

Sea-based sources of marine litter: The IMO perspective

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About IMO



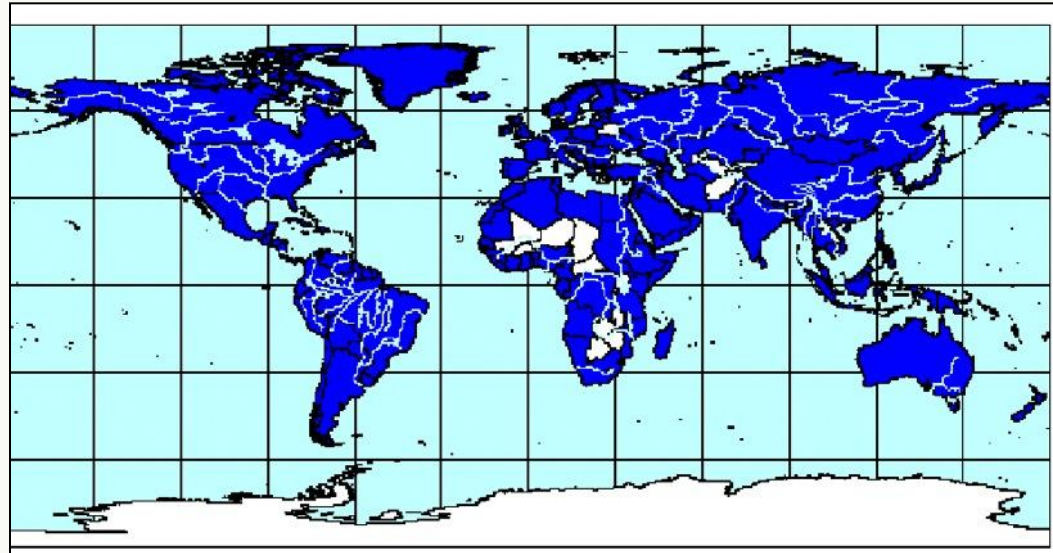
- Specialized UN agency.
- **Develops** global regulations.
- **Adopts** treaties and guidelines at the intergovernmental level.
 - including 21 environmental treaties
- **Member Governments** are responsible for implementing and enforcing the adopted regulatory framework.



IMO - Global Coverage



- 170 Member States
- All major ship owning nations
- All major port & coastal states
- Industry associations
- IGOs and NGOs



IMO and marine litter



Garbage from ships

MARPOL Annex V

Spoilt cargo

Boundary issue
London Convention/Protocol –
MARPOL Annex V

**Dumping of wastes and other matter
(dredged material, sewage, solid wastes,
vessels, etc.)**

London Convention/Protocol

Re-mobilization by dredging

London Convention/Protocol

Other IMO conventions are also relevant, directly or indirectly, such as SOLAS, STCW, etc.

MARPOL Annex V



MARPOL 73/78

International Convention for the Prevention of Pollution from Ships

To prevent the pollution of the marine environment by discharges from ships into the sea of harmful substances, or effluents containing such substances.



MARPOL regulates six main groups of harmful substances



Annex I

Petroleum in any form

Annex II

Noxious Liquid Substances (NLS) carried in bulk

Annex III

Harmful substances carried in packaged form

Annex IV

Sewage

Annex V

Garbage

Annex VI

Air Emissions

The revised MARPOL Annex V



On 1 January 2013, the revised Annex V of MARPOL entered into force.

The amendments to Annex V were adopted on 15 July 2011 by resolution MEPC.201(62).

RESOLUTION MEPC.201(62)

Adopted on 15 July 2011

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Revised MARPOL Annex V)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED draft amendments to Annex V of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annex V of MARPOL 73/78, the text of which is set out at annex to the present resolution;
2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2012 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;
3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2013 upon their acceptance in accordance with paragraph 2 above;
4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the Annex;
5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its

General prohibition of the discharge of all garbage into the sea



Regulation 3

General prohibition on discharge of garbage into the sea

- 1 Discharge of all garbage into the sea is prohibited, except as provided otherwise in regulations 4, 5, 6 and 7 of this Annex.
- 2 Except as provided in regulation 7 of this Annex, discharge into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products is prohibited.
- 3 Except as provided in regulation 7 of this Annex, the discharge into the sea of cooking oil is prohibited.

According to the revised regulations no discharges are permitted anywhere, except as provided otherwise in the Annex with regard to, for example, food waste, cargo residues, and cleaning agents and additives.

