

**RESPONSE TO MARINE POLLUTION
CAUSALITIES
&
PREVENTION OF MARINE
POLLUTION**

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INTRODUCTION

- IMO Priority
- In 1973 the first MARPOL (marine pollution) Convention was signed, though it took till 1983 for MARPOL 73/78 to come into effect.
- Through a total of six annexes, the scope of MARPOL has been dramatically extended.

IMO AND MARINE POLLUTION FROM SHIPS

- **Definition of the term ‘Marine Pollution’: [UNCLOS]**

‘Pollution of the marine environment ‘as the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is **likely to result** in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities’.

- **Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP):**

‘Pollution means the introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea water and reduction of amenities’.

HISTORICAL DEVELOPMENT OF IMO LEGAL INSTRUMENTS

- Inter-Governmental Maritime Consultative Organization (IMCO) adopted -1948
- However, nowhere in the IMCO Convention was the prevention of vessel-source marine pollution explicitly mentioned as a purpose of the organization.
- Initial focus of the organization was maritime safety and efficiency in navigation.
- Competence of the organization was very limited.
- In 1954, the International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL) was adopted.

- The OILPOL Convention was followed by some environmental protection provisions in the :
 - a. 1958 Law of the Sea conventions:
 - b. The Convention on Fishing and Conservation of the Living Resources of the High Seas; and
 - c. The Convention on the Continental Shelf and the Convention on High Seas
- The 1954 Convention, which was amended in 1962, 1969 and 1971, primarily addressed pollution resulting from routine tanker operations and from the discharge of oily wastes from machinery spaces - regarded as the major causes of oil pollution from ships.

- Between the late 1960s and early 1970s- several supplementary conventions relating to interventions in high seas in cases of oil pollution casualties.
- Several notable Conventions:
 - a. The 1969 International Convention on Civil Liability for Oil Pollution Damage (CLC),
 - b. The 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (INTERVENTION), and
 - c. The 1971 International Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage (FUND)
 - d. The International Convention for the Prevention of Pollution from Ships (MARPOL) was adopted- 1973

INSTITUTIONAL STRUCTURE AND LAW-MAKING PROCESS OF INTERNATIONAL MARITIME ORGANIZATION (IMO)

- International Maritime Organization (IMO) has a very distinctive process.

Actors in the IMO Law-Making Process:

- a) Member states (including associate members);
- b) Inter-governmental organizations as observer organizations, and
- c) International Non-Governmental organizations as organizations with consultative status.

MEMBER STATES

- IMO has 175 Member States and three Associate Members representing all regions of the world –At Present
- Membership – Unique Process
- Member States of the IMO may be divided into different groups depending on their interest in the organisation i.e. Port, Coastal and Flag States
- The first dynamic of IMO members' interests is the conflict between the interest of port or coastal and flag States.
- However, this type of division is practically impossible because a country may be a port state while simultaneously being a coastal or flag state.
- Both the 1958 Geneva Convention on High Seas and UNCLOS (articles 91 and 94) impose a condition of 'genuine link' between the ship and the flag State, without precisely defining the term.

POLLUTION FROM OCEAN

- Legal definition of ocean dumping refers to the dumping of garbage, sewage, waste chemicals, and construction debris into the ocean.
- There are many cases where ocean dumping is controlled and regulated.
- However, there are hazardous materials being dumped into the sea by tankers and ships.
- They are also being illegally dumped in coastal waters.

EFFECT OF OCEAN DUMPING

1. Oil spills are dangerous for marine life
 2. Effect on Human Health
 3. Garbage is dumped into the ocean, the oxygen in the water could be depleted.
 4. Bottles and other plastics including bags can suffocate or choke sea creatures. Thinking they are food; they may eat them
- Governments world-wide were urged by the 1972 Stockholm Conference to control the dumping of waste in “their oceans” by implementing new laws.
 - The United Nations met in London after this recommendation to begin the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter which was implemented in 1975.
 - The International Maritime Organization was given responsibility for this convention and a Protocol was finally adopted in 1996, a major step in the regulation of ocean dumping.

