



China National Standard

Discharge standard for water pollutants from ships

(GB3552-2018)

Issued 24 August 2018 (Version I)

Translation prepared by:

Mr. Gan Shaowei, China Classification Society Overseas Technology Center and Ms. Joyce Teng, INTERTANKO

CONTENTS PAGE

| | Page | |
|---|---|----|
| 1 | Scope of application | 1 |
| 2 | Standard reference files | 1 |
| 3 | Glossary and definitions | 2 |
| 4 | Control requirements for the discharge of oily wastewater | 4 |
| 5 | Control requirements for the discharge of sewage | 5 |
| 6 | Discharge control requirements for waste water containing noxious liquid substances | 8 |
| 7 | Requirements for the prevention of pollution by garbage from ships | 9 |
| 8 | Requirements for monitoring | 10 |
| 9 | Implementation and supervision | 11 |

PART-I. People's Republic of China National Standard- Discharge standard for water pollutants from ships (GB3552-2018)

1 Scope of application

This Standard stipulates the control requirements and testing requirements for the discharge of oily wastewater and sewage from ships, the requirements for the control of the discharge of wastewater containing noxious liquid substances and garbage from ships, as well as the implementation and supervision of the Standard.

This Standard is applicable to the waters of the People's Republic of China and any sea areas under its jurisdiction, as well as for the supervision and management of the discharge of oily wastewater and sewage, wastewater containing noxious liquid substances and ship garbage within such water areas. This Standard does not apply to temporary emissions necessary for the safety of ships or for the safety of life at sea.

This Standard refers to pollutants discharge actions permissible by law. The management of the discharge of marine pollutants in inland rivers and other special protected areas is in accordance with the law of the People's Republic of China environmental protection law, the law on the prevention and control of water pollution of the People's Republic of China, the law on the protection of the marine environment of the People's Republic of China, the regulations on the control of the environmental management of the marine pollution of the sea by the prevention and control of the marine pollution by the People's Republic of China, which provides specific provisions on the prohibition of dumping of garbage, the prohibition of the discharge of noxious liquid substances, the prohibition of pollutant discharge in protected areas of drinking water source, and the prevention of overflow and leakage of ship's cargo, etc.

2 Standard reference files

This Standard makes reference to the below list of documents and their terms therein. For dated references, only those dated versions apply to this Standard. For undated references, the latest edition (including all modifications) will be used in the application to this Standard:

GB 6920, GB 11893, GB 11901, GB/T 5750.11, GB/T 5750.12, HJ 505, HJ 535, HJ 536, HJ 537, HJ 585, HJ 586, HJ 636, HJ 665, HJ 666, HJ828, HJ/T 195, HJ/T 199, HJ/T 347, CB/T 3328.1, CB/T 3328.5, JT/T 409, IMO IBC code, MARPOL

denotes¹:

¹ Denotes are additional notes provided by the translators which are not included in the original Chinese Standard.

- *GB means "China National Standards"; HJ means " standards issued by Ministry of Environment Protection of PRC"; CB means "China industrial standards for ships";*
- *Standards with "/T" means the standards are recommendatory, otherwise they are compulsory standards*

3 Glossary and definitions

3.1 Ship

A vessel of any type whether it displaces water or not, yachts, hydrofoil boats, submersibles, mobile floating platforms but not including military vessels.

denotes: as an example, a ground-effect wing ship is a vessel without displacement.

3.2 Gross tonnage

The moulded volume of all enclosed spaces of a ship, measured and calculated according to the applicable statutory rules.

3.3 Inland water

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

3.4 Coastal water

All sea areas under the jurisdiction of the People's Republic of China.

3.5 Environment waterbodies

Inland waters and coastal waters.

3.6 Oily wastewater

Wastewater containing crude oil, fuel oil, lubricating oil and other various petroleum products and their residues generated in the operations of the ship, including all wastewater from machinery spaces and oil cargo residues.

