

# THE REPUBLIC OF LIBERIA LIBERIA MARITIME AUTHORITY

**Marine Notice** 

POL-013 Rev. 02/18

TO: ALL SHIPOWNERS, OPERATORS, AND MASTERS OF LIBERIAN FLAG

VESSELS, AND RECOGNIZED ORGANIZATIONS

SUBJECT: Implementation of Revised Annex V, Regulations for the Prevention of

Pollution by Garbage from Ships, of MARPOL

**Reference:** (a) Maritime Regulation 2.37

(b) MARPOL, Consolidated Edition 2017

(c) MEPC Resolution 201(62)

(d) MEPC Resolution 220(63)

**(e) MEPC Resolution 246 (66)** 

(f) MEPC Resolution 265(68)

(g) MEPC Resolution 277(70)

(h) MEPC Resolution 295(71)

(i) MEPC Resolution 264(68) - Polar Code

(j) IMSBC Code, as amended

(k) **MEPC.1/Circ.856** 

#### **PURPOSE:**

The purpose of this Marine Notice is to provide guidance on the implementation of the revised Annex V, Regulations for the Prevention by Garbage from Ships, of MARPOL, including its amendments.

MARPOL Annex V was ratified by Liberia on 12 June 1995 and became effective for all Liberian ships on 12 September 1995. Annex V was revised by MEPC Resolution 201(62) which entered into force on 1 January 2013. The revised Annex V was further amended by MEPC Resolution 246(66), MEPC Resolution 265(68); and MEPC Resolution 277(70) which enters into force on 01 March 2018.

The Revised Annex V, as amended by Resolutions MEPC 246(66), 265(68) and 277(70):

- prohibits the discharge of all types of garbage into the sea unless explicitly permitted under Regulations 3, 4, 5 and 6;
- restricts discharge to food wastes, identified cargo residues, animal carcasses, and identified cleaning agents and additives and cargo residues entrained in wash water which are not harmful

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- to the marine environment (refer to Attachment 4 of this Marine Notice for a summary of restrictions);
- prohibits the discharge at sea of all other garbage including plastics, synthetic ropes, fishing gear, plastic garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal, bottles, crockery and similar refuse;
- made the environment-related provisions of the Polar Code mandatory from 1 January 2017;
- requires the shipper to declare if a solid bulk cargo is harmful to the environment or not;
- recommends that ships use port reception facilities as the primary means of discharge for all garbage.

## **APPLICABILITY:**

The revised Annex V applies to all ships, except where expressly provided otherwise. Ships are defined in Article 2 of MARPOL as a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms.

Under Regulation 7.1, the regulations for the discharge of garbage, including discharge in polar waters, do not apply to:

- 1. the discharge of garbage from a ship necessary for the purpose of securing the safety of a ship and those on board or saving life at sea, or;
- 2. the accidental loss of garbage resulting from damage to a ship or its equipment, provided that all reasonable precautions have been taken before and after the occurrence of the damage, to prevent or minimize the accidental loss; or
- 3. the accidental loss of fishing gear from a ship provided that all reasonable precautions have been taken to prevent such loss; or
- 4. the discharge of fishing gear from a ship for the protection of the marine environment or for the safety of that ship or its crew.

Under Regulation 7.2, en route for discharge of garbage, including discharge in polar waters do not apply to the discharge of food wastes where it is clear the retention on board of these food wastes presents an imminent health risk to the people on board.

#### 1.0 Definitions

For the purpose of the revised MARPOL Annex V, the following definitions apply:

- 1.1 **Animal carcasses:** The bodies of any animals that are carried on board as cargo and that die or are euthanized during the voyage.
- 1.2 **Arctic waters:** Those waters which are located north of a line from the latitude 58°00′.0 N and longitude 042°00′.0 W to latitude 64°37′.0 N, longitude 035°27′.0 W and thence by a rhumb line to latitude 67°03′.9 N, longitude 026°33′.4 W and thence by a rhumb line to the latitude 70°49′.56 N and longitude 008°59′.61 W (Sørkapp, Jan Mayen) and by the southern shore of Jan Mayen to 73°31'.6 N and 019°01'.0 E by the Island of Bjørnøya, and thence by a great circle line to the latitude 68°38′.29 N and longitude 043°23′.08 E (Cap Kanin Nos) and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence

from the Bering Strait westward to latitude 60° N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60° N and thence eastward along parallel of latitude 60° N, to longitude 056°37′.1 W and thence to the latitude 58°00′.0 N, longitude 042°00′.0 W.

