## PREVENTION OF MARINE LITTER POLLUTION UNDER IMO CONVENTIONS

1st NOWPAP Workshop on Marine Litter Incheon, Republic of Korea 8 – 9 June 2006

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Marine litter is addressed under:

MARPOL Annex V; and London Convention & Protocol

#### **MARPOL**

THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOLS OF 1978 AND 1997 RELATING THERETO

In short:

the MARPOL Convention

### ANNEXES to MARPOL

Annex I: Regulations for the Prevention of

Pollution by Oil (October 1983).

Annex II: Regulations for the Control of

Pollution by Noxious Liquid Substances in Bulk (April 1987).

Annex III: Regulations for he Prevention of

Pollution by Harmful Substances Carried at Sea in Packaged Form

(July 1992)

### ANNEXES to MARPOL (Cont'd)

Annex IV: Regulations for the Prevention of

Pollution by Sewage from Ships

(September 2003).

Annex V: Regulations for the Control of

Pollution by Garbage from Ships

(December 1998).

Annex VI: Regulations for he Prevention of

Air Pollution from Ships (May 2005)

**MARPOL** General Obligations and Rights

#### General obligations:

Parties to ensure that ships flying their flag do not discharge wastes into the sea

Provision of port reception facilities

### **General rights:**

Not being polluted by ships from other

Parties and can prosecute

Principle of "not more favourable

treatment"

#### **MARPOL ANNEX V**

## Regulations for the control of pollution by garbage from ships

Two important definitions:

#### Garbage:

"all kinds of victual, domestic and operational waste including fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of" which are not covered by other Annexes.

#### Ship:

"vessel of any type whatsoever operating in the marine environment, including hydrofoil boats, air cushion vehicles, submersibles, floating craft and fixed or floating platforms". So, it also means fishing vessels and pleasure craft.

#### **MARPOL Annex V**

#### Roles of the maritime Administration:

#### As FLAG State:

- implement regulations applying to the ship

#### As COASTAL State:

-implement regulations applying to shore installations

#### As PORT State:

-make sure ships of other Parties comply

## Annex V Prevention of Pollution by Garbage from ships

Time taken for objects to dissolve at sea			
Paper bus ticket	2-4 weeks		
Cotton cloth	1-5 months		
Rope	3-14 months		
Woollen cloth	1 year		
Painted wood	13 years		
Tin can	100 years		
Aluminium can	200-500 years		
Plastic bottle	450 years		

Source: Hellenic Marine Environemnt Protection Association (HELMEPA)

## Special Areas under MARPOL Annex V (regulation 1(3))

Special Area means 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.

#### **Special Areas under MARPOL**

Annex I (oil)	Annex II (bulk chemicals)	Annex V (garbage)	Annex VI (air pollution)
Mediterranean Sea	Baltic Sea	Mediterranean Sea	Baltic Sea (19.05.2006)
Black Sea	Black Sea	Black Sea	North Sea (22.11.2007)
Baltic Sea	Antarctic Area	Baltic Sea	
Red Sea		Red Sea	
Gulfs Area		Gulfs Area	
Gulf of Aden		North Sea	
Antarctic Area		Wider Caribbean Region	
North West European Waters		Antarctic Area	

### Control of disposal in Special Areas

#### **Obligations for ships (flag State)**

#### **Disposal PROHIBITED EVERYWHERE:**

- •All plastics, including ropes, fishing nets, bags, incinerator ashes, etc.
- •All other garbage, including paper, rags, glass metal, bottles, crockery, dunnage, lining and packing materials
- •Mixtures of garbage and other wastes with different discharge requirements.

