements” is to be posted near the valves. Furthermore, in order to prevent backflow, a water seal or equivalent arrangement is to be installed on the hazardous area side of the return pipe.

(g) A safety valve is to be installed on the hazardous area side of each sampling pipe.

(h) If safety valve is installed in the sampling system, hydrostatic test is to be carried out at a pressure greater than that required to open the valve, or at a pressure

greater than the operating pressure of cargo pump and ballast pump if no valve is provided.

(i) No opening is to be provided in the non-hazardous area for the sampling line.

(j) The sampled ballast water is to be returned to the pipping from which the water is sampled or to the ballast tank.

(k) The standard internal diameter of sampling pipes is the minimum necessary in order to achieve the functional requirements of the sampling system.

(3) For the spaces, including hazardous area, where toxicity, asphyxiation, corrosivity or reactivity is present, these hazards are to be taken into account and additional precautions for the ventilation of the spaces and protection of the crew are to be considered.

(4) The electric equipment of BWMS is to comply with followings:

(a) The relevant electric equipment of BWMS is to have a degree of protection suitable for the installed location in accordance with Chapter 2 Part 4 of the National technical Regulation on Classification and Construction of sea-going steel ships.

(b) When the electric equipment is to be installed in a hazardous area of a tanker, ship carrying dangerous chemicals in bulk, or a ship carrying liquefied gases in bulk, the equipment is to comply with Chapter 4 Part 4 of the National technical Regulation on Classification and Construction of sea-going steel ships.

(c) Total capacity of generator is to cover maximum power demand when operating BWMS, including the ballasting under the normal seagoing conditions, loading/unloading cargoes and entering/leaving a port, etc.

(5) For tankers carrying flammable liquids having a flashpoint not exceeding 60 °C, products listed in the IBC Code having a flashpoint not exceeding 60 °C or cargoes heated to temperature above their flashpoint and cargoes heated to temperature within 15 °C of their flashpoint, in general, two independent BWMS may be required - i.e. one for ballast tanks in hazardous areas and the other for ballast tanks in non-hazardous areas. However, one BWMS may be required provided that the following (a) and (b) are satisfied:

(a) The interconnection of ballast piping between hazardous areas and non-hazardous areas may be accepted if an appropriate isolation arrangement is applied. Means of appropriate isolation are as follows:

(i) Two screw down check valves in series with a spool piece (refer to Fig. 8.1(1)); or

(ii) Two screw down check valves in series with a liquid seal at least 1.5 m in depth (refer to Fig. 8.1(2)); or

(iii) Automatic double block and bleed valves and a non-return valve (refer to Fig.

8.1(3)).

(b) Ballast water originating from a hazardous area is not to discharge into a non-hazardous area, except as given by -7(2). Examples of appropriate isolation arrangements are shown in Fig. 8.2(1) and (2). Isolation arrangements specified in (a)(i) to (iii) are to be fitted on the exposed deck in the hazardous area.

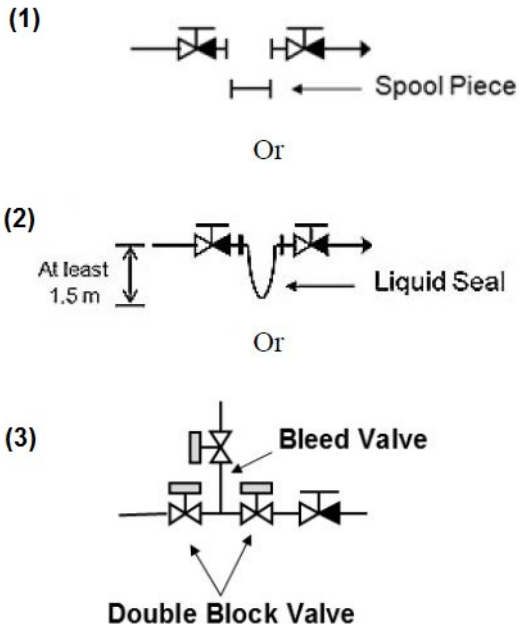


Fig. 8.1 Means of appropriate isolation

(6) The following requirements of ventilation (a) and (b) are to be satisfied:

(a) BWMS not in hazardous areas:

(i) BWMS that does not generate dangerous gas is to be located in an adequately ventilated area.

