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İSTANBUL & MARMARA, AEGEAN, MEDITERRANEAN, BLACKSEA REGIONS

# DENİZ TİCARET ODASI CHAMBER OF SHIPPING

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**Konu** : Çin Gemi Suyu Kirletici Yayılımı Kontrol Standartları Hk.

## Sirküler No :746

SAYIN ÜYEMİZ,

**İlgi** : ICS'nin 29.10.2019 tarihli ve ENV(19)08 sayılı yazısı.

Uluslararası Deniz Ticaret Odası'nın (International Chamber of Shipping-ICS) ilgi yazısı ile;

Tesis edilmiş onaylı artıma sisteminin çalıştırılmasına rağmen Çin'in kirletici yayılımı kontrol standart mevzuatına göre geminin Guangzhou/Çin şehrinde tutulduğu, Çin'in herhangi bir limanında buna izin verilmediği, arıtılmış pis su deşarjının kıyıdan 3 deniz mili (nautical mile-nm) uzaklıkta, 4 knot ve üzeri seyir hızında yapılabileceği, atık suların limandayken gemideki toplama tanklarında tutulması ya da kıyı sistemine deşarj edilmesi gerektiği, Ek'te yer alan bahse konu mevzuatın Aralık 2017 tarihinde yayınlandığı ve Temmuz 2018 tarihinde yürürlüğe girdiği bildirilmiş olup;

MARPOL atıklarının deşarjı ile ilgili olarak karşılaşılan herhangi bir sorunun john.stawpert@ics-shipping.org adresine yönlendirilmesi istenmiştir.

Gereğini bilgilerinize arz/rica ederim.

Saygılarımla,

*e-imza*

İsmet SALİHOĞLU  
Genel Sekreter

**Ek:** İlgi yazı ve Ek'i (19 sayfa)

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Tel : +90 (212) 252 01 30 Faks: +90 (212) 293 79 35  
Web: [www.denizticaretodasi.org.tr](http://www.denizticaretodasi.org.tr) E-mail: [iletisim@denizticaretodasi.org.tr](mailto:iletisim@denizticaretodasi.org.tr) Kep: imeakdto@hs01.kep.tr.



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Meclis-i Mebusan Caddesi No: 22 34427 Fındıklı - Beyoğlu - İstanbul Türkiye  
Tel : +90 (212) 252 01 30 Faks: +90 (212) 293 79 35  
Web: [www.denizticaretodasi.org.tr](http://www.denizticaretodasi.org.tr) E-mail: [iletisim@denizticaretodasi.org.tr](mailto:iletisim@denizticaretodasi.org.tr) Kep: [imeakdto@hs01.kep.tr](mailto:imeakdto@hs01.kep.tr)



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International  
Chamber of Shipping

Shaping the Future of Shipping

38 St Mary Axe London EC3A 8BH

Tel +44 20 7090 1460

Fax +44 20 7090 1484

[info@ics-shipping.org](mailto:info@ics-shipping.org) | [ics-shipping.org](http://ics-shipping.org) | [shipping-facts.com](http://shipping-facts.com)

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29 October 2019

**ENV(19)08**

**TO: ENVIRONMENT SUB-COMMITTEE**

**Copy: ALL FULL AND ASSOCIATE MEMBERS**

**CHINA SHIP WATER POLLUTANT EMISSION CONTROL STANDARDS**

**Action Required: *Members are advised of a recent ship detention in China under the pollutant emission control standards, and are invited to note the information provided, reporting any issues with respect to MARPOL discharges to the secretariat.***

Members' are advised of a recent ship detention in Guangzhou, China, due to the ship operating its approved sewage plant in port. According to Chinese regulations, this action is not permitted in any port in China, and treated Sewage can only be discharged 3nm from land when the ship is travelling at a speed of 4 knots or more. When in port the sewage must be held in a holding tank or discharged ashore. The relevant regulations were issued in December 2017 and came into force in July 2018, and a translation of them, produced by the China Environmental Science Press, is provided at **Annex A**.

