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## Review of Marine Pollution in Oil Spill Cases in terms of International **Environmental Law**

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### **Abstract**

This paper will focus on one of the cases related to pollution caused by the disposal of oil spills into the sea, a case study of the Exxon Valdez oil spill. In that matter, this paper can "provide the stage" for several relevant cases related to MARPOL 73/78 to build a discourse on environmental protection at sea based on the perspective of international environmental law. The writing of this paper uses a normative juridical legal research method. Judging from this Exxon Valdez case study, it can be agreed that this international treaty related to the prevention of pollution from ships or MARPOL has a renewal of its effectiveness if there has been an incident of pollution at sea in the past. The incident that impacted MARPOL 73/78 itself has also taught us the importance of protecting marine ecosystems.

Keywords Environment, Oil Spill, Pollution.

#### INTRODUCTION

Today, it seems that the oceans are no longer in the position of an inexhaustible resource. It is no exception that fatal pollution problems often occur in terrestrial ecosystems. Instead, humans are faced with a drastic decline in the quality of the marine and coastal environment which in the end results in a decrease in the quality of marine and coastal resources. The global community has experienced an increase in the number of international agreements related to environmental protection, especially the marine environment after the London Convention was held in 1972.

Then, in 1990 serious problems emerged when the degradation of biodiversity, marine ecosystems, and over-fishing got bigger. Based on scientific studies by GESAMP and at the regional level showing marine pollution by oil, organic compounds, chemicals, nuclear waste and household waste. Real events such as the Exxon Valdez ship tragedy are enough to provide a clear picture of the pollution problems caused by ships.

Modern international law also began its development with the international law of the sea. One of the first international legal instruments on the protection of the marine environment was the Washington Preservation and Protection of Fur Seals. Later, environmental problems became an issue of international law in 1926, when a draft convention on ship pollution was presented at a conference in Washington but was not yet open for signature. Prior to MARPOL 73/78, there had been efforts by the global community to control and prevent pollution at sea by ships, namely through OILPOL in 1954. Therefore, The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978(MARPOL 73/78) created to control human activity in the sea which continues to increase and is accompanied by an increase in the risk of marine pollution. Not only that, MARPOL 73/78 and Protocol 1997, moreover their enforcement also plays an important role in protecting marine resources in developing countries, many of which are



areas of international ship traffic. MARPOL continued the OILPOL Convention which was then followed up with instruments related to the International Maritime Organization.

Considering that incidents of marine pollution from ships still occur quite often even after MARPOL 73/78, for example, the Exxon Valdez case in 1989 which became one of the causes celebre for marine pollution by ships, followed by several smaller cases such as the Princess Cruise case in 1993. , the case of the Royal Caribbean Cruise in 1996, and others, increasingly provide confidence that the provisions regarding the control of pollution of the marine environment which are continuously updated and enforced are needed by the world community. Then, in 1992, for the first time the protection of the exclusive economic zone was linked to sustainable development especially for maritime biodiversity.

The development of human civilization was not enough to only take place on the mainland. The sea, as an ecosystem that is very rich in resources, is no longer an obstacle for humans to cross from one island to another. Ships have become so modern to accommodate the movement of people at sea. Unfortunately, the beauty and breadth of the sea is also too attractive for humans to dump their trash there.

As the main international convention that regulates the prevention of pollution to the environment in the sea (marine environment) originating from/performed by ships (whether for operational or unintentional purposes), the International Convention for the Prevention of Pollution from Ships or which is abbreviated as MARPOL only entered into force on October 2, 1983 even though it had been adopted by the International Maritime Organization (IMO) since November 2, 1973. This was inseparable from the 1978 Protocol which introduced stricter regulations for ship surveys and certification. Thus, MARPOL which was adopted in 1973 with the 1978 Protocol is referred to collectively as one unified instrument and known collectively as MARPOL 73/78. Apart from the addition of the 1978 Protocol, MARPOL 73/78 also consists of six separate annexes, each of which describes stipulations related to various sources of ship-generated pollution. Out of a total of six Annexes, Annexes I and II are mandatory for each signatory nation to comply with, while Annexes III, IV, V and VI are optional.