- 1.3 **Cargo residues:** The remnants of any cargo which are not covered by other Annexes to the present Convention and which remain on the deck or in 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.
- 1.4 **Cooking oil:** 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.
- 1.5 **Dishwater:** The residue from the manual or automatic washing of dishes and cooking utensils which have been pre-cleaned to the extent that any food particles adhering to them would not normally interfere with the operation of automatic dishwashers.
- 1.6 **Domestic wastes:** All types of wastes not covered by other Annexes that are generated in the accommodation spaces on board the ship. Domestic wastes does not include grey water.
- 1.7 **En route:** That the ship is underway at sea on a course or courses, including deviation from the shortest direct route, which as far as practicable for navigational purposes, will cause any discharge to be spread over as great an area of the sea as is reasonable and practicable.
- 1.8 **E-waste:** 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, with the presence of material potentially hazardous to human health and/or the environment, e.g. electronic cards, gadgets, instruments, equipment, computers, printer cartridges, etc.
- 1.9 **Fast ice:** Sea ice which forms and remains fast along the coast, where it is attached to the shore, to an ice wall, to an ice front, between shoals or grounded icebergs.
- 1.10 **Fishing gear:** Any physical device or part thereof or combination of items that may be placed on or in the water or on the sea-bed with the intended purpose of capturing, or controlling for subsequent capture or harvesting, marine or fresh water organisms.
- 1.11 **Fixed or floating platforms:** Fixed or floating structures located at sea which are engaged in the exploration, exploitation or associated offshore processing of sea-bed mineral resources.
- 1.12 **Food wastes:** Any spoiled or unspoiled food substances and includes fruits, vegetables, dairy products, poultry, meat products and food scraps generated aboard ship.
- 1.13 **Garbage:** All kinds of food wastes, domestic wastes and operational wastes, all plastics, cargo residues, incinerator ashes, cooking oil, fishing gear, and animal carcasses generated during the normal operation of the ship and liable to be disposed of continuously or periodically except those substances which are defined or listed in other Annexes to the

present Convention. Garbage does not include fresh fish and parts thereof generated as a result of fishing activities undertaken during the voyage, or as a result of aquaculture activities which involve the transport of fish including shellfish for placement in the aquaculture facility and the transport of harvested fish including shellfish from such facilities to shore for processing.

- 1.14 **Grey water:** Drainage from dishwater, shower, laundry, bath and washbasin drains. It does not include drainage from toilets, urinals, hospitals and animal spaces, as defined in regulation 1.3 of MARPOL Annex IV (sewage) and drainage from cargo spaces. Grey water is not considered garbage in the context of MARPOL Annex V.
- 1.15 **Ice-shelf:** A floating ice sheet of considerable thickness showing 2 to 50 m or more above sea-level, attached to the coast
- 1.16 **Incinerator ashes:** Ash and clinkers resulting from shipboard incinerators used for the incineration of garbage. Ash and clinkers from shipboard incinerators and coal-burning boilers should be considered as operational wastes within the meaning of regulation 1.12 of MARPOL Annex V, and therefore are included in the term "garbage", within the meaning of regulation 1.9 of MARPOL Annex V.
- 1.17 **Nearest land:** The term "from the nearest land" means from the baseline from which the territorial sea of the territory in question is established in accordance with international law, except that, for the purposes of the present Annex, "from the nearest land" off the northeastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in:

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latitude 11°00′ S, longitude 142°08′ E to a point in latitude 10°35′ S, longitude 141°55′ E, thence to a point latitude 10°00′ S, longitude 142°00′ E, thence to a point latitude 09°10′ S, longitude 143°52′ E, thence to a point latitude 09°00′ S, longitude 144°30′ E, thence to a point latitude 10°41′ S, longitude 145°00′ E, thence to a point latitude 13°00′ S, longitude 145°00′ E, thence to a point latitude 15°00′ S, longitude 146°00′ E, thence to a point latitude 17°30′ S, longitude 147°00′ E, thence to a point latitude 21°00′ S, longitude 152°55′ E, thence to a point latitude 24°30′ S, longitude 154°00′ E, thence to a point on the coast of Australia in latitude 24°42′ S, longitude 153°15′ E.
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1.18 **Operational wastes:** All solid wastes (including slurries) not covered by other Annexes that are collected on board during normal maintenance or operations of a ship, or used for cargo stowage and handling. Operational wastes also includes cleaning agents and additives\* contained in cargo hold and external wash water. Operational wastes does not include grey water, bilge water, or other similar discharges essential to the operation of a ship, taking into account the guidelines developed by the Organization. . "Other similar discharges" essential to the operation of a ship include, but are not limited to, the following:

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- boiler/economizer blowdown
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- boat engine wet exhaust
- chain locker effluent

- freshwater lay-up
- elevator pit effluent
- gas turbine washwater

- controllable pitch propeller and thruster hydraulic fluid and other oil to sea interfaces (e.g. thruster bearings, stabilizers, rudder bearings, etc.);
- distillation/reverse osmosis brine; and welldeck discharges
- motor gasoline and compensating discharge
- machinery wastewater
- pool, spa water and recreational waters
- firemain systems water
- sonar dome discharge

\*While cleaning agents and additives contained in hold washwater and deck and external surface washwater are considered "operational wastes" and thus "garbage" under MARPOL Annex V, these cleaning agents and additives may be discharged into the sea so long as they are not harmful to the marine environment.