Members are invited to note the information provided and circulate it as appropriate. Furthermore, members are reminded that any issues encountered with respect to discharges of MARPOL wastes should be reported to the undersigned ([john.stawpert@ics-shipping.org](mailto:john.stawpert@ics-shipping.org)).

John Stawpert  
Manager (Environment and Trade)

ICS 13.060.30  
Z64



Chinese People and People's  
Republic of China and  
National Standards

GB 3552-2018

代替GB 3552-83

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Ship water pollutant emission control  
standards

Discharge standard for water pollutants from ships

(Release)

This electronic version is for release. Please use the official standard text published by  
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State quality and quality supervision  
inspection inspection general bureau

## The number of

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## Preamble

In order to implement the Environmental Protection Law of the People's Republic of China, the Law on the Prevention and Control of Water Pollution of the People's Republic of China, the Marine Environment Protection Law of the People's Republic of China, the Regulations of the People's Republic of China on the Prevention and Control of Pollution of the Marine Environment by Ships and other laws and regulations, protect the environment, prevent and control pollution, and promote the progress of the technology of pollutant emission control of marine pollutants, We will promote the construction of the facilities for the receipt and treatment of pollutants in ships, promote the green development of the marine and related equipment manufacturing industry, and formulate this standard.

This standard specifies the discharge control requirements for the discharge of oily sewage, domestic sewage, sewage containing toxic liquid substances and ship waste discharge from the ship's discharge to the environmental water body, as well as the requirements for the implementation and supervision of the standards.

This standard was first published in 1983 and is being revised for the first time.  
Key revisions:

1. Modify the standard name according to the properties of controlling the discharge of pollutants;
2. adjust the scope of application of the standard and increase the emission control requirements of sewage containing toxic liquid substances;
3. According to the water and ship category, the discharge control requirements of oily sewage, domestic sewage, sewage containing toxic liquid substances and ship waste are stipulated;
4. Increase the pH, chemical oxygen demand (COD<sub>Cr</sub>), total chlorine (total residual chlorine), total nitrogen, ammonia nitrogen and total phosphorus and other pollutant control projects for domestic sewage discharge;
5. The emission limits of five-day biochemical oxygen demand (BOD<sub>5</sub>), suspended substances (SS) and heat-resistant coliforms in oily sewage and domestic sewage in strict vessels;

6.adjusting the regulations for the classification of ship waste and updating the requirements for the control of ship waste emissions;

7.Clarify the pollution monitoring requirements for oil-contaminated water and domestic sewage at the ship's machinery.

From the date of the implementation of this standard, the Standard for the Discharge of Pollutants in Ships (GB 3552-83) shall be repealed.

Provincial People's Government of the standard not specified in the project may establish their local pollutant emission standards; this standard has been provided for the project, may develop more stringent than this standard local pollutant emission standards.

This standard by the Water Environment Management Division of the Department of Environmental Protection, Science, Technology organizations to develop.

This standard is mainly drafted by: Institute of Water Transport Ministry of Transport Science, Institute for Environmental Standards, Ministry of Agriculture, Fisheries Ship Inspection Bureau, China Classification Society, Zhenjiang Maritime Bureau, Ministry of Transport Planning and Research Institute, Dalian Municipal Environmental Monitoring Center , fishery Machinery and instrument Research Institute, Chinese Academy of fishery sciences.

This standard Department of Environmental Protection approved December 25, 2017.

This Standard Since July 1, 2018

implementation. This standard

is interpreted by the MEP.



# Ship water pollutant emissions control standards

## 1 Scope

This standard specifies the requirements and monitoring emission control requirements oily wastewater contaminants vessel, sewage, waste water containing emission control requirements and ship refuse noxious liquid substances, as well as implementation and monitoring standards and so on.