There have been many cases of pollution from ships being 'vented' into the sea and potentially fulfilling the cargo prohibition stipulated in MARPOL 73/78. Maritime pollution is also a global phenomenon that links economic, technological, political and legal aspects to one another. To further clarify, pollution originating from ships (vessel source pollution) is one of the main sources of pollution in the sea. This trend is also inseparable from the fact that the sea is an essential component of the transportation system between people, between cargo and between goods around the world. World trade probably would not have happened without the shipping industry by ships at sea.

Thus, the formulation of the problem can be formulated in the context of this writing regarding the disposal of oil spills into the sea. How is the law of the sea protecting against marine pollution with case studies resulting from the Exxon Valdez oil spill?

International Journal o Social Science, Educat<mark>i</mark>on, Commu<mark>n</mark>icati<mark>o</mark>n and Econo<mark>mic</mark>

ISSN (e): 2829-7350 | ISSN(p): 2963-944

#### RESEARCH METHODS

The writing of this article uses the normative juridical law research method. Research using normative juridical methods is legal research conducted by examining literature or secondary data. The approach used is qualitative with the method of literature study.

#### RESULTS AND DISCUSSION

The very close relationship between humans and the sea also makes technological developments on these ships so fast that it is not surprising that these ships become the 'media' that humans use to carry out their daily activities just like what humans do when they are on land. Moreover, 90% of world trade is carried out 'on ships'. Therefore, it is important that this paper can 'provide a stage' for several cases related to MARPOL 73/78 which are relevant to building a discourse on environmental protection in the sea based on the perspective of international environmental law.

Against these cases, this paper will focus on one of the cases that occurred and is related to pollution caused by the disposal of oil spills into the sea. The case study will discuss the biggest 'disaster' that ever happened in the history of the United States in the 1980s: the Exxon Valdez oil spill. The massive impact of the Exxon Valdez oil spill even had an impact on oil prices in the United States, where after the Exxon Valdez incident the United States Government had to 'earn' more money to finance the oil spill prevention program and its mitigation efforts organized by the United States Coast Guard. The high cost of this program has finally forced oil consumers in the United States to pay higher prices to buy oil. This case is very thick with the provisions regulated in MARPOL 73/78 so that this case was chosen as the selected case study. Moreover, the provisions in MARPOL are internationally approved in terms of pollution from ships.

#### **Exxon Valdez Oil Spill Disaster**

The oil tanker Exxon Valdez entered the William Sound area of Alaska, United States on March 24, 1989 after departing from Terminal Valdez Marine with a full load of crude oil on board. At 12:04 am local time, the Exxon Valdez hit a reef and thus 'ripped' the ship's hull as a result, eleven million barrels filled with oil spilled into the surrounding environment in the sea. To this day, although the spilled oil has disappeared from view, many of Alaska's beaches are still polluted, with crude oil buried just inches below the surface.

The Exxon Valdez incident is not included in the top twenty oil spill tragedies in the world, but the Exxon Valdez oil spill is the largest oil spill in the history of the United States that took place from a ship. This tragedy affected aspects of oil transportation at sea and also changed how the United States Government and other stakeholders deal with oil pollution in the future.

Exxon Valdez also contributed to 'helping' improve the first Annex of MARPOL 73/78. Annex I regarding the Regulations for the Prevention of Pollution by Oil (Regulations for the Prevention of Pollution by Oil) came into force on October 2, 1983. Although Annex I appeared long before the Exxon Valdez incident, in 1992, the International Maritime Organization (IMO), through the revision of Annex I, finally introduced new provisions for

# Review of Marine Pollution in Oil Spill Cases in terms of International Environmental Law Damar Gymnastiar Ramdhani DOI: https://doi.org/10.54443/sj.v1i6.104



oil-laden vessels to equip themselves with double hulls to prevent another Exxon Valdez event from happening. In addition, the amendments to Annex I also require oil-carrying ships to have an emergency plan to deal with oil spill incidents which include:

- 1. Emergency plans related to procedures for reporting oil spill incidents;
- 2. Authorities to contact regarding oil spill incidents;
- 3. Description of each action that needs to be implemented; And
- 4. Point of contacton ships to coordinate actions with local and national governments.