New garbage categories



Animal carcasses	regulation 1.1
Cargo residues	regulation 1.2
Cooking oil	regulation 1.3
Domestic wastes	regulation 1.4
Fishing gear	regulation 1.6
Food wastes	regulation 1.8
Incinerator ashes	regulation 1.10
Operational wastes	regulation 1.12
Plastics	regulation 1.13

whether in wet or dry condition or entrained in wash water

including cleaning agents and additives contained in:
(a) cargo hold wash water; and
(b) external wash water

MARPOL requirements



MARPOL consequently imposes one important obligation on the Government of each Party to the Convention:

Port States shall ensure the provision of facilities for the reception of ship-generated residues and garbage that cannot be discharged into the sea; and

These reception facilities must be *adequate* to meet the needs of ships, *without causing undue delay to them*.

New discharge requirements



Table 1 – Summary of at-sea garbage disposal

Garbage type	§All ships except platforms		§Offshore platforms
	Outside special areas	‡In special areas	
Plastics – includes synthetic ropes and fishing nets and plastic garbage bags	Disposal prohibited	Disposal prohibited	Disposal prohibited
Floating dunnage, lining and packing materials	> 25 miles offshore	Disposal prohibited	Disposal prohibited
(Cargo residues, paper, rags, glass, metal, bottles, ash and clinkers*, crockery and similar refuse	> 12 miles	Disposal prohibited	Disposal prohibited
All other garbage including paper, rags, glass, etc. comminuted or ground	> 3 miles	Disposal prohibited	Disposal prohibited
Food waste not comminuted or ground	> 12 miles	> 12 miles	Disposal prohibited
†Food waste comminuted or ground	> 3 miles	> 12 miles	> 12 miles
Mixed refuse types	**	**	**

* Excluding ashes from plastic products which may contain toxic or heavy metal residues, disposal of which is prohibited into the sea by regulation 3(1)(a).

† Comminuted or ground garbage must be able to pass through a screen with mesh size no larger than 25 mm.

‡ Garbage disposal regulations for special areas shall take effect in accordance with regulation 5(4)(b) of Annex V.

§ Offshore platforms and associated ships include all fixed or floating platforms engaged in exploration or exploitation of sea-bed mineral resources, and all ships alongside or within 500 m of such platforms.

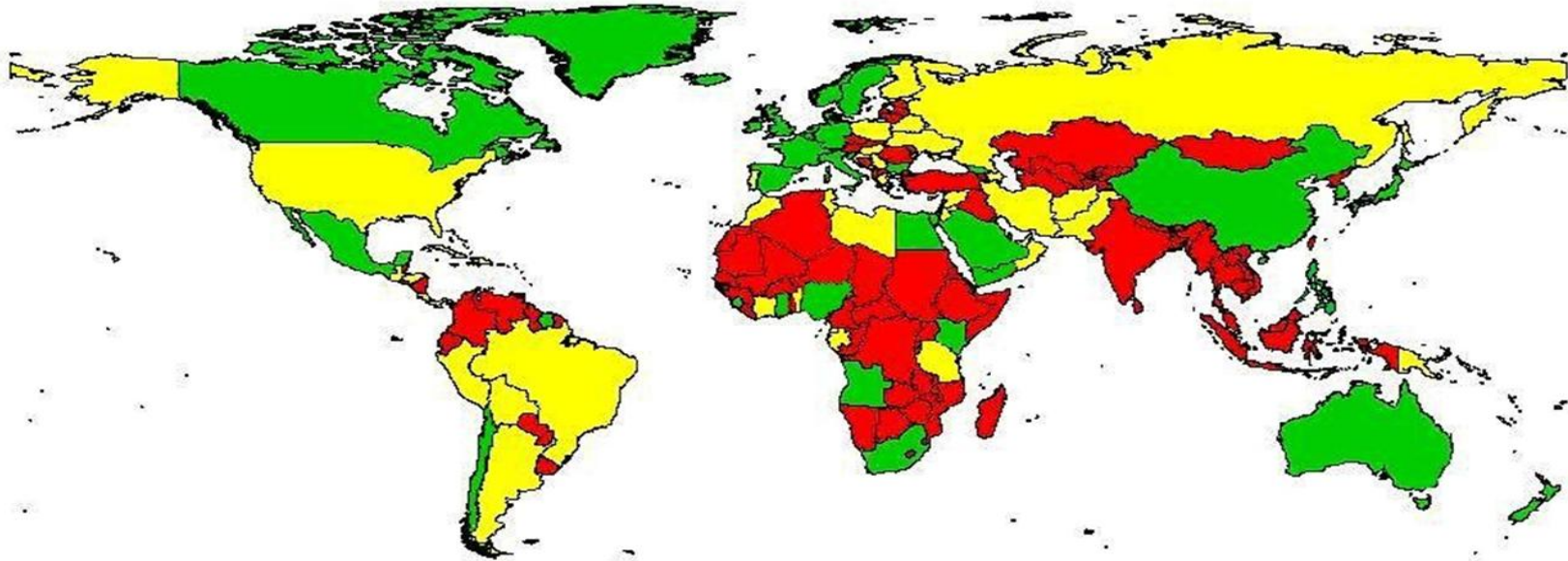
** When garbage is mixed with other harmful substances having different disposal or discharge requirements, the more stringent disposal requirements shall apply.