This standard applies in the other sea areas and in areas under the jurisdiction of the People's Republic of China, ship emissions to the environment water oily wastewater, sewage, supervision and management of sewage and garbage from ships behavior and other toxic liquid substances. This standard does not apply to temporary emission behavior for the protection of the safety of ships or maritime rescue safety of personnel necessary.

This standard applies to the behavior of pollutants permitted by law. In the river and other special protected areas management of ship emissions, according to "People's Republic of China Environmental Protection Law", "Water Pollution Prevention Law," People's Republic of China "Marine Environmental Protection Law of People's Republic of China", "People's Republic of China Prevention of Marine Pollution by Ships legal and regulatory environment management regulations "and performed on the prohibition of the dumping of garbage, prohibits the discharge of noxious liquid substances, sewage is prohibited in the drinking water source protection areas, specific provisions to prevent overflowing and leaking cargo ship and so on.

## 2 Normative References

This standard reference in the following documents or provisions. For dated references, only the edition is applicable to this standard. For undated references, the latest edition of(Including any modifications) apply to this standard.

GB 6920 Determination of the pH glass electrode method of Water

GB 11893 Determination of total phosphorus ammonium molybdate spectrophotometry

GB 11901 Water Determination Gravimetric Method suspension of

GB / T 5750.11 Standard examination methods for drinking water disinfectants index

GB / T 5750.12 Drinking water standard test method for microbiological indicators

HJ 505 Water quality BOD(Of BOD5) Dilution and seeding method

HJ 535 Water Quality Ammonia Nitrogen Determination Na's Reagent Spectlumine Method

HJ 536 Water quality Ammonia nitrogen determination Salicylic acid spectlumium method

HJ 537 Determination of water quality ammonia nitrogen Distillation-middleting

HJ 585 Water Quality Determination of Free Chlorine and Total ChlorineN, N-diaxethyl-1, 4-Pylene Titification

HJ 586 Water Quality Determination of Free Chlorine and Total Chlorine N, N-diaxepropyl-1, 4-Pheendiamine Spectlumine Method HJ 636 Determination of Total Nitrogen Alkaline Potassium Sulfate Dissolved Uvphoto method

HJ 665 Water Quality Ammonia Nitrogen Determination Continuous Flow-Salicylic Acid Spectlumine Method

HJ 666 Water Quality Ammonia Nitrogen Determination Flow Injection-Salicylic Acid Spectlumine Method

HJ 828 Water Quality Determination of Chemical Oxygen Demand

HJ/T 195 Water quality Ammonia nitrogen determination Gas phase molecular absorption spectroscopy

HJ/T 199 Determination of total nitrogen in water quality Gas phase molecular absorption spectroscopy

HJ/T 347 Determination of the water quality fecal coliform group Multitube fermentation and membrane (trial)

CB/T 3328.1 Water quality inspection methods for discharge of water from marine sewage treatment Part 1: Heat-resistant Coliseum group test

CB/T 3328.5 Water quality inspection method for discharge of water from marine sewage treatment Part5: Water oil content test

JT/T 409 Ship cabin bottom water, domestic sewage sampling method

Regulations on the Construction and Equipment of Ships for the International Bulk Transport of Hazardous Chemicals (IBC Rules)

International Convention on the Prevention of Pollution from Ships (MARPOL

)

### 3 Terminology and definitions

The following terms and definitions apply to this standard.

#### 3.1 Ship Ship Ship

All types of drainage or non-draining boats, boats, seaplanes, submersibles and mobile platforms, excluding military vessels.

#### 3.2 总吨gross tonnage

According to the statutory rules applicable to the ship measured and calculated, used to characterize the volume of the ship's indicators, there is no volume outline.

#### 3.3 内河inland water

Surface water bodies such as rivers, lakes and reservoirs within the territory of the People's Republic of China.

#### 3.4 沿海costal water

The sea area under the jurisdiction of the People's Republic of China.