A cleaning agent or additive is considered not harmful to the marine environment if it:

- is not a "harmful substance" in accordance with the criteria in MARPOL Annex III; .1 and
- .2 does not contain any components which are known to be carcinogenic, mutagenic or reprotoxic (CMR).

The ship's record should contain evidence provided by the producer of the cleaning agent or additive that the product meets the criteria for not being harmful to the marine environment. To provide an assurance of compliance, a dated and signed statement to this effect from the product supplier would be adequate for the purposes of a ship's record. This might form part of a Safety Data Sheet or be a stand-alone document, but this should be left to the discretion of the producer concerned.

- 1.19 Plastic: A solid material which contains as an essential ingredient one or more high molecular mass polymers and which is formed (shaped) during either manufacture of the polymer or the fabrication into a finished product by heat and/or pressure. Plastics have material properties ranging from hard and brittle to soft and elastic. For the purposes of this annex, "all plastics" means all garbage that consists of or includes plastic in any form, including synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products.
- **Polar Code:** The International Code for Ships Operating in Polar Waters, consisting of an 1.20 introduction, parts I-A and II-A and parts I-B and II-B, adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that:
  - .1 amendments to the environment-related provisions of the introduction and chapter 5 of part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to an appendix to an annex; and
  - .2 amendments to part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure
- 1.21 **Polar waters:** Arctic waters and/or the Antarctic area.
- 1.22 **Recycling:** The activity of segregating and recovering components and materials for reprocessing.

- 1.23 **Reuse:** The activity of recovering components and materials for further use without reprocessing.
- 1.24 **Special area:** A sea area where for recognized technical reasons in relation to its oceanographic and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by garbage is required.

For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the Gulfs area, the North Sea area, the Antarctic area and the Wider Caribbean Region, which are defined as follows:

- .1 The Mediterranean Sea area means the Mediterranean Sea proper including the gulfs and seas therein with the boundary between the Mediterranean and the Black Sea constituted by the 41° N parallel and bounded to the west by the Straits of Gibraltar at the meridian 5°36′ W.
- .2 The Baltic Sea area means the Baltic Sea proper with the Gulf of Bothnia and the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57° 44.8′ N.
- .3 The Black Sea area means the Black Sea proper with the boundary between the Mediterranean and the Black Sea constituted by the parallel 41° N.
- .4 The Red Sea area means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the rhumb line between Ras si Ane (12° 28.5′ N, 43° 19.6′ E) and Husn Murad (12° 40.4′ N, 43° 30.2′ E).
- .5 The Gulfs area means the sea area located north-west of the rhumb line between Ras al Hadd (22° 30′ N, 59° 48′ E) and Ras al Fasteh (25° 04′ N, 61° 25′ E).
- .6 The North Sea area means the North Sea proper including seas therein with the boundary between:
  - .1 the North Sea southwards of latitude 62° N and eastwards of longitude 4° W;
  - .2 the Skagerrak, the southern limit of which is determined east of the Skaw by latitude 57° 44.8′ N; and
  - .3 the English Channel and its approaches eastwards of longitude 5° W and northwards of latitude 48° 30′ N.
- .7 The Antarctic area means the sea area south of latitude 60° S.
- .8 The Wider Caribbean Region means the Gulf of Mexico and Caribbean Sea proper including the bays and seas therein and that portion of the Atlantic Ocean within the boundary constituted by the 30° N parallel from Florida eastward to 77°30′ W meridian, thence a rhumb line to the intersection of 20° N parallel and 59° W meridian, thence a rhumb line to the intersection of 7°20′ N parallel and 50° W meridian, thence a rhumb line drawn southwesterly to the eastern boundary of French Guiana.

# 2.0 Discharge of garbage outside special areas

- 2.1 Discharge of the following garbage into the sea outside special areas shall only be permitted while the ship is en route and as far as practicable from the nearest land, but in any case not less than:
  - 1 3 nautical miles from the nearest land for food wastes which have been passed through a comminuter or grinder. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 mm;
  - .2 12 nautical miles from the nearest land for food wastes that have not been treated in accordance with subparagraph .1 above;
  - 12 nautical miles from the nearest land for cargo residues that cannot be recovered using commonly available methods for unloading. These cargo residues shall not contain any substances classified as harmful to the marine environment, taking into account guidelines in Appendix I of revised Annex V of MARPOL and section 3 of reference (h);
  - .4 For animal carcasses, discharge shall occur as far from the nearest land as possible, taking into account the guidelines in section 2.12 of **reference** (h).
- 2.2 Cleaning agents or additives contained in cargo hold, deck and external surfaces wash water may be discharged into the sea, but these substances must not be harmful to the marine environment, taking into account guidelines in section 1.7.5 of reference (h).
- 2.3 When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply.