#### Disposal PROHIBITED WITHIN 12 MILES FROM LAND:

•Food wastes (in the Wider Caribbean, 3 miles if food wastes are ground to 25mm)

#### Control of disposal in Special Areas (cont'd)

#### **Obligations for coastal States**

- -Provision of adequate reception facilities in all their ports
- -Notify IMO of such provision (necessary for Special Area to become effective)

#### Special obligations in Antarctica

- -Flag State: Sufficient capacity on board
- -Coastal State: Adequate reception facilities in specific ports

#### **Control of disposal outside Special Areas**

Obligations for ships (flag State)

**Disposal PROHIBITED EVERYWHERE:** 

- -All plastics, including ropes, fishing nets, bags, incinerator ashes, etc.
- -Mixtures of garbage and other wastes with different disposal or discharge requirements.
- Disposal PROHIBITED WITHIN 25 MILES FROM LAND:
  - -Floating dunnage, lining and packing materials.

#### **Disposal PROHIBITED WITHIN 12 MILES FROM LAND:**

-Food wastes and other garbage, including paper, rags, glass metal, bottles, crockery, etc. Permitted outside 3 miles from land if ground to 25mm.

# Control of disposal outside Special Areas (cont'd)

Obligations for offshore platforms and ships within 500 metres (flag State)

Disposal of EVERYTHING is PROHIBITED except:

-food wastes if ground to 25mm, where the platform is located more than 12 miles from land.

## Control of disposal outside Special Areas

#### **Obligations for coastal States:**

- 1 Provision of adequate reception facilities in all their ports
- 2 Notify IMO of such provision

# Control of disposals anywhere UNDERLYING PRINCIPLE

In as far as is possible and practicable, all garbage and other wastes should be retained on board for disposal at adequate shore reception facilities. If this is not possible, the disposal into the sea should be made as far as practicable from the nearest land and, in no case, at a distance below the range stipulated by the Convention.

## MARPOL Annex V Conditions for garbage disposal (regulations 3, 4, 5)

Garbage type	All ships		Offshore
	Outside special areas* (regulation 3)	In special areas* (regulation 5)	ships within 500 m of then (regulation 4)
Plastics (includes synthetic ropes and fishing nets and plastic garbage bags)	Disposal prohibited	Disposal prohibited	Disposal prohibited
Floating dunnage, lining and packing materials	25 nautical miles offshore or more	Disposal prohibited	Disposal prohibited
Paper, rags, glass, metal, bottles, crockery and similar refuse	12 nautical miles offshore or more	Disposal prohibited	Disposal prohibited
All other garbage (including paper, rags, glass, etc.), comminuted or ground	3 nautical miles offshore or more	Disposal prohibited	Disposal prohibited
Food waste not comminuted or ground	12 nautical miles offshore or more	12 mutical miles offshore or more	Disposal prohibited
Food waste comminuted or ground	3 nautical miles offshore or more	12 mautical miles offshore or more	12 nautical miles offshore or more
Mixed refuse types	The more stringent requirements (regulation 3(2))		

#### **Shipboard Garbage Management**

All ships of 400 gross tonnage and above and every ship certified to carry 15 persons or more will have to carry a Garbage Management Plan, to include written procedures for collecting, storing, processing and disposing of garbage, including the use of any relevant equipment fitted onboard (incinerators, compactors, comminuters).

The Garbage Management Plan should designate the person responsible for carrying out the plan and should be in the working language of the crew.

(regulation 9(2))

#### **Garbage Record Book and Placards**

-Except for a few exceptions, all ships and fixed or floating platforms required to have a Garbage Management Plan must provide a Garbage Record Book to record all disposal and incineration operations.

(regulation 9 (3)

-Every ship of 12 metres or more in length must also display *placards* notifying passengers and crew of the relevant disposal requirements.

(regulation 9(1))

## Port reception facilities – Annex V (regulation 7)

- 1 "The Government of each Party to the Convention undertakes to ensure the provision of facilities at ports and terminals for the reception of garbage, without causing undue delay to ships, and according to the needs of the ships using them."
- 2 "The Government of each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities provided under this regulation are alleged to be inadequate."

#### Port reception facilities (cont'd)

- 3 Cover all ports, terminals, harbours and marinas, which need port waste management procedures
- 4 The Administration can:
  - > impose statutory obligation;
  - > allow voluntary industry initiatives; or
  - > accept a combination thereof.
- 5 Consultative process: Government agencies; port authorities; ship operators; agents; waste service providers, etc.