#### 3.5 Environmental water body environment waterbodies

inland and coastal.

#### 3.6 Oily sewage oily wastewater

Sewage produced in the operation of the ship containing crude oil, fuel, lubricants and various petroleum products and their residues, including oily water from machine shipping and oil containing oil residues.

#### 3.7 Domestic sewage sewage

Sewage from the ship, which is mainly generated by the lives of persons, includes:

- a) discharges and other waste from any form of toilet;
- b) the sinks, bath basins and drains of the drainage holes in the infirmaries (pharmacies, wards, etc.) and c) discharges containing living animal premises;
- d) Other sewage mixed with the above-mentioned discharges or waste.

#### 3.8 Toxic liquid substance noxious liquid substances

Substances that are harmful to the water environment or human health or that cause damage to the use of water resources, including in the International Bulk Transport.

List of contaminant types in Chapter 17 or 18 of the Rules for The Construction and Equipment of Dangerous Chemicals (IBC Rules), or

Any substance provisionally assessed as a Class X, Y or Z substance in accordance with

Article 6.3 of the International Convention for the Prevention of Pollution from Ships

(MARPOL). Among them:

- a) Class X substances are substances that pose a significant hazard to marine resources or human health and are prohibited from being discharged into environmental water bodies;
- b) Class Y substances are substances that pose a hazard to marine resources or human health, or cause damage to the marine recreational environment or other lawful use, and require strict restrictions on discharge into environmental water bodies;
- c) Class Z substances are substances that pose less harmful to marine resources or human health and restrict discharge into environmental water bodies.

3.9 Sewage containing toxic liquid substances waste water containing noxious liquid substances  
Sewage containing toxic liquid substances produced by ships as a result of activities such as washing cabins.

3.10 船舶垃圾garbage from ships

Waste produced during the normal operation of the ship, which requires continuous or regular disposal, including various plastic wastes, food waste, household waste, waste cooking oil, operating waste, cargo residues, animal carcasses, waste fishing gear and electronic waste (see Appendix A of this standard for details) and waste incinerator ash, Except for substances applicable to the International Convention for the Prevention of Pollution from Ships (MARPOL) by-laws I, II, III, IV and VI, and do not include fish (including shellfish) and their parts in the following activities:

- a) The activity of catching fish (including shellfish) during navigation;
- b) Activities of placing fish (including shellfish) in aquaculture facilities on board;
- c) Activities to transfer captured fish (including shellfish) from on-board aquaculture facilities to onshore processing and transportation.

3.11 Substances harmful to the marine environment of substances and marine sin  
Substances harmful to the marine environment as set out in the Guidelines for the  
Implementation of The International Convention for the Prevention of Pollution from  
Ships (MARPOL) By-laws V (MEPC.219 (63)).

3.12 最近陆地 the nearest land

The baseline of the territorial sea closest to the location.

3.13 Reception facility reception facility

Facilities for receiving ship sewage and garbage, including on-water reception facilities  
and onshore-specific receiving facilities.

**3.14 建造 construction**

The construction of the ship has completed the placement of keel or similar phases. A  
similar phase is when the assembly volume has reached at least 50t or 1% of the  
estimated weight of the entire structural material.

4 Oily sewage discharge control requirements

4.1 The discharge control requirements for oily sewage in ships shall be implemented in accordance  
with the provisions of Table 1.