3.7 Sewage

Wastewater produced from human activities on-board, including:

- a) Drainage and other wastes from any form of toilets and urinals;
- b) Drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;

- c) Drainage from spaces containing living animals; or
- d) Other waste waters when mixed with the drainages defined above.

3.8 **Noxious liquid substances**

Substances that are hazardous to the water environment or human health or that cause damage to water use, including those indicated in the Pollution Category column of chapter 17 or 18 of the International Bulk Chemical Code (IBC Code) or provisionally assessed under the provisions of MARPOL Annex II Regulation 6.3 as falling into category X, Y or Z. In particular:

- a) Category X: Noxious liquid substances which, if discharged into the sea, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment;
- b) Category Y: Noxious liquid substances which, if discharged into the sea, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment;
- c) Category Z: Noxious liquid substances which, if discharged into the sea, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment.

3.9 **Waste water containing noxious liquid substances**

Wastewater containing noxious liquid substances arising out of shipboard activities such as tank cleaning etc.

3.10 **Garbage from ships**

Wastes that need to be disposed of continuously or periodically during normal operation of the ship, including various plastic waste, food waste, domestic waste, cooking oil waste, operational waste, cargo residues, animal carcasses, discarded fishing gear and electronic-waste (see Appendix A of this standard for details) and incinerator ash waste, except for substances applicable to Annex I, II, III, IV, VI of the Convention on the Prevention of Pollution from Ships (MARPOL), and does not include fresh fish and parts thereof generated as a result of fishing activities undertaken:

- a) Fishing activities during navigation;
- b) Activities in which fish are placed in aquaculture facilities on board ships;
- c) Transfer of caught fish from on-board aquaculture facilities to onshore processing and transportation activities.

3.11 **Substances harmful to marine environment**

Substances that are harmful to the marine environment as specified in IMO resolution MEPC.219(63) for the implementation of MARPOL Annex V.

3.12 The nearest land

The baseline from which the territorial sea in question is established.

3.13 Reception facilities

Facilities for receiving wastewater and garbage from ships, including receiving facilities out at sea and shore-based receiving facilities.

3.14 Construction

Keel has been laid or similar stage of ship construction. A similar stage means that the ship assembly has reached at least 50t or 1% of the estimated mass of all structural materials.

4 Control requirements for the discharge of oily wastewater

4.1 Discharge control requirements for oily wastewater from ships shall be carried out in accordance with Table 1.

Table 1 Discharge control requirements for oily wastewater from ships

| Pollutants Type | Waters | Ship category | | Requirements |
|-----------------|--|---|---------------------|---|
| Oily Wastewater | Inland waters | Ship constructed before January 1, 2021 | | Implement according to section 4.2 of this Standard or collect and discharge into reception facilities from July 1, 2018. |
| | | Ship constructed on and after January 1, 2021 | | Collect and discharge into reception facilities |
| | Coastal waters | 400 gross tonnage and above | | Implement according to section 4.2 of this Standard or collect and discharge into reception facilities from July 1, 2018. |
| | | Less than 400 gross tonnage | Non-fishing vessels | Implement according to section 4.2 of this Standard or collect and discharge into reception facilities from July 1, 2018. |
| Fishing vessels | (1) From July 1, 2018 to December 31, 2020, to implement according to section 4.2 of this Standard (2) Implement according to section 4.2 of this Standard or collect and discharge into reception facilities from January 1, 2021. | | | |
| Oil Cargo | Inland waters | All tankers | | Collect and discharge to reception facilities from July 1, 2018 |

| Pollutants Type | Waters | Ship category | Requirements |
|-----------------|----------------|--|---|
| Residues | Coastal waters | Tankers of 150 gross tonnage and above | From July 1, 2018, to collect and discharge to reception facilities or discharge when vessel is en-route and providing it meets the following criteria: (1) Vessel is more than 50 nm from the nearest land; (2) The rate of discharge of oil content does not exceed 30 litres per nautical mile; (3) The total quantity of oil discharged into the sea does not exceed 1/30,000 of the total quantity of the particular cargo of which the residue formed a part; and (4) The vessel has an oil discharge monitoring and control system that is working normally. |
| | | Tankers less than 150 gross tonnage | Collect and discharge to reception facilities from July 1, 2018 |

4.2 The discharge of oily wastewater pollutants from machinery spaces shall be carried out in accordance with the provisions of Table 2, and the discharge shall be carried out while the vessel is en-route.