# 3.0 Discharge of garbage within special areas

- 3.1 Discharge of the following garbage into the sea within special areas shall only be permitted while the ship is en route and as follows:
  - .1 Discharge into the sea of food wastes as far as practicable from the nearest land, but not less than 12 nautical miles from the nearest land or the nearest ice shelf. Food wastes shall be comminuted or ground and shall be capable of passing through a screen with openings no greater than 25 mm. Food wastes shall not be contaminated by any other garbage type. Discharge of introduced avian products, including poultry and poultry parts, is not permitted in the Antarctic area unless it has been treated to be made sterile.
  - .2 Discharge of cargo residues that cannot be recovered using commonly available methods for unloading, where all the following conditions are satisfied:
    - .1 Cargo residues, cleaning agents or additives, contained in hold washing water do not include any substances classified as harmful to the marine environment, taking into account guidelines in section 3 of reference (h);

- .2 Both the port of departure and the next port of destination are within the special area and the ship will not transit outside the special area between those ports;
- .3 No adequate reception facilities are available at those ports taking into account guidelines developed by the Organization; and
- .4 Where the conditions of subparagraphs .2.1, .2.2 and .2.3 above have been fulfilled, discharge of cargo hold washing water containing residues shall be made as far as practicable from the nearest land or the nearest ice shelf and not less than 12 nautical miles from the nearest land or the nearest ice shelf.
- 3.2 Cleaning agents or additives contained in deck and external surfaces wash water may be discharged into the sea, but only if these substances are not harmful to the marine environment, taking into account guidelines in section 1.7.5 of reference (h).
- 3.3 The following rules (in addition to the rules in paragraph 4.1 above) apply with respect to the Antarctic area:
  - .1 Each Party at whose ports ships depart—route to or arrive from the Antarctic area undertakes to ensure that as soon as practicable adequate facilities are provided for the reception of all garbage from all ships, without causing undue delay, and according to the needs of the ships using them.
  - .2 Before entering the Antarctic area, ships shall have sufficient capacity on board for the retention of all garbage, while operating in the area and have concluded arrangements to discharge such garbage at a reception facility after leaving the area.
- 3.4 When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply.

# 4.0 Discharge of garbage in polar waters

- 4.1 In Arctic waters, discharge of garbage into the sea permitted in accordance with paragraph 3.0 above, shall meet the following additional requirements:
  - .1 discharge into the sea of food wastes is only permitted when the ship is as far as practicable from areas of ice concentration exceeding 1/10, but in any case not less than 12 nautical miles from the nearest land, nearest ice-shelf, or nearest fast ice;
  - .2 food wastes shall be comminuted or ground and shall be capable of passing through a screen with openings no greater than 25 mm. Food wastes shall not be contaminated by any other garbage type;
  - .3 food wastes shall not be discharged onto the ice;
  - .4 discharge of animal carcasses is prohibited; and
  - .5 discharge of cargo residues that cannot be recovered using commonly available methods for unloading shall only be permitted while the ship is en route and where all the following conditions are satisfied:

- .1 cargo residues, cleaning agents or additives, contained in hold washing water do not include any substances classified as harmful to the marine environment, taking into account guidelines in section 3 of reference (h);
- .2 both the port of departure and the next port of destination are within Arctic waters and the ship will not transit outside Arctic waters between those ports;
- 3 no adequate reception facilities are available at those ports taking into account guidelines developed by the Organization; and
- where the conditions of subparagraphs .5.1, .5.2 and .5.3 above have been fulfilled, discharge of cargo hold washing water containing residues shall be made as far as practicable from areas of ice concentration exceeding 1/10, but in any case not less than 12 nautical miles from the nearest land, nearest ice shelf, or nearest fast ice.
- 4.2 In the Antarctic area, discharge of garbage into the sea permitted in accordance with Paragraph 4.0 above, shall meet the following additional requirements:
  - .1 discharges under paragraph 4.1 of above shall be as far as practicable from areas of ice concentration exceeding 1/10, but in any case not less than 12 nautical miles from the nearest fast ice; and
  - .2 food waste shall not be discharged onto ice.
- 4.3 Operation in polar waters shall be taken into account, as appropriate, in the Garbage Record Book, Garbage Management Plan and the placards as required by revised MARPOL Annex V.
- 4.4 In applying paragraph 4.0 above, consideration should be given to the additional guidance in part II-B of the **Polar Code, reference (i)**.
- 4.5 **Reference** (k) provides guidance concerning reissuing of certificates and revisions of manuals and record books for compliance with the environmental related provisions of the Polar Code.
- 5.0 Special requirements for discharge of garbage from fixed and floating platforms
- 5.1 Subject to the provisions of paragraph 6.2 below, the discharge into the sea of any garbage is prohibited from fixed or floating platforms and from all other ships when alongside or within 500 m of such platforms.
- 5.2 Food wastes may be discharged into the sea from fixed or floating platforms located more than 12 nautical miles from the nearest land and from all other ships when alongside or within 500 m of such platforms, but only when the wastes have been passed through a comminuter or grinder. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 mm.