Table 1 Ship oily sewage discharge control requirements

Sewage category	Water category	Ship category	Emission control requirements		
Oil edge at the machine	Inland	Ships built before January 1, 2021	As of July, 2018, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.		
		Ships built on and after January 1, 2021	Collect side-by-side to receiving facilities.		
	Coastal	400 gross tons and above ships	As of July, 2018, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.		
		Ships under 400 gross tons	<table border="1"> <tr> <td>Non-fishing vessels</td> <td>As of July, 2018, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.</td> </tr> <tr> <td>Fishing Ships</td> <td>                     (1) from July, 2018 to December 31, 2020, in accordance with this standard 4.2;                      (2) As of January 1, 2021, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.                 </td> </tr> </table>	Non-fishing vessels	As of July, 2018, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.
Non-fishing vessels	As of July, 2018, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.				
Fishing Ships	(1) from July, 2018 to December 31, 2020, in accordance with this standard 4.2; (2) As of January 1, 2021, side-by-side receiving facilities will be performed or collected in accordance with this Standard 4.2.				
Oil and sewage containing oil residues	Inland	All tankers	As of July 1, 2018, collection is side-by-side to the receiving facility.		
	Coastal	150 gross tons and above oil tankers	As of July, 2018, the following conditions are met by collecting side-by-side discharges into the receiving facility or discharged during the ship's voyage: <ul style="list-style-type: none"> <li>① the tanker is more than 50 nautical miles from the nearest land;</li> <li>② The instantaneous discharge rate of oil content of oil discharged into the sea shall not exceed 30 liters/nautical miles;</li> <li>③ The oil content of oil discharged into the sea shall not exceed 1/30000 of the total amount of oil;</li> <li>④ The drainage monitoring system is functioning properly.</li> </ul>		
		150 gross tons or less oil tankers	As of July 1, 2018, collection is side-by-side to the receiving facility.		

4.2 The discharge control of oil and sewage pollutants at the machine premises shall be carried out in accordance with the provisions of Table 2, and discharge shall be carried out during the navigation of the ship.

Table 2 Limits for the discharge of oil and sewage pollutants from marine machinery

Contaminants Project	Limits	Pollutant emission monitoring location
Petroleum (mg/L)	15	Oil sewage treatment plant outlet

**5 Domestic sewage control requirements**

5.1 As of July, 2018, ships with a total of 400 gross tons or more, and ships with 400 gross tons or less and with an approved permit to carry 15 persons and more, will be subject to the emission controls of domestic sewage in different waters as required by 5.1.1 and 5.1.2, respectively.

5.1.1 In the inland river and within 3 nautical miles (inclusive) of the nearest land, the domestic sewage of the ship shall be treated in one of the following ways and shall not be discharged directly into the ambient water body:

- a) Collecting and draining the receiving facility using the ship's onboard collection device;
- b) Treatment with onboard domestic sewage treatment plant, to meet the requirements of 5.2 after discharge during navigation.

5.1.2 In the sea area 3 nautical miles away from the nearest land, the control of the discharge of domestic sewage pollutants by ships shall be carried out in accordance with Table 3.

Table 3 Domestic Sewage Control Requirements for Ships 3 Nautical Miles Away from the Nearest Land

Waters	Emission control requirements
3 nautical miles and a distance of up to 12 nautical miles from the nearest land	At the same time, the following conditions are met: (1) Use equipment to break solids and disinfect discharges; (2) The speed of the ship is not less than 4 knots, and the domestic sewage discharge rate does not exceed the maximum allowable discharge rate at the corresponding speed.
12 nautical miles from the nearest land	The speed of the ship is not less than 4 knots and the discharge rate of domestic sewage does not exceed the maximum allowable at the corresponding speed  The emission rate.

5.2 In the inland river and within 3 nautical miles (inclusive) of the nearest land, according to the ship category and the time of installation (including replacement) of domestic sewage treatment plant, the corresponding pollutant discharge limits shall be carried out using the marine domestic sewage treatment plant treated on board.

5.2.1 Ships that install (including replacement) domestic sewage treatment units prior to January 1, 2012 to discharge domestic sewage into environmental water bodies, and their pollutant emission control is carried out in accordance with Table 4.

