

Guidance on disposal of cargo residues in line with MARPOL Annex V

Introduction

As has been covered in our previous guidance, preparation of cargo holds for the carriage of their next intended cargo is a critical element of bulk carrier operations, requiring careful planning and competent execution. Under the updated MARPOL rules, the same diligence needs to be applied when disposing of the associated cargo residues and wash water.

As well as controlling the discharge of operationally generated garbage into the sea, the revised MARPOL annex V¹, which entered into force on 1 January 2013, provides restrictions on the disposal of cargo residues which remain on deck or in holds following loading or unloading of cargo. The new Annex V reverses the historic presumption that garbage may be discharged into the sea based on its nature and the distance from shore. It recommends that ships use port reception facilities as the primary means of discharge of all garbage.

The only exceptions to this rule are for food waste, animal carcasses, swept cargo residues / cargo residues (and cleaning agents) in wash water which are not harmful to the marine environment (not HME) and these may be discharged in certain circumstances. Whilst these rules seem clear enough, the difficulty confronting the seafarer and ship operator is identifying whether the cargo residues left onboard, and the cleaning agents used to prepare for the next cargo, are considered harmful. As such, the limitations and implications of these rules must be understood by the whole “cargo chain” ashore and onboard.

Fixing the Charter

In order to ensure the voyage can proceed smoothly, early consideration should be given to the nature of the cargo and the geographical location of load and discharge along with the associated restrictions that this may impose on the vessel’s operations. Where discharge of cargo residues is restricted, it is important for the shore team to understand the vessel’s ability to hold wash water,

the limitations imposed on the vessel's cleaning schedule and hold preparation and the implications this will have on the next voyage and subsequent cargo to be carried.

Under a standard voyage charter party, removal and disposal of cargo residues would normally be for the owners' account. However, recognising the additional complications and potential delays and additional costs with HME residues, BIMCO and P&I clubs alike have created an HME cargo residue clause that shifts this responsibility to the charterer. The shore team should ensure that an appropriate clause is in place for HME or potential HME cargoes to protect against loss.

BIMCO HME Cargo Residues Disposal Clause for Voyage Charter Parties:

If the cargo is harmful to the marine environment (HME) in accordance with MARPOL Annex V, the Charterers shall be responsible for all extra costs and time and/or losses incurred by the Owners associated with the storage, removal and disposal of HME cargo related residues and/or hold washing water. Compensation for such extra time shall be in an amount equivalent to the rate of demurrage stipulated in the charter party. Storage, removal and disposal shall always be in accordance with MARPOL Annex V or other applicable rules.

https://www.bimco.org/contracts-and-clauses/bimco-clauses/hme_cargo_residues_disposal_clause_for_voyage_charter_parties

The Master of the vessel should ensure concise record keeping is maintained throughout any additional cleaning operation. Receipts for additional cleaning costs should be properly retained, in case of any claim against the costs of cleaning.

Cargo declaration

In the same way that the onus is on the shipper to declare cargo information under the IMSBC Code, the MARPOL guidelines require the shipper to identify whether or not the cargo is HME.

Amendment 03-15 made to the IMSBC code², made the identification by the shipper of cargoes as HME (or not) mandatory as of 1 January 2017. However provisional lists of HME cargoes have not yet been publicly issued and are not yet available for reference.

Similarly, the most recent amendment to MARPOL Annex V, by resolution MEPC.277(70), fully incorporates the criteria for classifying solid bulk cargoes as harmful to the marine environment. However this particular amendment will only come into force on 1 March 2018.

To assist shippers, the ITOPF has also issued advice to shippers on how to classify cargoes as HME (or not) in its technical advisory paper "*Bulk cargo hold wash water discharge and cargo declarations under MARPOL Annex V*" July 2013³. As always, if the nature of the cargo is unclear, the master should seek confirmation from the shipper but, if in doubt, contact your P&I club for further information: assumptions could lead to significant problems for the vessel.

Cleaning Agents

The level of hold preparation will depend not only on the previous cargo but the next cargo as well. Where cleaning agents are required to be used it is important that the limitations of disposal and storage of the wash water is taken into account if the agent is considered harmful. A cleaning agent or additive is considered not harmful if:

- It is not a harmful substance as per the criteria in MARPOL Annex III
- Does not contain components which are known to be carcinogenic, mutagenic or reprotoxic

To ensure compliance, it is advised to avoid the use of harmful cleaning agents except where no alternative is available, or where wash water is already considered HME.

In order to demonstrate compliance, it should be ensured that agents can be identified as non-harmful. This should be stated on its material safety data sheet or on an accompanying compliance statement. Each vessel should retain this information on-board for future reference.

Discharge Restrictions

If the cargo is not considered to be harmful, residues (irrelevant of whether they are in wash water or sweepings) can be disposed at sea as long as the vessel is not in a special area, the vessel is *en route* and at least 12 nautical miles from the nearest land. Discharge of HME cargo residues in any form is prohibited. Irrespective of the classification of the cargo residue, wash water containing cleaning agents considered to be harmful should be treated as any other HME residue. It should be

noted that dust on external surfaces from cargo operations is not classified as a residue but should be removed and disposed with due regard to local rules.

Under the same rules that restrict disposal at sea, port facilities are encouraged to provide adequate reception facilities based on the number and type of ships that call there. It therefore goes that facilities handling HME bulk cargoes should be prepared to receive cargo residues and wash water: vessels encountering difficulties discharging same should inform their flag States accordingly. The reporting document '**Inadequacies of Port Reception Facilities**'⁴, ensures that the necessary information is captured.

