



Republic of the Philippines  
DEPARTMENT OF TRANSPORTATION

**MARITIME INDUSTRY AUTHORITY**



MEMORANDUM CIRCULAR NO. SR-2020-02  
Series of 2020

TO : ALL PHILIPPINE-REGISTERED SHIP OWNER/ OPERATOR/  
CHARTERERS/ MANAGERS

SUBJECT : RULES AND REGULATION ON THE CONSTRUCTION OF TANK AND  
INSTALLATION OF EQUIPMENT TO COLLECT, STORE AND TREAT  
SEWAGE FROM SHIPS IN COMPLIANCE TO ANNEX IV OF MARPOL  
73/78, AS AMENDED

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Pursuant to Presidential Decree No.474, Executive Order No.125/125-A, Presidential Decree No. 1059, Philippine Merchant Marine Rules and Regulations 1997, as amended and Republic Act No. 9295, as amended, the following rules and regulations are hereby prescribed.

**I. OBJECTIVE**

To ensure that all Philippine-Registered Ships shall have an adequate design facility for Sewage Treatment Plant (STP) and/or holding tank in compliance with Annex IV of MARPOL 73/78, as amended where the Philippine is a party to the Convention.

To promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter.

**II. COVERAGE**

This Circular shall apply to all persons, corporations, partnerships, firms and entities acquiring or operating the following:

1. Ships of 400 gross tonnage and above; and,
2. Ships below 400 gross tonnage and certified to carry more than 15 persons including crew.

Passenger banca and service boat with travel time of less than three (3) hours carrying 15 passengers & below and non-propelled barge are exempted from this Circular.

**III. DEFINITION OF TERMS**

1. **"Administration"** refers to the Maritime Industry Authority (MARINA)

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2. **"Black Sewage" or "Sewage"** refers to the:
  - .1 drainage and other wastes from any form of toilets and urinals;
  - .2 drainage from medical premises (dispensary, sick bay, etc.) via wash basin, wash tubs and scuppers located in such premises;
  - .3 drainage from spaces containing living animals; or,
  - .4 other waste waters when mixed with the drainages defined above.
3. **"Grey Sewage"** refers to the effluents from galleys, laundries, bathrooms, etc.
4. **"Holding tank"** refers to a tank used for the collection and storage of sewage.
5. **"MARPOL Convention"** refers to the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocols of 1978 and 1997 and as amended;
6. **"MARPOL Annex IV"** refers to the revised Annex IV to the MARPOL Convention containing regulations for the prevention of pollution by sewage from ships up to and including amendments adopted by IMO Resolution MEPC.216(63) which entered into force on 1 August 2013;
7. **"Recognized Organization"** refers to an organization that has been assessed by the Administration and has complied with the RO Code and the provisions of MC 2018-01 and has entered into a MOA with the Administration.
8. **"Ship Sewage Treatment Plant (STP)"** refers to a facility that treats the sewage on a ship and make it capable of being discharged into the sea.

#### IV. GENERAL PROVISION

1. All Philippine-Registered Ships for construction shall submit to the Administration the installation plan for holding tank and/or STP including the discharge pipeline incorporated to the Engine Room Arrangement Plan and Piping Plan for verification and approval under MC 2015-07. (The Guidelines for capacity calculation of sewage systems and/or holding tank shall be attached herewith as Annex A & B)
2. All existing ships without holding tank, comminuting/ disinfecting system and/or STP shall comply with this Circular within the next dry-docking period and shall be required to submit to the Administration and/or its Recognized Organization the modified Engine Room Arrangement Plan incorporating the holding tank and/or STP including the discharge pipeline for approval subject to actual verification and issuance of Safety Construction Certificate indicating the installation of the holding tank or sewage treatment plant in accordance with MC 2015-07. In case the

stability of the ship is affected by the said fittings, a re-inclining experiment test, re-calculation of freeboard and other related issuances shall be required by the Administration.

3. All ships to be imported must have a holding tank, comminuting/ disinfecting system and/or STP in compliance with MARPOL ANNEX IV with a valid International Sewage Pollution Prevention (ISPP) Certificate.
4. All existing ships with holding tank and/or STP shall be required to submit to the Administration and/or its Recognized Organization the Schematic Diagram of the holding tank and/or STP including the discharge pipeline for verification and approval in accordance with MC 2015-07.
5. The Guidelines for the approval of the ship STP is based on Resolution MEPC.2(VI), MEPC.159(55), MEPC.227(64), Guidelines on Implementation of Effluent Standards and Performance Tests for Sewage Treatment Plants (STP), as amended.
6. Vessels below 400 GT carrying more than 15 persons with fixed or portable toilet system shall be fitted with fixed or portable holding tanks and shore connection to discharge pipe approved by the Administration.

#### **V. DOCUMENTARY REQUIREMENTS**

1. Letter of Intent
2. Plans and Specifications
  - Installation Plan or Schematic Diagram of Sewage Treatment Plant
  - Holding Tank Plan including the discharge pipeline
  - Revised Engine Room Arrangement Plan and Piping Plan
  - Other related documents required under MC 2015-07

#### **VI. ENFORCEMENT AND MONITORING**

The Administration shall undertake periodic, random inspection of Philippine-Registered ships calling any Philippines ports to ensure compliance with the Circular.