Table 4 Limits for discharge of marine domestic sewage pollutants (I)

Serial number	Contaminants Project	Limits	Pollutant emission monitoring location
1	Five-day biochemical oxygen demand (BOD <sub>5</sub> ) (mg/L)	50	The outlet of the sewage treatment plant
2	Suspended (SS) (mg/L)	150	
3	Number of heat-resistant coliforms (individual/L)	2500	

5.2.2 Ships that install (including replacement) domestic sewage treatment units on or after January 1, 2012, discharge domestic sewage into environmental water bodies, and their pollutant discharge control shall be carried out in accordance with Table 5, except for vessels that are required to implement 5.2.3 discharge control requirements.

Table 5 Limits for discharge of marine domestic sewage pollutants (II)

Serial number	Contaminants Project	Limits	Pollutant emission monitoring location
1	Five-day biochemical oxygen demand (BOD <sub>5</sub> ) (mg/L)	25	The outlet of the sewage treatment plant
2	悬浮物 (SS) (mg/L)	35	
3	Number of heat-resistant coliforms (individual/L)	1000	
4	Chemical Oxygen Demand (COD <sub>Cr</sub> ) (mg/L)	125	
5	pH (no volume)	6~8.5	
6	Total chlorine (total residual chlorine) (mg/L)	<0.5	

5.2.3 Passenger vessels that install (including replacement) domestic sewage treatment units on or after January 1, 2021 to discharge domestic water into the river, and



their pollutant emission control is carried out in accordance with Table 6.

5.3

Table 6 Limits for discharge of marine domestic sewage pollutants (III)

Serial number	Contaminants Project	Limits	Pollutant emission monitoring location
1	Five-day biochemical oxygen demand (BOD5) (mg/L)	20	The outlet of the sewage treatment plant
2	悬浮物 (SS) (mg/L)	20	
3	Number of heat-resistant coliforms (individual/L)	1000	
4	Chemical Oxygen Demand (CODCr) (mg/L)	60	
5	pH (no volume)	6~8.5	
6	Total chlorine (total residual chlorine) (mg/L)	<0.5	
7	Total nitrogen (mg/L)	20	
8	(mg/L)	15	
9	Total phosphorus (mg/L)	1.0	

5.3 In the drinking water source protection area, no domestic sewage shall be discharged and the control measures shall be recorded in accordance with the regulations.

Ships installed (including replacement) of domestic sewage treatment units on and after January 1, 2016, if the process of sewage treatment is diluted due to process requirements, five-day biochemical oxygen demand, suspension, chemical oxygen demand, total nitrogen, ammonia nitrogen, total phosphorus water pollutant emission concentration press conversion, heat-resistant e. coli group, pH Value sand and total chlorine (total residual chlorine) are still measured concentrations as water pollutant emission concentrations.

$$\frac{Q_e}{Q_i} \quad (\text{Type 1})$$

- refers to the concentration of water pollutant emissions, mg/L;

Solid - refers to the measured concentration of water pollutants, mg/L;

$Q_i$ - refers to the flow of domestic sewage sewage into the domestic sewage treatment plant for treatment, m<sup>3</sup>/d;

$Q_e$ - refers to the flow of water from the domestic sewage treatment unit, m<sup>3</sup>/d, after mixing with diluted water.

## 6 Sewage discharge control requirements containing toxic liquid substances

6.1 The discharge of sewage containing toxic liquid substances by ships along the coast shall be carried out in accordance with The Provisions of Table 7.