The amendment introduces two new regulations: Regulation 13F and Regulation 13G regarding design and construction standards for new and existing oil vessels. Regulation 13F regulates the prevention of oil pollution in the event of a collision or stranding of ships, while Regulation 13G regulates the prevention of accidental oil pollution and measures that apply to existing oil vessels.

Against the provisions stipulated in Regulation 13F the main thing is the use of double hulls or the two-layered ship hulls mentioned before. Regulation 13F applies to new oil vessels shipped on or after July 6, 1996. The application of double hulls does not mean relinquishing the obligation for ships existing before July 6, 1996 to also have double hulls. Existing oil vessels must comply with the provisions stipulated in Regulation 13F not later than 30 years after the date of delivery.

Regarding the provisions in Regulation 13G, the attention given is to existing vessels. Existing vessels are further regulated in this regulation, especially in terms of implementing inspection programs that have been formulated in such a way that they are better than before for existing tankers, especially those that are more than five years old. The 13G regulations also allow for the use of alternatives to the protective measures provided for in the regulations themselves, such as the use of hydrostatic balance loading (HBL) as an optional operational or structural arrangement. Furthermore, oil vessels that are 25 years old and constructed not according to MARPOL 73/78 must, therefore, be equipped with double sides and double bottoms in accordance with Regulation 13G.

Returning to the Exxon Valdez incident above, it can be learned that MARPOL 73/78 continues to improve its substance cargo to adapt to pollution problems that may arise from shipping activities. The 1989 incident of Exxon Valdez led to the mandatory use of double hulls for oil tankers weighing equal to or more than 5,000 deadweight tonnage (dwt) and made after 1996. In addition, amendments Post-Exxon Valdez Annex I also requires the cessation of the use of single hull or single layer ship hull. A phase-out process was also recognized and adopted which eventually resulted in periodic discontinuation of operations or modifications to ships over 25 years of age.

Reflecting on the Exxon Valdez case, the improvement of Annex I to MARPOL 73/78 is a real example that challenges to preventing pollution of the marine environment from ships will continue to be adjusted by developments in human activities. This clearly does not rule out the possibility for the current roles of ships that have been considered appropriate according to MARPOL 73/78 to be replaced immediately to adjust to human activities whose implications are not easy to guess. Thus, departing from this Exxon Valdez case study, it can be agreed that this international agreement related to the prevention of pollution originating

International Journal o Social Science, Education, Commu<mark>n</mark>ication and Econo<mark>mic</mark>

ISSN (e): 2829-7350 | ISSN(p): 2963-944

from ships or MARPOL has a renewal of its effectiveness if an incident of pollution has occurred in the sea. It is a fact that, whether we realize it or not,

#### **CLOSING**

MARPOL 73/78 exists because of the human need to protect the environment, the purpose of which is to ensure human survival. The jurisdiction and responsibilities of the MARPOL convention 73/78 are divided into three namely flag states, port states and coastal states. In MARPOL, flag states play the most active role in enforcing regulations on ships on the high seas. The main task of flag states is to ensure that their ships comply with the MARPOL reference standards 73/78, one of which is the obligation to inspect ships periodically and issue certificates for ships within their jurisdiction. Second, for port countries, MARPOL 73/78 obliges all member countries to implement the application of all their forms to all ships entering their ports without exception. Third, for the ship state legal action is limited to reporting violations by the ship state. Meanwhile, enforcement of MARPOL 73/78 is divided into inspections, monitoring, and sentencing.

Regarding the case studies that are the focus, this paper wants to emphasize the Exxon Valdez case that occurred in the United States. The incident that had an impact on MARPOL 73/78 itself has also taught us lessons about the importance of protecting marine ecosystems. Exxon Valdez has also pushed for revisions to MARPOL 73/78 through its Annex I, specifically Regulations 13F and 13G. Both regulate the addition of ship accessories that function to mitigate and prevent oil spills from ships. These two regulations also regulate which oil vessels are still allowed to sail and which are not. Phasephase-outalso known to stop the operation of oil vessels that have been deemed not in accordance with revision Annex I MARPOL 73/78.

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International Journal o Social Science, Educat<mark>i</mark>on, Commu<mark>n</mark>icati<mark>o</mark>n and Econo<mark>mic</mark>

ISSN (e): 2829-7350 | ISSN(p): 2963-9441

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