On cargo residues the revised MARPOL Annex V contains new differentiated requirements.

Type of garbage	Ships outside special areas	Ships within special areas	Offshore platforms
Food waste comminuted or ground	Discharge permitted ≥ 3 nm from the nearest land and <i>en route</i>	Discharge permitted ≥ 12 nm from the nearest land, and <i>en route</i>	Discharge permitted ≥ 12 nm from the nearest land
Food waste not comminuted or ground	Discharge permitted ≥ 12 nm from the nearest land and <i>en route</i>		
Cargo residues not contained in wash water			
Cargo residues contained in wash water	Discharge permitted ≥ 12 nm from the nearest land and <i>en route</i>	Discharge only permitted in specific circumstances and ≥12 nm from the nearest land and <i>en route</i>	
Cleaning agents and additives contained in cargo hold wash water	Discharge permitted	Discharge only permitted in specific circumstances and ≥12 nm from the nearest land and <i>en route</i>	
Cleaning agents and additives in deck and external surfaces wash water		Discharge permitted	
Carcasses of animals carried on board as cargo and which died during the voyage	Discharge permitted as far from the nearest land as possible and <i>en route</i>		
All other garbage			
Mixed garbage	When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply.		



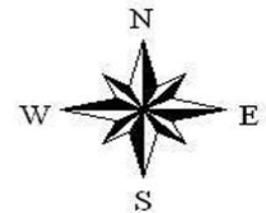
Parties to the London Convention and Protocol



LEGEND

Yellow - London Convention Parties
Green - London Protocol Parties
Red - Non-Parties

Date: 31 August 2012





Dumping of wastes and other matter

All dumping is prohibited except for 8 wastes that may be considered:

Dredged material

Fish waste

Vessels, platforms or other man-made structures

Inert, inorganic geological material

Organic material of natural origin

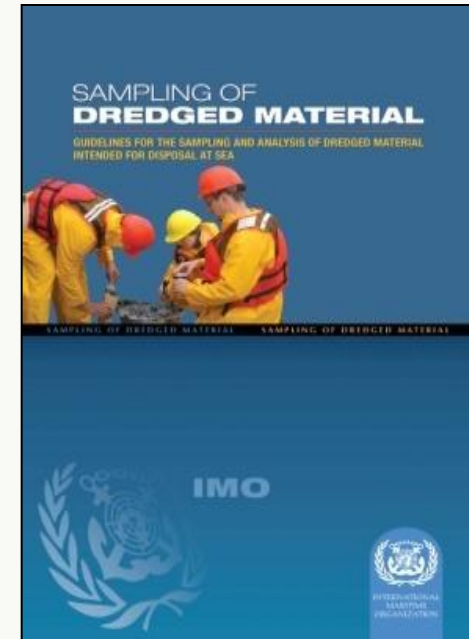
Bulky items

CO₂ storage in sub-seabed geological formations





Dredging and the re-mobilisation of waste during dredging operations





Spoilt Cargo

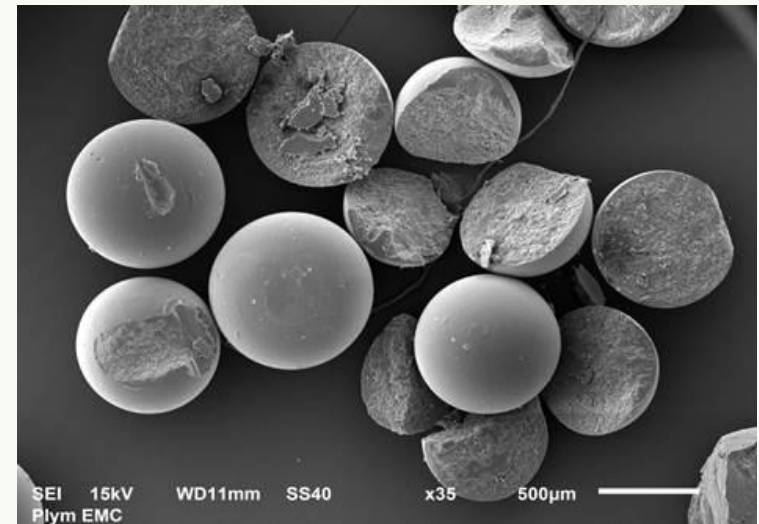
- MARPOL / LC-LP boundary issue
- First guidance issued in 1998
- Revised Guidelines issued in June 2013,
LC-LP.1/Circ.58 and *MEPC.1/Circ.809*



Working Group on Micro-plastics

“Sources, fate and effects of micro-plastics in the marine environment – a global assessment”

Several UN agencies are supporting the GESAMP Working Group on micro-plastics in the marine environment



*Photo Credit A. Bakir and RC Thompson
Plymouth University*



Regulatory

- Developing and strengthening international regulations and guidelines (i.e. MARPOL, LC/LP, and associated guidelines)

Outreach and awareness raising

- Publications, information campaigns, social media, conferences and partnerships

Capacity building and assistance

- Training workshops, seminars and direct assistance to Member States
- Projects (e.g. Norad in East Asia)



Main objectives:

1. **Increase awareness** of the **impact** of marine debris and solid waste to the marine environment (among seafarers, regulators/administrators, etc);
2. **Increase awareness** of the **existing international and national regulations** on marine debris and solid waste to the marine environment (among seafarers, regulators/administrators, etc);
3. **Increase political/policy level commitments** to implement and enforce regulations.



- Recordings of **floating litter items** by HELMEPA member-vessels transiting the Mediterranean Sea
- Voluntary observations of marine litter when at sea, anchor or in port using a Marine Litter Observation Sheet
- Results amalgamated and presented by HELMEPA in a report to UNEP/MAP and to IMO Marine Environmental Protection Committee (MEPC)
- HELMEPA proposes to expand this activity by setting-up the [Global Observatory on Marine Litter \(GOML\)](#)
- Data to be compiled by HELMEPA and transmitted to IMO quarterly



MARINE LITTER OBSERVATION SHEET

This observation sheet will be used for research purposes only.

Please fill out the following clearly and, if possible, take a photograph of the objects you have spotted.

- Ship's Name:.....
- Managing Company:.....
- Type of Ship:.....
- Date of Observation:.....
- Sea Area: Port Coastal Area Open Sea
- Ship's Position at the beginning of Observation:.....
- Ship's Position at the end of Observation:.....
- Distance (n.m.) that observation lasted:.....
- Surface (sq. meters) covered by the objects/litter you have spotted:

HELMEPA Marine Litter Observation System



TYPE OF LITTER

Check the number of litter you spotted by using lines () on the right of the category and after the observation, please write the number in the box on the left.

PLASTIC		RUBBER	
<input type="checkbox"/>	bags.....	<input type="checkbox"/>	balls.....
<input type="checkbox"/>	bottles.....	<input type="checkbox"/>	balloons.....
<input type="checkbox"/>	cans	<input type="checkbox"/>	gloves
<input type="checkbox"/>	crates.....	<input type="checkbox"/>	boots.....
<input type="checkbox"/>	cover/packing.....	<input type="checkbox"/>	tyres.....
<input type="checkbox"/>	table cloths.....	<input type="checkbox"/>	other
METAL		PAPER	
<input type="checkbox"/>	barrels.....	<input type="checkbox"/>	boxes.....
<input type="checkbox"/>	cans.....	<input type="checkbox"/>	packing.....
<input type="checkbox"/>	fishing items	<input type="checkbox"/>	newspapers.....
<input type="checkbox"/>	wiring	<input type="checkbox"/>	other.....

Thank you for your attention!



Any views expressed in this presentation are those of its author.