Port reception facility database (PRFD)

A web-based inventory on port reception facilities data available through the IMO website

### The objectives of the database are:

- •the dissemination of current information on port reception facilities to the maritime community on a global basis through the internet;
- •the institution of an automated method for the regular up-dating of the information; and
- •the facilitation of user-friendly searches.

# Port Reception Facilities: IMO support

- -Comprehensive manual on port reception facilities
- -Guidelines for ensuring the adequacy of port waste reception facilities
- -Guidelines for the implementation of MARPOL Annex V
- -MARPOL How to do it

### **Port State Control**

(regulation 8)

- Ships, when in foreign ports, are subject to control by the port State
- Port State control officers may inspect ship if there are clear grounds that master or crew are not familiar with essential procedures, including Garbage Record Book
- Ship may be detained until situation is rectified

#### THE LONDON CONVENTION

- The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (the London Convention) is one of the oldest global conventions to protect the marine environment from human activities and has been in force since 1975
- Its objective is to promote the effective control of ALL SOURCES of marine pollution and take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter (Articles I and II)
- 81 States are Party to the London Convention

#### WHAT IS DUMPING?

DUMPING IS THE DELIBERATE DISPOSAL AT SEA OF WASTES AND OTHER MATTER FROM VESSELS, AIRCRAFT AND OTHER STRUCTURES, INCLUDING THE VESSELS THEMSELVES.

THE LONDON CONVENTION FULLY PROHIBITS THE DUMPING OF WASTES such as persistent plastics and other persistent synthetic materials such as netting and ropes which may float or remain in suspension in the sea.

#### **DUMPING IS NOT:**

- -Pipeline discharges from land
- -Operational discharges from vessels or offshore installations

#### LONDON PROTOCOL BASIC RULES

The 1996 Protocol to the London Convention (London Protocol) is developed to modernize and eventually replace the Convention.

The Protocol is in force since 24 March 2006 and has currently 27 Parties

Its objective is to "....protect and preserve the marine environment from ALL SOURCES of pollution and take effective measures to prevent, reduce and where practicable eliminate pollution caused by dumping or incineration at sea of wastes and other matter."



#### THE ROLE OF IMO

- Cannot act as enforcement agency (prerogative of the Parties)
- Receives and disseminates reports on alleged inadequacies of port reception facilities
- Provides technical assistance to developing countries
- Fosters regional agreements as basis for co-operation on enforcement

#### LATEST DEVELOPMENTS

Following requests by UN General Assembly (A/RES/60/30 & A/RES/60/31):

- IMO's MEPC has initiated a review of MARPOL Annex V; Members to submit review proposals;
- IMO Secretariat is co-operating with FAO, UNEP, GPA re. marine debris;
- IMO is co-operating with FAO on discarded fishing gear (Joint IMO/FAO Working Group on IUU fishing)

#### SO, UNDER INTERNATIONAL LAW...

- Discharge/disposal anywhere at sea of plastic-derived garbage is prohibited under the MARPOL Convention
- Dumping of plastic or synthetic materials anywhere at sea is prohibited under the London Convention/Protocol
- · Therefore....

#### CONCLUDING REMARKS

- There exist adequate international regulations to prevent/control the disposal and dumping into the sea of garbage/litter from ships
- Difficult to quantify the proportion of marine litter contributed by ships, but need to reduce/eliminate through full implementation of MARPOL and London Convention & Protocol

#### **CONCLUDING REMARKS (cont'd)**

- Need to assist developing countries through technical co-operation, in particular with port reception facilities issues, but resources are scarce
- Global problem that requires global solutions: need funding from donor countries and organizations, including shipping industry

#### **CONCLUDING REMARKS (cont'd)**

- Avoid duplication of efforts and waste of resources
- IMO ready to co-operate with UNEP, FAO, regional centres such as MERRAC, individual countries and shipping industry, if necessary, to reduce and, eventually, eliminate ship-generated garbage worldwide