(ii) BWMS that generates dangerous gas is to be located in a space fitted with a mechanical ventilation system providing at least 6 air changes per hour or as specified by the manufacturer, whichever is greater.

(iii) Ventilation openings are to be led to a safe area on open decks.

(b) BWMS in hazardous areas:

(i) BWMS, regardless of whether or not it generates dangerous gas, is to be located in a space fitted with mechanical ventilation complying with relevant requirements, e.g. Part 4, 8D and 8E of the National technical Regulation on Classification and Construction of sea-going steel ships.

(ii) (a)(iii) above is to be complied with.

(7) Where BWMS is installed in an independent compartment, the compartment is to satisfy the following requirements (a) and (b):

(a) The compartment is to be provided with fire integrity equivalent to “other machinery spaces”; and

(b) The compartment is to be positioned outside of any combustible, corrosive, toxic, or hazardous areas unless otherwise specifically approved.

(8) A risk assessment may be conducted to ensure that risks, including but not limited to those arising from the use of dangerous gas affecting persons on board, the environment, the structural strength or the integrity of the ship are addressed.

8.4 Prototype Ballast Water Treatment Technologies

1 For any ship that, prior to the date that the standard specified in 8.2 would otherwise become effective for it, participates in a programme approved by VR to test and evaluate promising ballast water treatment technologies, the standard specified in 8.2 is not to 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 specified in 8.2 has become effective for it, participates in a programme approved by VR, taking into account Guidelines specified in 8.3-1(1) and (2), to test and evaluate promising ballast water technologies with the potential to result in treatment technologies achieving a standard higher than that specified in 8.2, the standard specified in 8.2 is to cease to apply to that ship for five years from the date of installation of such technology.