Philippine-Registered ships trading overseas shall be subject to survey/ inspection under the oversight function of the Administration.

#### **VII. FEES AND CHARGES**

Fees and Charges as prescribed under MC2015-07.

#### **VIII. FINES AND PENALTIES**

1. Ships covered by this Circular operating without the sewage treatment plant or holding tank approved by the Administration.

50 GT or less	P 50,000.00 plus suspension and/or cancellation of Authority to Operate (no sail condition until compliance)
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Over 50 GT - 500 GT	P 100,000.00 plus suspension and/or cancellation of Authority to Operate (no sail condition until compliance)
Above 500 GT - 1,500 GT	P 150,000.00 plus suspension and/or cancellation of Authority to Operate (no sail condition until compliance)
Above 1,500 GT	P 200,000.00 plus suspension and/or cancellation of Authority to Operate (no sail condition until compliance)

2. Other related fines and penalties as prescribed under MC 2015-07.

#### IX. TRANSITORY PROVISION

1. New ships for construction under this Circular shall comply upon effectivity of this Circular.
2. Existing ships covered by this Circular shall comply during the next scheduled dry-docking period.

#### X. SEPARABILITY CLAUSE

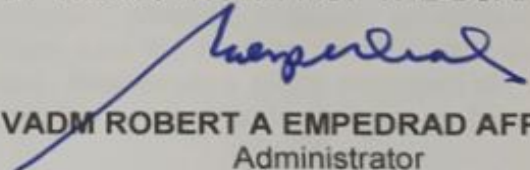
Should any provision or part of this Circular be declared by competent authorities to be invalid or unconstitutional, the remaining provisions or parts thereof shall remain in full force and effect and shall continue to be valid and effective.

#### XI. EFFECTIVITY

This Circular shall take effect fifteen (15) days after its publication once in a newspaper of general circulation or in the Official Gazette.

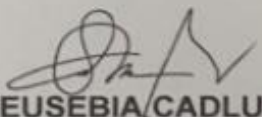
Done in the City of Manila, Philippines, this day of 23 April 2020.

BY THE AUTHORITY OF THE BOARD:

  
VADM ROBERT A EMPEDRAD AFP (Ret)  
Administrator

#### SECRETARY'S CERTIFICATE

This is to certify that Memorandum Circular No. SR-2020-02 has been approved by the MARINA Board during its 275<sup>th</sup> Regular Board Meeting held on 23 April 2020.

  
ATTY. EUSEBIA CADLUM-BOCO  
Corporate Board Secretary

Published on \_\_\_\_\_ at \_\_\_\_\_.  
Copy filed with UP Law Center on \_\_\_\_\_.

## ANNEX A

### GUIDELINES FOR CAPACITY CALCULATION OF SEWAGE SYSTEMS

This guideline shall be used for calculating the size of systems for the treatment and storage of sewage so that they comply with regulations 9.1.3 of MARPOL Annex IV holding tanks.

The guideline contains rules on both black and grey sewage. Black and Grey sewage has been defined in part III of the Memorandum Circular. Only black sewage is required to be treated in accordance with the regulations, but since the sanitary systems on board, many ships have been designed so that the black and the grey sewage is led to the same system or tank, the table below also gives calculation values for such systems.

The figures in the table below give the cubic meter per person per day for the three systems.

SYSTEMS	BLACK WATER	BLACK/GREY WATER
Conventional system	0.070 m <sup>3</sup>	0.230 m <sup>3</sup>
Vacuum system	0.025 m <sup>3</sup>	0.185 m <sup>3</sup>
Recirculation/ water saving system	0.002 m <sup>3</sup>	-

The figures mentioned above may be deviated in connection with any other toilet systems.

Ships provided with systems for comminution and disinfection of sewage shall also be equipped with a suitable holding tank. Holding tanks shall in general be sufficiently large to contain sewage for one day's operation. Vessels engaged on voyages only during the day, such as sport fishing vessels, may be equipped with a tank capacity for 12 hours considering the circumstances. Passengers ships engaged on regular voyages between two ports shall at least have a holding tank capacity sufficient for a return voyage.

## ANNEX B

### HOLDING TANK CAPACITY COMPUTATION

In compliance with regulations 9.1.3 of MARPOL Annex IV holding tanks must meet the following:

#### CAPACITY:

The Holding Tank must be able to comply with the following formula:

$$Cr \geq A Np Da$$

whereas:

**Cr** : capacity of holding tank  
**A** : sewage volume per system as state on Annex A

SYSTEMS	BLACK WATER	BLACK/GREY WATER
Conventional system	0.070 m <sup>3</sup>	0.230 m <sup>3</sup>
Vacuum system	0.025 m <sup>3</sup>	0.185 m <sup>3</sup>
Recirculation/ water saving system	0.002 m <sup>3</sup>	-

**Np** : total number of persons aboard  
**Da** : number of days in operation (any increment of 24 hours shall be considered as equivalent to a day)