# 6.0 Garbage management plan

6.1 Every ship of 100 tons gross and above which is certified to carry 15 persons or more and every fixed or floating platform shall carry a garbage management plan which the crew shall follow. This plan shall provide written procedures for minimizing, collecting, storing, processing and disposing of garbage, including the use of equipment on board. It shall also designate the person or persons in charge of carrying out the plan. Such a plan shall be based on guidelines in **reference** (d) and guidelines for implementation of revised Annex V in **reference** (h) and written in the working language of the crew.

# 7.0 Placards and garbage record-keeping

- 7.1 Every ship of 12 meters or more in length overall and fixed or floating platforms shall display placards written in the working language of the ship's crew and in English, French or Spanish, which notify the crew and passengers of the discharge requirements in paragraphs 3.0, 4.0, 5.0 and 6.0, as applicable. Sample placards are provided in *Attachment 2 and 3* of this Marine Notice.
- 7.2 Every ship of 400 tons gross and above which is certified to carry 15 persons or more engaged in voyages to ports or offshore terminals and every fixed or floating platform shall be provided with a garbage record book in the form specified in *Attachment 1* of this Marine Notice. All Ships shall record discharges in accordance with Appendix II, Part I of MARPOL Annex V Record of Discharges for garbage discharges of cargo residues in accordance with Appendix II, Part II of MARPOL Annex V Record of Discharges for recording garbage discharges of cargo residues.
  - .1 Each discharge into the sea or to a reception facility, or a completed incineration, shall be promptly recorded in the garbage record book and signed for on the date of the discharge or incineration by the officer in charge. Each completed page of the Garbage Record Book shall be signed by the master of the ship. The entries in the Garbage Record Book shall be at least in English, French or Spanish;
  - .2 The entry for each discharge or incineration shall include date and time, position of the ship, category of the garbage and the estimated amount discharged or incinerated;
  - .3 The garbage record book along with receipts obtained from reception facilities shall be kept on board the ship or the fixed or floating platform, and in such a place as to be readily available for inspection at all reasonable times. This document shall be preserved for a period of at least two years from the date of the last entry made in it. The Liberian Administration has prepared two Garbage Record Books. One contains Part I for use for use on ships that do not carry solid bulk cargoes and the other Part I & 2 for use on ships that carry solid bulk cargoes. Both the Garbage Record Books Part I (RLM-125) and Part I & Part II (RLM-125A) with instructions and guidance are available from Office of the Deputy Commissioner, c/o Liberian International Ship & Corporate Registry, 22980 Indian Creek Drive., Suite 200, Dulles, VA 20166, USA. To order the books, please complete the publications order form using the link: <a href="http://www.liscr.com/order-publications">http://www.liscr.com/order-publications</a>.

- .4 In the event of any discharge or accidental loss referred to in regulation 7 of revised Annex V of MARPOL, an entry shall be made in the garbage record book, or in the case of any ship of less than 400 gross tonnage, an entry shall be made in the ship's official log-book, of the location, circumstances of, and the reasons for the discharge or loss, details of the items discharged or lost, and the reasonable precautions taken to prevent or minimize such discharge or accidental loss.
- 7.3 The competent authority of the Government of a Party to the Convention may inspect the garbage record books or ship's official log-book on board any ship to which this regulation applies while the ship is in its ports or offshore terminals and may make a copy of any entry in those books, and may require the master of the ship to certify that the copy is a true copy of such an entry. Any copy so made, which has been certified by the master of the ship as a true copy of an entry in the ship's garbage record book or ship's official log-book, shall be admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of a garbage record book or ship's official log-book and the taking of a certified copy by the competent authority under this paragraph shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

# 8.0 Port State control on operational requirements

- 8.1 A ship, when in a port or an offshore terminal under the jurisdiction of another Party is subject to the inspection by officers duly authorized by such Party concerning operational requirements under revised Annex V, where there are clear grounds for believing that the master or crew are not familiar with essential shipboard procedures relating to the prevention of pollution by garbage.
- 8.2 Owners, operators and Masters of Liberian flag ships shall report port State control actions to this Administration forthwith so as to arrange the attendance of a Liberian Nautical Inspector or to take other appropriate action in a timely manner.