OTHER PROBLEMS OF OCEAN DUMPING

- The most toxic waste material dumped into the ocean includes dredged material, industrial waste, sewage sludge, and radioactive waste
- Accumulation of waste in the ocean is detrimental to marine and human health.
- Another unwanted effect is eutrophication- A biological process where dissolved nutrients cause oxygen-depleting bacteria and plants to proliferate creating a hypoxic, or oxygen poor, environment that kills marine life.
- In addition to eutrophication, Ocean dumping can destroy entire habitats and ecosystems when excess sediment builds up and toxins are released
- Waste dumped into the ocean is categorized into the:
 - a. Black list
 - b. Gray list
 - c. White list

ISSUES ASSOCIATED WITH OCEAN DUMPING

- Incineration has been used to control dangerous chemical waste being dumped into the Ocean
- Global ban on ocean dumping of industrial waste was determined in the Global Waste Survey Final Report, 1995
- Enforcement of regulations was also a problem
- The unregulated disposal of waste, pollution of water, and buildup of materials in the ocean were serious problems for a multitude of countries.

SEABED ACTIVITIES AND THE PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT IN THE ASIA-PACIFIC REGION

- Delimitation of maritime boundaries and sovereignty over islands and other features
- Threat : Construction and Use of offshore installations and structures for the purpose of exploring and exploiting the mineral resources found in disputed maritime areas
- United Nations Convention on the Law of the Sea (“UNCLOS”) provides that coastal States must give due notice of the presence of offshore installations and structures and establish safety zones around them

PARADIGM OF THE ASIA-PACIFIC REGION

- Intricacy of the geopolitical circumstances of the maritime disputes
- Asia-Pacific region includes valuable and interrelated marine ecosystems that together have some of the richest marine biological diversity in the world
- Significant regional efforts made under the umbrella of the Association of Southeast Asian Nations (“ASEAN”)
- Example: ASEAN Minerals Cooperation Action Plan 2011-2015; several national and regional entities, the Memorandum of Understanding (“MoU”) of 1994 on Port State Control in the Asia-Pacific Region, and, the respective Code of Good Practice for Port State Control Officers.

RIGHTS AND OBLIGATIONS OF STATES IN DISPUTED MARITIME AREAS

- Depend on the spatial organization of the different maritime areas
- These areas can be generally divided into those that are subject to the jurisdiction or sovereignty of coastal States .
- States are only subject to the rule that delimitation of maritime boundaries should be settled by agreement and in accordance with international law, without prejudice to the general obligation for all States to settle international disputes by peaceful means and refraining from the threat or use of force.
- In fact, the Convention for the Protection of the Marine Environment of the North-East Atlantic (“OSPAR”) provides that States shall take all possible steps to prevent and eliminate pollution from offshore sources.
- It also establishes the prohibition of dumping of wastes or other matter from offshore installations, as well as the dumping, and the prohibition of leaving wholly or partly in place, of disused offshore installations

PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT IN THE LAW OF THE SEA

- 1958 Geneva Convention on the High Seas, however, there is a clear reference to the prevention of pollution by discharge of oil from ships or pipelines or resulting from the exploitation and exploration of the seabed and subsoil.
- This Convention also refers to the adoption of measures and international cooperation to prevent pollution from dumping of radioactive waste.
- Several non-binding instruments have increased awareness of the need to protect and preserve the marine environment
- The Declaration of the 1972 UN Conference on the Human Environment (“UNCHE”) affirmed in Principle 21
- Significance of Principle 22 & 24 of UNCHE
- In 1992, the UN held the Conference on the Environment and Development in Rio de Janeiro approving the well-known Agenda 21 and which essentially provided an outline for sustainable development.
- Chapter 17 included non-binding recommendations and guidelines relating to the pollution of the marine environment from various sources, as well as on how to develop strategies and plans to protect and preserve the marine environment at the global, regional and national levels.

GLOBAL LEGAL FRAMEWORK FOR REGULATING LAND-BASED MARINE POLLUTION

1. Customary law: the principle of *sic utere tuo ut alienum non laedas* – Fundamental Principle of IEL
 - Origins of this principle can be traced to the 1941 *Trail Smelter* arbitration
 - Later elaborated- Principle 21 of Stockholm Declaration of 1972 & Principle 2 of Rio Declaration, 1992
 - Principle contains some limitations with respect to its practical application .
 - a. Concept of ‘due diligence’
 - b. Principle does not mean an absolute prohibition of environmental damage.
 - c. Essentially functions after damage has been caused in the other State’s territory in terms of establishing State responsibility

2. UN Convention on the Law of the Sea

- ❑ General and comprehensive framework for marine environmental protection.

- a. Article 192 lays down a general obligation to protect the marine environment, by stating that: ‘States have the obligation to protect and preserve the marine environment’
- b. Article 194(1) -provision covers all sources of marine pollution, including land-based pollution.
- c. Article 194(2) UNCLOS imposes a duty upon States to take all measures necessary to ensure that activities under their jurisdiction or control are conducted so as not to cause damage by pollution to other States and their environment
- d. Article 194(3)(a): Minimize to the fullest possible extent ‘the release of toxic, harmful or noxious substances ..