Table 7 Sewage discharge control requirements containing toxic liquid substances

Sewage contains any of the following toxic liquid substances	Emission control requirements
<p>(1) Class X substances;</p> <p>(2) High viscosity or solidification in Class Y substances;</p> <p>③ Class Y substances that have not been discharged in accordance with the prescribed procedures;</p> <p>④ Class Z substance that has not been discharged in accordance with the prescribed procedures.</p>	<p>If pre-washing cannot be exempted, the ship shall be pre-washed in accordance with the prescribed procedures before leaving the port of discharge, and the pre-washed cabin water shall be discharged into the receiving facility. Wherein, Class X substances should be pre-washed to a concentration of 0.1% or equal to 0.1% (mass percentage), and the remaining sewage in the cabin shall continue to be discharged into the receiving facility until the cabin is emptied after the concentration has reached the requirements. After pre-washing, the discharge of sewage containing toxic liquid substances produced by water ingifill sinboards the cabin</p> <p>Play in accordance with this standard 6.2.</p>
<p>① Class Y substances discharged in accordance with the prescribed procedures;</p> <p>② Class Z substance shipping in accordance with the prescribed procedure.</p>	<p>6.2 in accordance with this standard;</p> <p>Or sewage discharges tentatively designated as class Z substances may be exempted from the requirement of 6.2 c) discharge sefrom below the waterline through underwater discharge.</p>

6.2 After unloading the cargo in accordance with the prescribed procedures of the ship and pre-washing, effective cleaning or ventilation in accordance with the provisions, the discharge of sewage containing toxic liquid substances shall meet the following conditions at the same time:

- a) discharge from an area of not less than 25 metres from the nearest land area (inclusive) at a depth of not less than 25 metres;
- b) Emissions in the navigation of the ship, the speed of the self-sailing ship is not less than 7 knots, the speed of non-self-sailing ships is not less than 4 knots;
- c) Emissions are discharged below the waterline through underwater discharges at a rate not exceeding the maximum design rate.

## **7 Ship waste emission control requirements**

7.1 Dumping of ship waste is prohibited in the river. In the sea areas where waste is allowed to be discharged, corresponding emission control requirements shall be implemented according to the type of ship waste and the nature of the sea area.

7.1.1 Plastic waste, waste cooking oil, household waste, incinerator ash, waste fishing gear and electronic waste should be collected and discharged side by side in receiving facilities in any sea area.

7.1.2 For food waste, the area within 3 nautical miles (inclusive) from the nearest land, should be collected and discharged into the receiving facility, crushed or grated to a diameter of not more than 25 mm in the sea from the nearest land land area of 3 nautical miles to 12 nautical miles inclusive, and discharged from the sea 12 nautical miles away from the nearest land.

7.1.3 For cargo residues, the area within 12 nautical miles (inclusive) of the nearest land, the receiving facility shall be collected and discharged side by side, and in the sea beyond the nearest land land area of 12 nautical miles, the discharge of cargo residues containing materials harmful to the marine environment may be discharged.

7.1.4 For animal carcasses, the area within 12 nautical miles (inclusive) of the nearest land area shall be collected and discharged into the receiving facility;

7.1.5 In any sea area, cleaning water on cargo compartments, decks and outer surfaces may contain cleaners or additives that are not substances harmful to the marine environment;

7.2 In any sea area, the emission control of mixed waste of different types of ship waste should be simultaneously met the emission control requirements of each type of ship's waste contained.

## **8 Monitoring requirements**

8.1 Samples of oily water and domestic sewage from ship machines are carried out in accordance with JT/T 409.

8.2 The determination of pollutants from oil-contaminated water and domestic sewage used the method criteria listed in Table 8.

8.3 The monitoring data of the pollutant emission monitoring location are used as the basis for determining whether the emission behavior is up to standard or not.

Table 8 Standards for the determination of oil-contaminated water and domestic sewage pollutants used in ship machines