Table 2 Discharge limits of Oily Waste Water pollutants from machinery spaces

| Pollutants | Limits | Monitoring position of pollutant discharge |
|------------------|--------|--|
| Petroleum (mg/l) | 15 | Water outlet of oily water separation unit |

5 Control requirements for the discharge of sewage

5.1 From July 1, 2018, the discharge of sewage from ships not less than 400 gross tonnage and ships below 400 gross tonnage but certified to carry 15 persons and above in respective waters shall meet the requirement as set out in 5.1.1 and 5.1.2 below:

5.1.1 When in inland waters and within 3 nautical miles (including) from the nearest land, the direct discharge of sewage into waters is prohibited.

The sewage shall be treated in either of the following ways:

- a) the sewage be stored in holding tanks and then discharged to the reception facilities;
- b) the sewage be treated by the on-board treatment plant and then discharged when the ship is en-route, provided the requirement in 5.2 is met.

5.1.2 In waters that are more than 3 nautical miles from the nearest land, the discharge of sewage from ships shall be carried out in accordance with Table 3.

Table 3 Requirements on the discharge of sewage into waters that are more than 3 nautical miles from the nearest land

| Waters | Sewage discharge requirement |
|---|---|
| 3 nmiles < Distance from the nearest land ≤ 12 nmiles | Discharge subject to meeting both conditions below: (1) the sewage shall be comminuted and disinfected using a system; and (2) discharge when the ship is en-route and proceeding at no less than 4 knots, the rate of discharge shall not exceed the maximum allowable rate corresponding to the ship speed. |
| Distance from the nearest land > 12 nmiles | Discharge when the ship is en-route and proceeding at no less than 4 knots, and the rate of discharge shall not exceed the maximum allowable rate corresponding to the ship speed. |

5.2 When in inland waters and within 3 nautical miles (including) from the nearest land, the discharge of sewage treated by the onboard treatment plant shall meet the pollutants limit corresponding to the ship type and installation (including change) date of the sewage treatment plant.

5.2.1 For ships with sewage treatment plants installed on-board or changed before January 1, 2012, the discharge of sewage effluent into waters shall be carried out in accordance with Table 4.

Table 4 Discharge limits of sewage effluent from ships (1)

| No | Pollutants | Limits | Monitoring position of pollutant discharge |
|----|--|--------|--|
| 1 | 5-day biochemical oxygen demand (BOD ₅) (mg/L) | 50 | Effluent outlet of sewage treatment plant |
| 2 | Suspended Solids (SS) (mg/L) | 150 | |
| 3 | Thermotolerant Coliform (/L) | 2500 | |

5.2.2 For ships with sewage treatment plants installed on-board or changed on and after January 1, 2012, except those required by 5.2.3, the discharge of sewage effluent into waters shall be carried out in accordance with Table 5.

Table 5 Discharge limits of sewage effluent from ships (2)

| No | Pollutants | Limits | Monitoring position of pollutant discharge |
|----|--|--------|--|
| 1 | 5-day biochemical oxygen demand (BOD ₅) (mg/L) | 25 | Effluent outlet of sewage treatment plant |

| No | Pollutants | Limits | Monitoring position of pollutant discharge |
|----|--|--------|--|
| 2 | Suspended Solids (SS) (mg/L) | 35 | |
| 3 | Thermotolerant Coliform (/L) | 1000 | |
| 4 | Chemical Oxygen Demand (COD _{Cr}) (mg/L) | 125 | |
| 5 | pH | 6~8.5 | |
| 6 | Total Chlorine (residual Chlorine) (mg/L) | <0.5 | |

5.2.3 For passenger ships with sewage treatment plants installed on-board or changed on and after January 1, 2021, the discharge of sewage effluent into inland waters shall be carried out in accordance with Table 6.

