



TECHNICAL CIRCULAR No. 152 of 27th October 2013

To:	All Surveyors/Auditors
Applicable to flag:	All Flags
Subject:	Garbage Surveys
Reference	MARPOL Annex V

Garbage from Ship

1. General

1.1 Annex V of the International Convention for the Prevention of Pollution 1973, as modified by the Protocol of 1978, provides the means for the reduction of pollution from ship generated garbage that is disposed of into the marine environment. Garbage, as defined by Annex V, means all kinds of food wastes, domestic wastes and operational wastes, all plastics, cargo residues, 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 that are defined or listed in other Annexes to the present Convention; these include oils, noxious liquid substances, hazardous materials in packaged form, and sewage. It is not the intention of Annex V to control these substances, and they should not be considered "garbage" to be disposed of within the guidelines mandated by Annex V.

1.2 Annex V of MARPOL 73/78 (hereafter referred to as Annex V) prevents the discharge of all plastics, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products, into the marine environment because plastics are persistent; some non-biodegradable plastic products are believed to have a life of several hundred years in the marine environment. Furthermore, Regulations 3, 4, 5 and 6 of Annex V prohibit the discharge of certain types of garbage in particular areas and from certain classes of vessels.

1.3 Annex V entered into force on 31 December 1988, and applies to all vessels of any type operating in the marine environment.

1.4 Although discharge into the sea of limited types of garbage is permitted under Annex V, most waste is required to be disposed ashore. Notwithstanding this, Surveyors shall be aware

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of the various types of devices that ships may have on board to process garbage. Depending on several factors, including the type of ship, area of operation, or the size of the crew, ships may be equipped with incinerators, compactors, or comminutors, etc. Additionally, garbage that must be returned to port for disposal, such as plastics, may require long-term storage or arrangements for off-loading (e.g., transferring garbage to an offshore vessel for incineration or subsequent transfer ashore). The Surveyor shall note that such garbage should be stored so that all health and safety hazards are avoided and that storage capacity is adequate to accommodate all accumulated garbage, taking into account the type and size of the ship, the area of operation (e.g. special area, distance from nearest land or ice-shelf), shipboard garbage processing equipment and storage space, number of crew or passengers, duration of voyage, and regulations and reception facilities at ports of call.

1.5 Every ship of 100 gross tonnage and above, and every ship which is certified to carry 15 or more persons, and fixed or floating platforms 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 the equipment on board. It shall also designate the person or persons in charge of carrying out the plan.

Every ship of 400 gross tonnage and above and every ship which is certified to carry 15 or more persons engaged in voyages to ports or offshore terminals under the jurisdiction of another Party to the Convention and every fixed or floating platform shall be provided with a Garbage Record Book.

MEPC.220 (63) contains "Guidelines for the Development of Garbage Management Plans" for owners or operators. The plan should include such topics as procedures for collecting, separating, processing, sorting, and disposing of garbage together with information for operating any associated equipment on board as well as the person designated as the responsible person.

The Garbage Record Book should include, among other items, entries for when the garbage was discharged or processed or for when there was accidental or exceptional discharges of garbage. Receipts for transfer of garbage ashore or to other ships shall also be kept on board with the Garbage Record Book for 2 years.

2. Survey

2.1 At the request of the Owners, Surveyors may be called upon to verify a vessel's compliance with Annex V. The following items shall be addressed when carrying out the survey:

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A. Types of garbage normally produced during the vessel's voyage using the following definitions:

1. Animal carcasses means the bodies of any animals that are carried on board as cargo and that die or are euthanized during the voyage.
2. Cargo residues means 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.
3. 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.
4. Domestic wastes mean all types of wastes not covered by other Annexes that are generated in the accommodation spaces on board the ship. Domestic wastes do not include grey water.
5. Food wastes mean any spoiled or unspoiled food substances and includes fruits, vegetables, dairy products, poultry, meat products and food scraps generated aboard ship.
6. Incinerator ashes mean ash and clinkers resulting from shipboard incinerators used for the incineration of garbage.
7. Operational wastes means 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 include cleaning agents and additives contained in cargo hold and external wash water. Operational wastes do not include grey water, bilge water, or other similar discharges essential to the operation of a ship.
8. Plastic means 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.