Serial number	Contaminants Project	Standard name for monitoring method	Standard No.
1	Chemical oxygen demand (CODCr)	Water quality, determination of chemical oxygen demand, heavy chromate method	HJ 828
2	Five-day biochemical oxygen demand (BOD5)	Water quality Five-day biochemical oxygen demand (BOD5) determination dilution and inoculation method	HJ 505
3	Suspended (SS)	Weight determination of water quality suspended matter	GB 11901
4	Number of heat-resistant e. coli	Standard testing method sable sancitis Microbial indicators	GB/T 5750.12
		Water quality Determination of fecal coliforms Multi-tube fermentation and membrane (trial)	HJ/T 347
		Water quality inspection methods for discharge of water from ship sewage treatment Part 1: Testing of heat-resistant coliform group	CB/T 3328.1
5	Ph	Determination of pH of water quality Glass electrode method	GB 6920
6	Oil	Water quality inspection methods for discharge of water from ship sewage treatment Part 5: Water oil content inspection method	CB/T 3328.5
7	Total chlorine (total residual chlorine)	Standard inspection method of drinking water, disinfectant index	GB/T 5750.11
		Water quality Determination of free chlorine and total chlorine N, N-diehyl-1, 4-pylamine titration	HJ 585
		Water quality Determination of free chlorine and total chlorine N, N-diehyl-1, 4-pylene specphotos	HJ 586
8	Total nitrogen	Water quality Determination of total nitrogen Gas phase molecular absorpction spectroscopy	HJ/T 199
		Water quality Determination of total nitrogen Alkaline potassium sulfate to dissipate ultraviolet speculumium method	HJ 636
9	Ammonia nitrogen	Water quality, ammonia nitrogen determination gas phase molecular absorpction spectroscopy	HJ/T 195
		Water quality, ammonia nitrogen determination, Nanoret reagent speculumium method	HJ 535
		Water quality, ammonia nitrogen determination salicylic acid speculumium method	HJ 536
		Water quality, ammonia nitrogen determination Distillation-middleting	HJ 537
		Water quality, ammonia nitrogen determination Continuous flow-salicylic acid speculumium method	HJ 665
		Water quality, ammonia nitrogen determination flow injection-salicylic acid speculumium method	HJ 666
10	Total phosphorus	Water quality Determination of total phosphorus ammonium molybdenum acid speculumium method	GB 11893

## 9 Implementation and supervision

9.1 The competent department of environmental protection under the State Council shall be responsible for guiding, coordinating and supervising the implementation of this standard.

9.2 The competent departments of national maritime affairs and the competent departments of national fisheries shall, in accordance with laws and regulations and the provisions of these standards, supervise and manage the discharge of water pollutants by various types of ships.

Appendix A  
(Normative Appendix)  
Ship waste classification

Table A.1 Classification of Ship Waste

Serial number	Category	Description
1	Plastic waste	Solid waste containing or including any form of plastic, including synthetic cables, synthetic fibre fishing nets, plastic waste bags and incinerator ash for plastic products.
2	Food waste	Deterioration or deterioration of the ship produced foodstuffs, including fruits, vegetables, dairy products, poultry, meat products and food scraps.
3	Household waste	Various types of waste generated on board accommodation spaces, not including sewage and gray water (Dishwashing water, shower water, laundry water, bath water and wash water, etc.).
4	Used cooking oil	Any waste or for preparing an edible oil or animal fat for cooking or cooking food, but does not include the use of the oil for cooking food.
5	Waste incinerator ash	For waste incineration ash and slag marine incinerator generated.
6	Operation of waste	During normal maintenance or operation of ships in the ship collected or used for storage and handling of solid waste cargo (Including mud), comprising a cargo tank washings and external cleaning and detergent additives contained in the water, not including gray water, other similar or ship bilge emissions necessary for the operation.
7	Cargo residues	After cargo handling on the deck or in the cargo compartment leave residual, excess or spills including handling, whether it is in a wet or dry state, or mixed in the wash water. Excluding cargo cargo residues or dust remaining on the ship deck after cleaning Dust outer surface of the ship.
8	Animal carcasses	As the goods are carried and dead animals died during the voyage the ship.
9	Abandoned fishing gear	Abandon the use of the fishing gear, laid on the water-containing, water or seabed for capturing aquatic physical device or a part of components Co.
10	electronic waste	Waste electronic cards, small appliances, electronic equipment, computers, printers and the like.