# 9.0 Garbage management

- 9.1 Shipowners and operators should minimize taking onboard material that could become garbage. Ship-specific garbage minimization procedures should be included in the garbage management plan.
- 9.2 Procedures for collecting garbage generated on board should be based on the consideration of what is permitted and what is not permitted to be discharged into the sea while en route, and whether a particular garbage type can be discharged to port facilities for recycling or reuse. The details of these procedures should be written in the garbage management plan.
- 9.3 To reduce or avoid the need for sorting after collection and to facilitate recycling, it is recommended that distinctively marked garbage receptacles be provided on board the ship to receive garbage as it is generated. Receptacles on board can be in the form of drums, metal bins, cans, container bags or wheelie bins. Any receptacles on deck areas, poop decks or areas exposed to the weather should be secured on the ship and have lids that are tight and securely fixed. All garbage receptacles should be secured to prevent loss, spillage, or loss of any garbage that is deposited in the receptacles. Receptacles should be clearly marked and distinguishable by graphics shape, size or location. Receptacles should be placed in appropriate spaces throughout the ship (e.g. the engine-room, mess deck, wardroom, galley

and other living or working spaces) and all crew members and passengers should be advised of what garbage should and should not be placed in them.

- 9.4 The recommended garbage types that should be separated are:
  - .1 non-recyclable plastics and plastics mixed with non-plastic garbage;
  - .2 rags;
  - .3 recyclable material:
    - .1 cooking oil;
    - .2 glass;
    - .3 aluminium cans;
    - .4 paper, cardboard, corrugated board;
    - .5 wood;
    - .6 metal; and
    - .7 plastics; (including styrofoam or other similar plastic material);
  - .4 E-waste generated on board (e.g. electronic cards, gadgets, instruments, equipment, computers, printer cartridges, etc.); and
  - .5 garbage that might present a hazard to the ship or crew (e.g. oily rags, light, bulbs, acids, chemicals, batteries, etc.)
- 9.5 Crew responsibilities should be assigned for collecting or emptying these receptacles and taking the garbage to the appropriate processing or storage location. Use of such a system facilitates subsequent shipboard processing and minimizes the amount of garbage which must be stored on board ship for return to port.
- 9.6 When plastic is mixed with other garbage, the mixture must be treated as if it were all plastic. Precautions should be taken to ensure that plastics contaminated by food wastes (e.g. plastic food wrappers) are not discharged into the sea with other food wastes. The most stringent procedures for the handling and discharge should be followed taking into account the applicable provisions of the garbage management plan.
- 9.7 Some Governments have regulations for controlling human, plant and animal diseases that may be carried by foreign food wastes and materials that have been associated with them (e.g. food packing and disposable eating utensils, etc.). These regulations may require incinerating, sterilizing, double bagging or other special treatment of garbage to destroy possible pest and disease organisms. This type of garbage should be kept separate from other garbage and preferably retained for discharge at port reception facilities in accordance with the laws of the receiving country.
- 9.8 Depending on factors such as the type of ship, area of operation, number of crew or passengers, etc., ships may be equipped with incinerators, compactors, comminuters or other devices for shipboard garbage processing. Appropriate members of the crew should be trained and assigned responsibility for operating this equipment on a schedule commensurate with ship needs.

## FORM OF GARBAGE RECORD BOOK

Name of ship:		
Distinctive numb	per or letters:	
IMO No.:		
Period:	From:	To:

#### 1 Introduction

In accordance with regulation 10 of Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL), a record is to be kept of each discharge operation or completed incineration. This includes discharges into the sea, to reception facilities, or to other ships, as well as the accidental loss of garbage.

## 2 Garbage and garbage management

*Garbage* means all kinds of food wastes, domestic wastes and operational wastes, all Plastics, cargo residues, incinerator ashes, cooking oil, fishing gear, and animal carcasses generated during the normal operation of the ship and liable to be disposed of continuously or periodically except those substances which are defined or listed in other Annexes to the present Convention.

Garbage does not include fresh fish and parts thereof generated as a result of fishing activities undertaken during the voyage, or as a result of aquaculture activities which involve the transport of fish including shellfish for placement in the aquaculture facility and the transport of harvested fish including shellfish from such facilities to shore for processing.

The Guidelines for the Implementation of Annex V of MARPOL (**reference h**) should also be referred to for information.

# 3 Description of the garbage

Garbage is to be grouped into categories for the purposes of recording in parts I and II of the Garbage Record Book (or ship's official log-book) as follows:

#### Part I

- A Plastics
- B Food wastes
- C Domestic Wastes
- D Cooking Oil
- E Incinerator ashes
- F Operational wastes
- G Animal carcasses
- H Fishing gear
- I E-waste

## Part II

- J Cargo residues (non-HME)
- K Cargo residues (HME)