Table 6 Discharge limits of sewage effluent from ships (3)

| No | Pollutants | Limits | Monitoring position of pollutant discharge |
|----|--|--------|--|
| 1 | 5-day biochemical oxygen demand (BOD ₅) (mg/L) | 20 | Effluent outlet of sewage treatment plant |
| 2 | Suspended Solids (SS) (mg/L) | 20 | |
| 3 | Thermotolerant Coliform (/L) | 1000 | |
| 4 | Chemical Oxygen Demand (COD _{Cr}) (mg/L) | 60 | |
| 5 | pH | 6~8.5 | |
| 6 | Total Chlorine (residual Chlorine) (mg/L) | <0.5 | |
| 7 | Total nitrogen (mg/L) | 20 | |
| 8 | Ammoniacal nitrogen (mg/L) | 15 | |
| 9 | Total phosphorus (mg/L) | 1.0 | |

5.2.4 For ships with sewage treatment plants installed onboard or changed on and after January 1, 2016, where amounts of dilution are deemed essential to a treatment process, the concentration of BOD₅, SS, COD, total nitrogen, ammoniacal nitrogen and total phosphorus in the discharged effluent shall be adjusted as per the following formula, while the concentration of Thermotolerant Coliform, pH and total Chlorine (residual Chlorine) shall use the actual measured values.

$$\rho = \frac{Q_e}{Q_i} \rho_{actual}$$

Where,

ρ - adjusted concentration, mg/L;

ρ_{actual} - actual measured concentration, mg/L;

Q_i - influent flow, m³/day;

Q_e - effluent flow, m³/day.

5.3 Discharge of sewage effluent is strictly prohibited in the protected areas of drinking water source, and the corresponding control measures shall be recorded.

6 Discharge control requirements for waste water containing noxious liquid substances

6.1 Discharge of waste water containing noxious liquid substances into coastal waters shall be carried out in accordance with Table 7.

Table 7 Discharge control requirements for waste water containing noxious liquid substances

| Waste water containing any one of the following noxious liquid substances | Discharge control requirements |
|--|---|
| (1) Substances in category X; (2) High-viscosity or solidifying substances in category Y; (3) A substance in category Y the unloading of which is not carried out in accordance with the approved procedures; (4) A substance in category Z the unloading of which is not carried out in accordance with the approved procedures; | <ul style="list-style-type: none"> • Tanks shall be prewashed before the ship leaves the port of unloading unless the prewash can be exempted, the resulting residues shall be discharged to a reception facility. • For category X substances, the prewash shall be continued until the concentration of the substance in the effluent is at or below 0.1% by weight, when the required concentration level has been achieved, remaining tank washings shall continue to be discharged to the reception facility until the tank is empty. • Any water subsequently introduced into the tank may be discharged into waters in accordance with the discharge requirements in 6.2. |
| (1) A substance in category Y the unloading of which is carried out in accordance with the approved procedures; (2) A substance in category Z the unloading of which is carried out in accordance with the approved procedures; | <ul style="list-style-type: none"> • Discharged in accordance with 6.2; • For ships constructed before 1 January 2007, the discharge into the sea of residues of substances in category Z or of those provisionally assessed as such below the waterline is not mandatory. |

6.2 For discharge of waste water containing noxious liquid substances into the coastal sea after unloading, prewashing, sweeping and ventilation which were carried out in accordance with approved procedures, all discharge standards below shall apply:

- a) the discharge is made at a distance of not less than 12 nautical miles from the nearest land in a depth of water of not less than 25 m; and
- b) the ship is proceeding en-route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled; and
- c) the discharge is made below the waterline through the underwater discharge outlet(s) not exceeding the maximum rate for which the underwater discharge outlet(s) is (are) designed.

7 Requirements for the prevention of pollution by garbage from ships

7.1 Disposal of garbage into the inland waters is prohibited. In other waters where disposal of garbage is allowed, the applicable disposal control requirements corresponding to garbage categories and water characters shall be met.