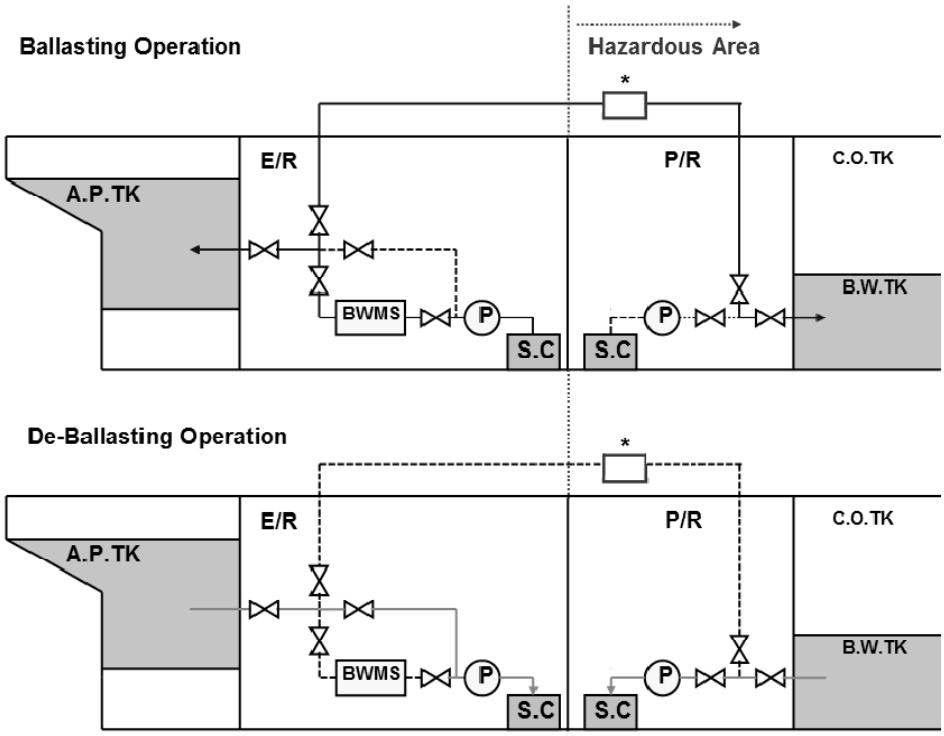
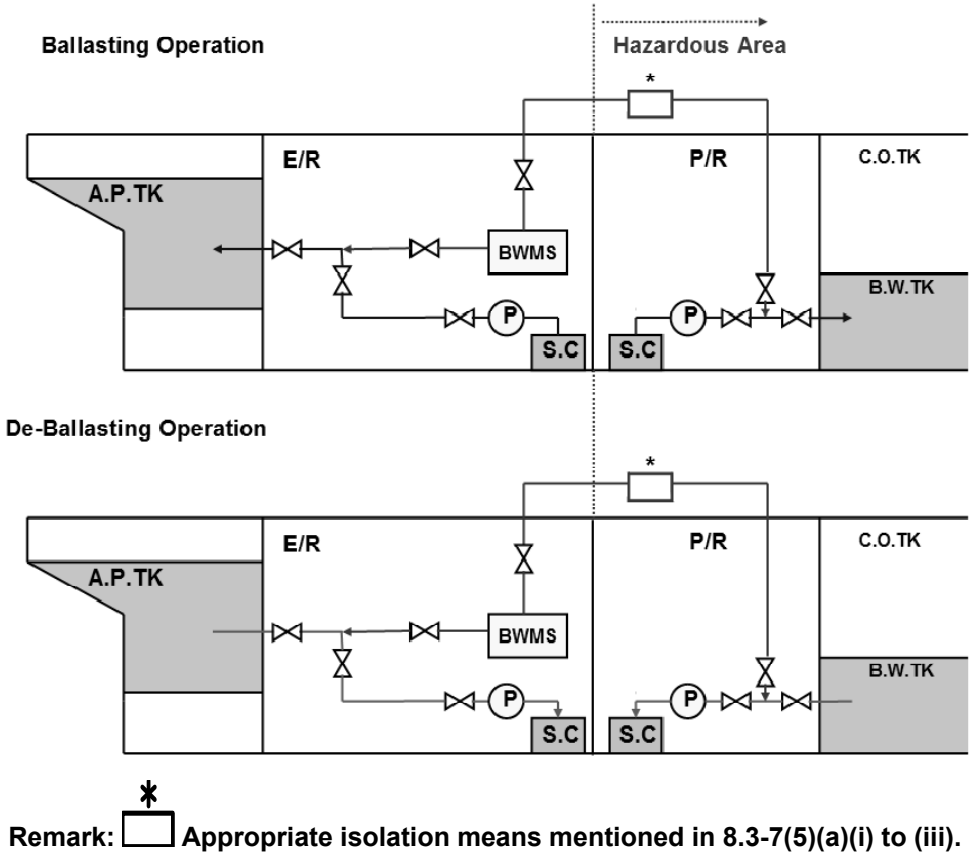


Fig. 8.2(1) Ballast water treatment system which does not require after-treatment



Remark: * Appropriate isolation means mentioned in 8.3-7(5)(a)(i) to (iii).

Fig. 8.2(2) Ballast water treatment system which require after-treatment (Injection type)

CHAPTER 9 BALLAST WATER MANAGEMENT PLAN

9.1 General

9.1.1 Application

1 The requirements in this chapter apply to ballast water management plan required to be on board.

2 A ballast water management plan is to be provided on board.

9.2 Ballast Water Management Plan

1 Ballast water management plans are to be approved by VR. If the contents of any such plan are modified, the plan is to be approved once again.

2 Ballast water management plans are to at least contain the following:

(1) Safety procedures for the ship and the crew associated with ballast water management;

(2) Actions to be taken to implement the ballast water management requirements and supplemental ballast water management practices as set forth in the BWM Convention;

(3) Procedures for the following disposals of sediments:

(a) at sea; and

(b) to shore;

(4) 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) The designated officer on board in charge of ensuring that the plan is properly implemented; and

(6) The reporting requirements for ships provided for under the BWM Convention.

3 Ballast water management plans are to 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 is to be included.

III REGULATIONS ON MANAGEMENT

CHAPTER 1 REGULATIONS ON CERTIFICATION

1.1 General

1 Sea-going ships under the scope in 1.1.1 Section I of the Regulation are to be surveyed and issued a certificate of compliance for ballast water management provided in 1.2 and 1.3 below.