# 4 Entries in the Garbage Record Book

- 4.1 Entries in the Garbage Record Book shall be made on each of the following occasions:
- 4.1.1 When garbage is discharged to a reception facility<sup>2</sup> ashore or to other ships:
  - .1 Date and time of discharge
  - .2 Port or facility, or name of ship
  - .3 Categories of garbage discharged
  - .4 Estimated amount discharged for each category in cubic metres
  - .5 Signature of officer in charge of the operation.
- 4.1.2 When garbage is incinerated:
  - .1 Date and time of start and stop of incineration
  - .2 Position of the ship (latitude and longitude) at the start and stop of incineration
  - .3 Categories of garbage incinerated
  - .4 Estimated amount incinerated for each category in cubic metres
  - .5 Signature of the officer in charge of the operation.
- 4.1.3 When garbage is discharged into the sea in accordance with regulations 4, 5 or 6 of Annex V of MARPOL or chapter 5 of Part II-A of the Polar Code:
  - .1 Date and time of discharge
  - .2 Position of the ship (latitude and longitude). Note: for cargo residue discharges, include discharge start and stop positions.
  - .3 Category of garbage discharged
  - .4 Estimated amount discharged for each category in cubic metres
  - .5 Signature of the officer in charge of the operation.
- 4.1.4 Accidental or other exceptional discharges or loss of garbage into the sea, including in accordance with regulation 7 of Annex V of MARPOL:
  - .1 Date and time of occurrence
  - .2 Port or position of the ship at time of occurrence (latitude, longitude and water depth if known)
  - .3 Categories of garbage discharged or lost
  - .4 Estimated amount for each category in cubic metres
  - .5 The reason for the discharge or loss and general remarks.
- 4.2 Amount of garbage

The amount of garbage on board should be estimated in cubic metres, if possible separately according to category. The Garbage Record Book contains many

<sup>&</sup>lt;sup>2</sup> Ship's masters should obtain from the operator of the reception facilities, which includes barges and trucks, a receipt or certificate specifying the estimated amount of garbage transferred. The receipts or certificates must be kept together with the Garbage Record Book.

references to estimated amount of garbage. It is recognized that the accuracy of estimating amounts of garbage is left to interpretation. Volume estimates will differ before and after processing. Some processing procedures may not allow for a usable estimate of volume, e.g., the continuous processing of food waste. Such factors should be taken into consideration when making and interpreting entries made in a record.

# "RECORD OF GARBAGE DISCHARGES

# $\begin{array}{c} \textbf{PART I} \\ \textbf{For all garbage other than cargo residues as defined in regulation 1.2 (Definitions)} \\ \textbf{(All ships)} \end{array}$

Ship's name	Distinctive number or letters	IMO number

# **Garbage categories**

A-Plastics	<b>B</b> -Food waste	C-Domestic waste	<b>D</b> -Cooking oil	
<b>E</b> -Incinerator ashes	<b>F</b> -Operational wastes	<b>G</b> -Animal carcasses	<b>H</b> -Fishing gear	I-E-waste

Discharges under MARPOL Annex V regulations 4 (Discharge of garbage outside special areas), 5 (Special requirements for discharge of garbage from fixed or floating platforms) or 6 (Discharge of garbage within special areas) or chapter 5 of part II-A of the Polar Code

ate/ ime	Position of the Ship/(latitude/ longitude) or port if discharged ashore or name	Category	Estimated amount discharged		Estimated amount incinerated (m3)	Remarks: (e.g. start/stop time and position of incineration; general remarks)	Certification/ Signature
	of ship if discharged to another ship		Into sea (m3)	To reception facilities or to another ship (m3)			
/ :							
/ :							

# Exceptional discharge or loss of garbage under regulation 7 (Exceptions)

Date/ Time	Port or position of the ship (latitude/ longitude and water depth if known)	Category	Estimated amount lost or discharged (m3)	discharge of remarks precautions minimize	n the reason for the or loss and general (e.g. reasonable taken to prevent or such discharge or ss and general remarks)	Signature
: /						
	Iaster's ignature:				Date:	
	]				ntion 1.2 (Definitions)	
Ship's name			Distinctive number or letters		IMO number	
		•				
Ga	ırbage categories					
	residues (non-HN	<b>Л</b> Е)	K- (	Cargo residues	(HME)	
J- Cargo Dis	residues (non-HN scharges under re thin special areas	gulations 4	( <b>Discharge of gar</b> ) Estimated	bage outside s	special areas) and 6 (D	Certification/
J- Cargo Dis wi	o residues (non-HM scharges under re thin special areas	gulations 4	(Discharge of gar	Start sed the s tion or to	special areas) and 6 (D  and stop positions of hip for discharges into	
J- Cargo Dis with	Position of the Ship/(latitude/ longitude) or port if discharged	gulations 4	Estimated amount discharge Into To recep sea facilities (m3) another s	Start sed the s tion or to	special areas) and 6 (D  and stop positions of hip for discharges into	Certification/

# Sample placard targeting crew and shipboard operations

# Discharge of all garbage into the sea is prohibited except provided otherwise

The MARPOL Convention and domestic law prohibit the discharge of most garbage from ships. Only the following garbage types are allowed to be discharged and under the specified conditions.