7.1.1 All plastics, cooking oil, domestic wastes, incinerator ashes, fishing gear and E-waste shall be collected and then disposed to the reception facilities.

7.1.2 For food wastes:

- They shall be collected and then disposed to the reception facilities if the distance from the nearest land is less than 3 nautical miles (including);
- Disposal may be allowed for wastes that have been passed through a comminuter or grinder and such comminuted or ground garbage shall be capable of passing through a screen with openings no greater than 25 mm, if the distance from the nearest land is more than 3 nautical miles but less than 12 nautical miles (including);
- Disposal is allowed if the distance from the nearest land is more than 12 nautical miles.

7.1.3 For cargo residues:

- Shall be collected and then disposed to the reception facilities if the distance from the nearest land is less than 12 nautical miles (including);
- The disposal may be allowed if the distance from the nearest land is more than 12 nautical miles and the cargo residues contain no substances that are harmful to the marine environment.

7.1.4 For animal carcasses:

- Shall be collected and then disposed to the reception facilities if the distance from the nearest land is less than 12 nautical miles (including);

- The disposal may be allowed if the distance from the nearest land is more than 12 nautical miles.

7.1.5 The discharge into sea of cleaning agents and additives contained in cargo hold, deck and external surfaces washwater is only permitted when these substances are not harmful to the marine environment; other operational wastes shall be collected and then discharged to the reception facilities. These apply to all water areas.

7.2 When garbage is mixed with or contaminated by other harmful substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply in all water areas.

8 Requirements for monitoring

8.1 The sampling of oily bilge water and sewage shall be carried out in accordance with JT/T 409.

8.2 The test of oily bilge water and sewage shall be carried out in accordance with the standards listed in Table 8.

8.3 The data read at the monitoring location for pollutants discharge will be used as the basis to judge if the discharge standards are met.

Table 8 Applicable standards for testing of oily bilge water and sewage

| No | Pollutants | Name of the applicable standards | Standard no. |
|----|---|---|--------------|
| 1 | Biochemical oxygen demand (BOD _{Cr}) | Water quality-determination of the chemical oxygen demand - dichromate method | HJ 828 |
| 2 | 5-day biochemical oxygen demand (BOD ₅) | Water quality-determination of biochemical oxygen demand after 5 days (BOD ₅) for dilution and seeding method | HJ 505 |
| 3 | Suspended Solids (SS) | Determination of suspended substance - Gravimetric method | GB11901 |
| 4 | Thermotolerant Coliform (/L) | Standard examination methods for drinking water - microbiological | GB/T 5750.12 |
| | | Water quality-Determination of fecal coliform-manifold zymotechnics and filter membrane | HJ/T 347 |
| | | Test method for waste water quality of ship sewage treatment - Part 1 : Thermotolerant coliform counts | CB/T 3328.1 |
| 5 | pH | Water quality--Determination of pH value--Glass electrode method | GB 6920 |
| 6 | Oily water | Test method for waste water quality of ship sewage treatment - Part 5 : Oil content in water | CB/T 3328.5 |

| No | Pollutants | Name of the applicable standards | Standard no. |
|----|------------------------------------|--|--------------|
| 7 | Total Chlorine (residual Chlorine) | Standard examination methods for drinking water - Disinfectants parameter | GB/T 5750.11 |
| | | water quality-determination of free chlorine and total chlorine-titrimetric method using n,n-diethyl-1,4-phenylenediamine | HJ 585 |
| | | water quality-determination of free chlorine and total chlorine-spectrophotometric method n,n-diethyl-1,4-phenylenediamine | HJ 586 |
| 8 | Total nitrogen | water quality -- determination of total-nitrogen gas-phase molecular absorption spectrometry | HJ/T 199 |
| | | water quality-determination of total nitrogen-alkaline potassium persulfate digestion uv spectrophotometric method | HJ 636 |
| 9 | Ammoniacal nitrogen | Water quality—Determination of Ammonia—Nitrogen By Gas -phase molecular absorption spectrometry | HJ/T 195 |
| | | Water quality—Determination of ammonia nitrogen —Nessler’s reagent spectrophotometry | HJ 535 |
| | | Water quality-Determination of ammonia nitrogen-Salicylic acid spectrophotometry | HJ 536 |
| | | Water quality-Determination of ammonia nitrogen-Distillation-neutralization titration | HJ 537 |
| | | Water quality-Determination of ammonium nitrogen by continuous flow analysis(CFA) and Salicylic acid spectrophotometry | HJ 665 |
| | | Water quality-Determination of ammonium nitrogen by flow injection analysis (FIA) and Salicylic acid spectrophotometry | HJ 666 |
| 10 | Total phosphorus | Water quality - determination of total phosphorus - Ammonium molybdate spectrophotometric method | GB 11893 |