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B. Awareness of the vessel's crew, including the Master, regarding the limitations on the discharge of garbage from ships as specified in Annex V. The Master should be knowledgeable as to what types of garbage may be disposed of into the marine environment, realizing the range limitations for each type of ocean-disposable garbage as well as the restrictions for disposing of garbage while operating within special areas. Crew members are also to be familiar with any waste management plan on the vessel. Any such plan should outline the procedures for handling, storing, and processing garbage aboard ship and the crew's responsibilities thereof. The plan may be incorporated into the vessel's operating manual, and the various options available to the vessel for the handling of garbage, either ocean disposable or non-ocean disposable, are shown in Attachment B.

C. Verification that the vessel has a copy of the requirements permanently posted, indicating the restrictions and prohibitions for discharging garbage from ships. This copy may be placed on a placard of durable material in conspicuous places regularly utilized by the crew such as galley spaces, mess areas, wardrooms, the bridge, main deck, the engine room, etc. The placard should be printed in the language or languages understood by the crew or passengers.

D. A description of the various types of garbage processing equipment a vessel may have installed on board. Use of compactors, comminutors, incinerators, etc. should be reported on including the make and model, rated capacity, output (or reduction of volume), kinds of garbage that may be processed by the equipment, the area of installation, and any working pressure (compactors). Incinerators may also have an IMO type approval certificates.

However, Regulation 16 of MARPOL Annex VI requires that each incinerator installed on board a ship on or after 01 January 2000 shall be approved in accordance with resolution MEPC 76(40) on "Standard Specification for Shipboard Incinerators."

The Surveyor shall be cognizant that comminuted wastes should be capable of passing through a screen with a mesh size no larger than 25mm if comminuted wastes are to be dumped more than three (3) miles from the nearest land. The 25mm screen should also be verified, if provided. Moreover, proper instructions as to the operation of any installed equipment should be posted in an obvious place near the equipment so that crew members may be properly guided. An appropriate crew member should be assigned the responsibility of operating the equipment and should be familiar with the operating, storage, and/or disposal procedures for processed garbage.

E. Verification of adequate storage facilities for garbage. Garbage that must be returned to port for disposal may require long-term storage, and garbage, that may be discarded overboard, may require short-term storage. Whichever the case, garbage shall be stored in a

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safe, healthy manner. Sufficient storage space and storage containers (cans, drums, bags) shall be provided, and all processed or unprocessed garbage shall be stored in tight, securely covered, leak-proof containers. Similarly, food wastes and associated garbage, which shall be returned to port and which may carry exotic diseases or pests, shall also be stowed in tightly sealed containers and separated from garbage which does not contain such food wastes. Containers for these kinds of contaminated wastes shall be clearly marked as such thus avoiding incorrect disposal procedures and treatment on land. The Surveyor shall also confirm that disinfection and preventative pest control methods are applied regularly in storage areas. Other factors, which may be provided in storage areas, such as fresh water wash down service, coamings, deck drains, adequate ventilation, and hand or automatic fixed firefighting equipment shall also be reported on by the Surveyor.

F. Verification of a garbage management plan and a Garbage Record Book (refer to section 4.1.5 of this procedure for details).

2.2 Upon completion of the satisfactory examination of above items, the Surveyor shall issue a report, indicating the following (as applicable to each vessel): type of equipment on board, the storage facilities, and whether a placard, listing Annex V regulations, is posted. Statements indicating conditions of said items as being satisfactory shall not be used because they imply opinion or indication of compliance with CONARINA or other recognized standards that CONARINA has been authorized to represent. Similarly, descriptions of said items shall be limited to the type of equipment, for example: X type compactor, X Manufacturer, X Model, X capacity, etc., avoiding reference to conditions, opinions, conclusions, or expiration dates.

REFERENCES:

- MARPOL Annex V

ATTACHMENTS: No.

Kindest Regards,

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