Outside Special Areas designated under MARPOL Annex V and Artic waters:

- Comminuted or ground food wastes (capable of passing through a screen with openings no larger than 25 millimetres) may be discharged not less than 3 nautical miles from the nearest land.
- Other food wastes may be discharged not less than 12 nautical miles from the nearest land.
- Cargo residues classified as not harmful to the marine environment may be discharged not less than 12 nautical miles from the nearest land.
- Cleaning agents or additives in cargo hold, deck and external surfaces washing water may be discharged only if they are not harmful to the marine environment.
- With the exception of discharging cleaning agents or additives that are not harmful to the marine environment and are contained in washing water, the ship must be en route and as far as practicable from the nearest land..

Within Special Areas designated under MARPOL Annex V and Arctic waters

- More stringent discharge requirements apply for the discharges of food wastes and cargo residues; AND
- Consult MARPOL Annex V, chapter 5 of part II-A of the Polar Code and the shipboard garbage management plan for details.

For all areas of the sea, ships carrying specialized cargoes such as live animals or solid bulk cargoes should consult Annex V and the associated Guidelines for the implementation of Annex V.

Discharge of any type of garbage must be entered in the Garbage Record Book Violation of these requirements may result in penalties.

# Sample placard targeting fixed or floating platforms and ships operating within 500 metres of such platforms

# Discharge of all garbage into the sea is prohibited except provided otherwise

The MARPOL Convention and domestic law prohibit the discharge of all garbage into the sea from fixed or floating platforms and from all other ships when alongside or within 500 metres of such platforms.

Exception: Comminuted or ground food wastes may be discharge from fixed or floating platforms located more than 12 miles from the nearest land and from all other ships when alongside or within 500 metres of such platforms. Comminuted or ground food wastes must be capable of passing through a screen no larger than 25 millimetres.

Discharge of any type of garbage must be entered in the Garbage Record Book Violation of these requirements may result in penalties.

# Sample placard targeting passengers

# Discharge of all garbage into the sea is prohibited except provided otherwise

The MARPOL Convention and domestic law generally prohibit the discharge of most forms of garbage from ships into the sea.

Violation of these requirements may result in penalties. All garbage is to be retained on board and placed in the bins provided.

# Summary of restrictions to the discharge of garbage into the sea under regulations 4, 5, 6 and 14 of MARPOL Annex V and chapter 5 of part II-A of the Polar Code

(**Note:** <u>This table is intended as a summary reference only.</u> The provisions in MARPOL Annex V and the Polar Code, not this table, prevail.)

	All ships ex	Offshore platforms located		
Garbage type <sup>1</sup>	Outside special areas and Arctic waters Regulation 4 (Distances are from the nearest land	Within special areas and Arctic waters Regulation 6 (Distances are from nearest land, nearest ice-shelf or nearest fast ice)	more than 12 nm from nearest land and ships when alongside or within 500 metres of such Platforms <sup>4</sup> Regulation 5	
Food waste comminuted or ground <sup>2</sup>	>3 nm, en route and as far as practicable	>12 nm, en route and as far as practicable <sup>3</sup>	Discharge permitted	
Food waste not comminuted or ground	>12 nm, en route and as far as practicable	Discharge prohibited	Discharge prohibited	
Cargo residues <sup>5, 6</sup> not contained in washwater		Discharge prohibited		
Cargo residues <sup>5, 6</sup> contained in washwater	> 12 nm, en route and as far as practicable	> 12 nm, en route and as far as practicable (subject to conditions in regulation 6.1.2 and paragraph 5.2.1.5 of part II-A of the Polar Code)	Discharge prohibited	
Cleaning agents and additives <sup>6</sup> contained in cargo hold washwater	Discharge permitted	> 12 nm, en route and as far as practicable (subject to conditions in regulation 6.1.2 and paragraph 5.2.1.5 of part II-A of the Polar Code)	Discharge prohibited	
Cleaning agents and additives <sup>6</sup> in deck and external surfaces washwater		Discharge permitted		
Animal Carcasses (should be split or otherwise treated to ensure the carcasses will sink immediately)	Must be en route and as far from the nearest land as possible. Should be >100 nm and maximum water depth	Discharge prohibited	Discharge prohibited	
All other garbage including plastics, synthetic ropes, fishing gear, plastic garbage bags, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal, bottles, crockery and similar refuse	Discharge prohibited	Discharge prohibited	Discharge prohibited	

<sup>1</sup> 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.

- 2 Comminuted or ground food wastes must be able to pass through a screen with mesh no larger than 25 mm.
- 3 The discharge of introduced avian products in the Antarctic area is not permitted unless incinerated, autoclaved or otherwise treated to be made sterile. In polar waters, discharge shall be made as far as practicable from areas of ice concentration exceeding 1/10; in any case food wastes shall not be discharged onto the ice.
- 4 Offshore platforms located 12 nm from nearest land and associated ships include all fixed or floating platforms engaged in exploration or exploitation or associated processing of seabed mineral resources, and all ships alongside or within 500 m of such platforms.
- 5 Cargo residues means only those cargo residues that cannot be recovered using commonly available methods for unloading.
- 6 These substances must not be harmful to the marine environment.