9 Implementation and supervision

- 9.1 The implementation of this standard shall be supervised, guided and coordinated by the Ministry of Ecology and Environment of PRC.
- 9.2 China Maritime Safety Administration is in charge of supervising the discharge of water pollutants from ships.

Annex A to Part I 10 Categories of garbage

| No | Categories | Definition |
|----|--|--|
| 1 | Plastics | means all garbage that consists of or includes plastic in any form, including synthetic ropes, synthetic fishing nets, plastic garbage bags, biodegradable bags, and incinerator ashes from plastic products. |
| 2 | Food wastes | means any spoiled or unspoiled food substances and includes fruits, vegetables, dairy products, poultry, meat products and food scraps generated aboard ship. |
| 3 | Domestic wastes | means all types of wastes that are generated in the accommodation spaces on board the ship, except the black water and grey water. |
| 4 | Cooking oil | means any type of edible oil or animal fat used, or intended to be used, for the preparation or cooking of food, but does not include the food itself that is prepared using these oils. |
| 5 | Incinerator ashes | means ash and clinkers resulting from shipboard incinerators used for the incineration of garbage. |
| 6 | Operational wastes | means all solid wastes (including slurries) that are collected on board during normal maintenance or operations of a ship, or used for cargo stowage and handling. Operational wastes also include cleaning agents and additives contained in cargo hold and external wash water, but do not include grey water, bilge water or other similar discharges essential to the operation of a ship. |
| 7 | Cargo residues <i>(see denotes)</i> | means the remnants of any cargo that are remain on the deck or in the holds following loading or unloading, including loading and unloading excess or spillage, whether in wet or dry condition or entrained in wash water, but does not include cargo dust remaining on the deck after sweeping or dust on the external surfaces of the ship. |
| 8 | Animal carcasses | means the bodies of any animals that are carried on board as cargo and that die or are euthanized during the voyage. |
| 9 | Fishing gear | means surface nets, midwater or bottom nets, longlines, synthetic line and netting scraps, pots and traps, dredges, etc. |
| 10 | E-waste | means electrical and electronic equipment used for the normal operation of the ship or in the accommodation spaces, including all components, subassemblies and consumables, which are part of the equipment at the time of discarding (such as electronic cards, gadgets, instruments, equipment, computers, printer cartridges, etc.). |

denotes:

- *Category for cargo residues has been split into HME (harmful to the marine environment) and non-HME by **IMO Resolution. MEPC.277(70)-Amendments to MARPOL Annex V** which entered into force from 1 March 2018, so there are now 11 categories (from A to K) for garbage according to MARPOL Annex V. The change of category for cargo residues is NOT reflected in this standard as it was developed earlier than the aforementioned IMO Resolution.*

PART II GAP ANALYSIS OF THE 2018 DISCHARGE STANDARD AGAINST THE FIRST EDITION RELEASED IN 1983

The first edition of China Discharge Standard for water pollutants from ships was released in 1983. Compared with this first edition (the old Standard), the 2018 edition Standard (the new Standard) has the following two main changes:

1. Expansion of pollutants and items to be controlled

In the old Standard, only oily waste water, sewage and garbage were addressed; in the new Standard, the scope of the pollutants to be controlled was expanded to include the noxious liquid substances. For pollutants that were already addressed in the old Standard, the items to be controlled were expanded in the new Standard. For example, the scope of garbage in the old Standard included only plastic, floating wastes and food waste, but in the new Standard, the scope of garbage was expanded to include 10 categories. See Table 9.