2 Forms of the certificate specified in 1.2 and certificates required for equipments of ballast water management system installed onboard are provided in Circular No. 25/2017/ TT-BGTVT.

1.2 Certificate issued to ship

Upon the satisfactory survey by VR in accordance with requirements in Chapter 6 to 9 Section II of the Regulation, sea-going ships are to be issued a certificate of compliance for ballast water management.

1.3 Validity of certificate

1 Certificate of compliance for ballast water management is to be valid for a period not exceeding five years from the following date:

(1) For registration survey specified in Chapter 3 Section II of the Regulation: completion date of registration survey.

(2) For special survey specified in 4.3 Section II of the Regulation:

(a) The expiration date of the existing certificate if the special survey is completed within 3 months prior to expiration date of the existing certificate;

(b) The completion date of special survey if the survey is completed more than 3 months before or after expiration date of the existing certificate.

2 The above mentioned certificate is to be verified at periodical surveys specified in Chapter 4 Section II of this Regulation.

1.4 Retention, Reissue, Rewriting and Return of Certificate

1 The Master is to have responsibility to carry certificates onboard the ship and present the same to VR upon request.

2 Ship owner, manufacturer of equipments for the Ballast Water Management or the Master is to request VR without delay by a written document to reissue relevant certificates when:

(1) The certificates are lost or soiled;

(2) The contents in those certificates are changed.

3 Ship owner or the Master is to return to VR the replaced soiled certificates right after reissued in accordance with -2 above, except in cases those are lost.

CHAPTER 2 DOCUMENT MANAGEMENT

2.1 General

Documents issued by VR are to include:

(1) Approved design documentation, including plans and data provided in Chapter 3 Section II and in relevant chapters (if any), Certificate of compliance for ballast water management.

(2) Approved technical documents/instructions;

(3) Survey records including test, survey reports (as a basis for the issuance of relevant certificates) and certificates including certificates of materials and machinery, equipments for ballast water management to be installed on board ship.

2.2 Issue of survey record

VR will issue a survey record for the ship and the equipments for the ballast water management which is installed on board the ship when the registration or periodical survey has been completed in accordance with Chapter 2 Section II of the Regulation.

2.3 Document management

1 Survey Document storage

All documents issued by VR for ships are to be kept and maintained on board. Those are to be ready to present to VR or other competent bodies as requested.

IV RESPONSIBILITIES OF ORGANIZATIONS, INDIVIDUALS

1.1 Responsibilities of ship owners; design companies; yards of ship construction, conversions and repair; manufacturers of equipments for the Ballast Water Management

1.1.1 To fully comply with relevant requirements in this Regulation.

1.1.2 To comply with regulations on survey of VR given in this Regulation.

1.2 Responsibilities of Vietnam Register

1.2.1 Design approval, technical supervision

To carry out the approval of design documents, technical supervision in accordance with requirements specified in this Regulation.

1.2.2 To give instructions for implementation/application

To give instructions for the application of requirements of this Regulation to ship owners, operators, design companies, yards of ship construction, conversions, renovations and repair, manufacturers of equipments for the Ballast Water Management installed onboard sea-going ship.

1.2.3 To amend and supplement the Regulation

Based on the fact, Vietnam Register is to have responsibility to petition the Ministry of Transport for amendment, supplementation of the Regulation when needed or on a basis specified in Law on standards and technical regulations.

V IMPLEMENTATION

1.1 It is the responsibility of Vietnam Register to manage the survey system, technical supervision in accordance with requirements in this Regulation.

1.2 In case of inconsistency between the requirements in this Regulation and those in other rules, standards or technical regulations relating to the systems for the control and management of ships' ballast water and sediments, the requirements of this Regulation is to prevail over those of others.

1.3 In case the documents referred to in this Regulation are amended, supplemented or replaced, the latter is to prevail over the former.

1.4 In case that the compliance with any requirements of this Regulation is impracticable, or in case of necessity, the decision is to be made by the Ministry of Transport on a case by case basis.