- ❑ Similarly, there are various articles 207, 207(1), 207(2), 213 etc...

- ❑ UNCLOS contains no specific machinery for ensuring compliance with rules regulating land-based marine pollution.

3. Non-binding instruments

- ❑ The 1985 Montreal Guidelines for the Protection of the Marine Environment against Pollution from Land-based Sources;
- ❑ Agenda 21 of 1992;
- ❑ The 1995 Washington Declaration on the Protection of the Marine Environment from Land-based Activities;
- ❑ The 1995 Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (1995 Global Programme of Action);
- ❑ The 2001 Montreal Declaration on the Protection of the Marine Environment from Land-Based Activities; and
- ❑ The 2012 Manila Declaration on Furthering the Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities

1985 Montreal Guidelines: Enumerate various measures to be taken in order to ‘prevent, reduce and control’ pollution from land-based sources.

POLLUTION OF THE MARINE ENVIRONMENT FROM OR THROUGH ATMOSPHERE

- The term ‘marine environment’ is not explicitly defined by the Convention and the scope of this provision is ambiguous –under 1982 United Nations Convention on the Law of the Sea (UNCLOS)
- Air-borne pollutants are a significant threat to human health, causing premature mortality, cardiopulmonary disease, lung cancer, and chronic respiratory ailments.
- ‘**Acid Deposition** [through precipitation] has been blamed for increased acidity of soil, lakes, and rivers and for other effects including reduced crop growth, death or degradation of forests, and the disappearance of fish and wildlife’
- Atmosphere is the source of many contaminants in the marine environment, including nitrogen, sulphur, carbon, heavy metals, and other organic compounds.

POLLUTION FROM OR THROUGH THE ATMOSPHERE UNDER UNCLOS

- Regulated by Article 212 of UNCLOS
- IMO also has taken into account many of the existing international instruments addressing air pollution in negotiating its own response to air pollution
- 1979 Convention on Long-Range Transboundary Air Pollution which committed the parties to ‘reduce their national annual sulphur emissions
- Regulation 14 of MARPOL Annex VI addresses SO_x emissions
- Nitrogen Oxides (NO_x) are formed through the combination of Nitrogen and Oxygen during the combustion process. This gas is produced both through land-based industrial activity and through ship engines.
- Regulation 13 of MARPOL Annex VI addresses the emission of NO_x by marine diesel engines.
- The contribution to climate change by anthropogenic emissions of greenhouse gases, such as carbon dioxide, is today well-documented
- IPCC has stated that ‘most of the observed increase in global average temperature since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations’
- Adoption of the UN Framework Convention on Climate Change (UNFCCC) that seeks to achieve ‘stabilization of [GHG] concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system’

INTRODUCTION TO MARINE POLLUTION CASUALTIES

- March 1967, the tanker Torrey Canyon Disaster
- *Exxon Valdez*, 1989, Prince William Sound, Alaska, USA; *Haven*, 1991, Genoa, Italy; *Braer*, 1993, Shetland Islands, UK; *Sea Empress*, 1996, Milford Haven, Wales, UK; *Nakhodka*, 1997, off Honshu Island, Japan; *Erika*, 1999, off Brittany, France; *Prestige*, 2002, off Galicia, Spain; and *Hebei Spirit*, 2007, south of Seoul, South Korea).
- The International Maritime Organization (IMO) is the United Nations (UN) specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships

INTERNATIONAL LEGAL FRAMEWORK OVERVIEW

- **IMO Conventions**
- **OPRC Convention**
- **MARPOL Convention**
- **UNCLOS, 1994**

INTERVENTION ON THE HIGH SEAS BY COASTAL STATES

- International Convention Relating to Intervention on The High Seas in Cases of Oil Pollution Casualties (1969)
- Protocol Relating to Intervention on the High Seas in Cases of Pollution by Substances Other Than Oil (1973)
- INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND COOPERATION (OPRC 1990)
- PROTOCOL ON PREPAREDNESS, RESPONSE AND COOPERATION TO POLLUTION INCIDENTS BY HAZARDOUS AND NOXIOUS SUBSTANCES (OPRC/HNS 2000 PROTOCOL)
- OIL TANKERS UNDER 1992 CLC AND 1992 FUND
- Bunker spills convention (2001)
- The Bonn Agreement

THANK YOU !!