Table 9 Comparison of pollutants and items to be controlled in old & new Standards

| Pollutants | Old Standard (1983 version) | New Standard (2018 version) |
|---------------------------|---|--|
| Oily Waste Water | Addressed | Addressed, see Table 1 |
| Noxious liquid substances | Not addressed | Addressed, see Table 7 |
| Sewage | Addressed, but only the following items controlled: <ul style="list-style-type: none"> • Biochemical oxygen demand • SS • Coliform group | Addressed, see Table 3 to Table 6 |
| Garbage | Addressed, but only the following items controlled: <ul style="list-style-type: none"> • Plastics; • Floating wastes • Food wastes | Addressed, Garbage is grouped into 10 categories |

2. Upgrade of the limit (more stringent)

For pollutants addressed in both Standards, the limit for allowed discharge has been upgraded in the new Standard. For example, for sewage discharge, the limit for suspended solid (SS) in the old Standard is not more than 150, whereas in the new standard, this value is significantly reduced (see Table 6 (1) to Table Table 6 (3)).

Furthermore, the division of the waters and the condition to which different requirements apply is more detailed in the new Standard. For example, for sewage discharge, the new Standard addresses the waters more than 12 nautical miles from the nearest land, which was not addressed in the old Standard; also the new Standard stipulated different requirements based on the plant/system installation date and ship types.

For easy reference and comparison, the simplified overview of the old Standard is given in the Annex B to this Part.

Annex B to Part II. Simplified overview of the discharge provisions of the OLD Standard (1983 version)

Table 1. Limits for discharge of oily wastewater from ships

| Waters | Discharged concentration (mg/L) |
|--|---------------------------------|
| Inland water | ≤ 15 |
| Sea within 12 nautical miles from the nearest land (including) | ≤ 15 |
| Sea outside the 12 nautical miles from the nearest land | ≤ 100 |

Table 2. Limits for discharge of sewage effluent from ships

| Items \ Areas | Inland waters | Coastal sea | |
|----------------|---------------|--|--|
| | | The distance from the nearest land is less than 4 nautical miles (including) | The distance from the nearest land is more than 4 nautical miles but less than 12 nautical miles (including) |
| BOD | ≤ 50 | ≤ 50 | |
| SS | ≤ 150 | ≤ 150 | No visible SS |
| Coliform group | ≤ 250/100 mL | ≤ 250/100 mL | ≤ 1000/100 mL |

Table 3. Requirements for disposal of garbage

| Garbage category | Inland waters | Coastal sea |
|-------------------------------|---------------------|--|
| Plastics | Disposal prohibited | Disposal prohibited |
| Floating wastes | Disposal prohibited | Disposal prohibited if the distance from the nearest land is less than 25 nautical miles (including) |
| Food wastes and other garbage | Disposal prohibited | <ul style="list-style-type: none"> • Disposal is not allowed within 12 nautical miles from the nearest land unless the wastes have been comminuted; • Disposal may be allowed within 3 nautical miles from the nearest land when the wastes have been passed through a comminuter or grinder and such comminuted or ground garbage shall be capable of passing through a screen with openings no greater than 25 mm. |

Disclaimer: This is a translation of the Original version of the People's Republic of China National Standard (GB3553-2018) - Discharge standard for water pollutants from ships, the Chinese version shall always prevail in case of any discrepancy or inconsistencies.

For any enquiries or further information required, contact:

CCS Technical Manager - Mr Gan Shao Wei (swgan@ccs.org.cn), Tel: +65 – 6324 1618

CCS Business Development Manager – Mr Alec Liew (alecliew@ccs.org.cn), Tel: +65 – 9113 6856

INTERTANKO Assistant Regional Manager – Ms Joyce Teng (joyce.teng@intertanko.com), Tel: +65 6333 4007