IMO Special Areas for Annex V:

Mediterranean Sea	Red Sea
Baltic Sea	"Gulfs" area
Black Sea	North Sea
Antarctic area (south of latitude 60° south)	Wider Caribbean region (including the Gulf of Mexico and the Caribbean Sea)

CARGO RESIDUES

Simplified overview of the discharge provisions regarding cargo residues of the revised MARPOL Annex V

DISCLAIMER: Additional requirements may apply.

This simplified overview is for information or reference purposes only and is not meant as a substitute for the comprehensive provisions in the revised MARPOL Annex V (resolution MEPC.201(62)) or the 2012 Guidelines for the Implementation of MARPOL Annex V (resolution MEPC.219(63)).

Type of garbage	Ships outside special areas	Ships within special areas	Offshore platforms and all ships within 500 m of such platforms
Cargo residues not considered harmful to the marine environment and not contained in wash water	Discharge permitted ≥12 nm from the nearest land and <i>en route</i>	Discharge prohibited	Discharge prohibited
Cargo residues not considered harmful to the marine environment contained in wash water		Discharge only permitted in specific circumstances ¹ and ≥12 nm from the nearest land and <i>en route</i>	Discharge prohibited
Cargo residues considered harmful to the marine environment	Discharge prohibited	Discharge prohibited	Discharge prohibited

¹ According to regulation 6.1.2 of MARPOL Annex V, the discharge shall only be allowed if: (a) 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 these ports (regulation 6.1.2.2); and (b) if no adequate reception facilities are available at those ports (regulation 6.1.2.3).

Practical Measures

In view of the practicalities and potential costs of dealing with cargo residues, it is economically advantageous to first limit the amount of residues left onboard. Removal of as much of the cargo remnants as possible will reduce workload, cleaning costs and, where residues are considered harmful, difficulties that could be encountered with storage. To minimise residues every effort should be made to discharge all of the cargo, this will require good cooperation and communication between ships staff and the shore workers:

- Cargo spillage on deck and on hatch covers should be swept and stowed/discharged with cargo in the holds
- Cargo should be freed from areas where it may become trapped (overhangs, ladders, platforms etc.) during the discharge process
- Holds should be shovel cleaned and thoroughly swept by stevedores/ crew and residues discharged ashore with the remaining cargo.

Discharge to reception facility

Each effected shipping company/vessel should include a section within their SMS, detailing the necessary procedures for disposing of wash water containing HME. This must include how the wash water generated will be removed from the hold being cleaned.

It is quite probable that the ships bilge system is not designed or approved for removing the contaminated wash water. In this case, portable pumps and hoses may have to be used.

If discharge is planned to be direct to a reception barge, pre planning should consider the best position for making fast the barge.

Consideration must then be given to updating the vessels anti-pollution planning. Specifically with regard to the rupture of any flexible hoses used in the transferring of wash water.

If cleaning is conducted concurrent with discharge operations, robust isolation standards must be used to prevent contamination of the cargo in other holds with the wash water generated. For example, through connected bilge system piping.

If wash-water is to be retained on-board, it should be ensured that the specified retention tank has classification society approval for the carriage of wash-water. This may also be the case with any fixed infrastructure intended to be used, for example bilge lines and pumps.

Retention on board will be required if reception facilities do not exist or if washing has to be conducted during a ballast voyage.

Planning and Record Keeping

Every vessel over 100 gross tonnes and/or licensed to carry 15 persons or more is required to have (and implement) a garbage management plan. For vessels carrying solid bulk cargoes, the management and disposal of cargo residues should be included in this plan.

Every vessel over 400 gross tonnes and/or licensed to carry 15 persons or more is required to maintain a Garbage Record Book (GRB). The layout of the GRB has been amended under MEPC.277(70), splitting it into two parts. Part II will only be for the logging of cargo residues (HME or non-HME). Until new versions of the GRB become available commercially, records should continue to be recorded as normal.

Discharge of cargo residues must be recorded in the ship's GRB and must include:

- Date and time of discharge
- Position of the ship (latitude and longitude) or name of the port if disposed ashore
- Category of garbage discharged
- Estimated amount discharged into the sea, a reception facility or to another ship in cubic metres
- The start and stop positions of the ship for discharges into the sea
- Signature of the officer in charge of the operation

To avoid misunderstanding The Master must ensure that the '**Advance Notification Form**'⁴ with the estimated quantities of wash-water to be landed is correctly completed. Any local requirements must be met, involving close liaison with the vessels agent. It would be very unfortunate (and costly) if the shore refuse to accept the HME wash water due to some minor error in paperwork or segregation.

All material disposed of ashore should be accurately recorded within the GRB. A '**Waste Delivery Receipt**'⁴ from the shore reception facility/slop barge should be requested, and this should be held with the record book for a period of at least 2 years.

Conclusion

All cargo residues and hold wash water must be disposed of in line with the revised MARPOL Annex V requirements and practical steps should be taken to minimise residues during loading and discharge operations. Appropriate cleaning agents should be used and their disposal considered in advance.

Cargoes considered to be harmful to the marine environment should be treated with extra care and the resulting restrictions considered prior to fixing a charter. Onboard, all necessary steps should be taken to ensure that residues and wash water are discharged ashore. If in doubt, contact your P&I Club for advice.

1. Implemented by resolution MEPC.201(62)
2. Implemented by resolution MSC.393(95)
3. See <http://www.itopf.com/fileadmin/data/Documents/Papers/ITOPFMARPOLAnnexVAdvisoryNoteV2.pdf>
4. See MEPC.1/Circ.834