

# AN ANALYSIS OF MARITIME LEGAL FRAMEWORKS RELATING TO OIL SPILL IN THE CONTEMPORARY OCEANS

Shivam Kumar Pandey

Research Scholar  
SICMSS, RASHTRIYA RAKSHA UNIVERSITY

**Abstract-** India's geographical centrality in the Indian Ocean and its peninsular structure with a long coastline and island territories has given it enormous opportunities. Maritime security challenges include traditional and non-traditional threats, such as oil or chemical spills, which can severely damage the marine habitat and coastal ecosystem. Oil is essential for the economic development of a country, and about 50% of the earth's fossils oil is shipped through Indian waters. An oil spill can cause widespread environmental damage and hamper or impair the area's commercial marine operations. India must develop an effective response strategy and liability regime for the fossils oil accidents at sea.

**Key Words:** Maritime Oil Spill, Non-traditional threat, Environment, Marine resources, Legal Framework, UNCLOS, Maritime Zones

## 1. Introduction

India's geographical centrality in the Indian Ocean and its peninsular structure with a long coastline and island territories has given it enormous opportunities. Maritime security challenges accompany opportunities. Maritime safety and security are multidimensional, including traditional and non-traditional threats. Non-traditional maritime threats like oil or chemical spills can severely damage the marine habitat and the coastal ecosystem.

Oil is vital for the economic development of a country. Nations worldwide have uneven oil distribution, which makes petroleum trade and maritime transportation necessary—about 50% of the earth's fossils oil is shipped through Indian waters. Over the years, the possible threat of an oil spill has increased manifold times. A major oil spill can cause widespread environmental damage and hamper or impair the area's commercial marine operations. India must develop an effective response strategy and liability regime for the fossils oil accidents at sea.

## 2. Effects of an oil spill

Oil spills expose marine life to harsh elements and destroy their food and habitat sources. The NOAA<sup>1</sup> states that birds and mammals can become vulnerable to hypothermia from exposure due to crude fossils leakages. Feathered kinds of birds like ocean otters deprived of its ability to act as insulators due to oil. Additionally, it lessens the ability of a bird's wings to resist water, which makes them less able to withstand freezing water.

A maritime oil spill pollutes the maritime environment by releasing a liquid petroleum hydrocarbon. Oil leakage may occur on sea as well as on the land and/or coastal waterways, which are known as marine oil spills. Oil spills can occur for a variety of reasons, including the release of unrefined oil from carriers, offshore facilities, drilling sites, the spilling of processed petroleum products (like petrol and diesel), heavier fuels used by bigger vessels, or petroleum-based debris or trash.

Large-scale oil spills temporarily alter the air-sea interaction, preventing oxygen from the atmosphere from going into the water. The damage an oil spill causes to the ecosystem depends on how much oil was spilled, what kind of fossils was spilled, and the oceanographic and climate situations where the incident happened. The primary producers, including phytoplankton, which form the foundation of the marine food chain, are the first groups of creatures to be impacted. Fish eggs and larvae are also affected, among other freely swimming microorganisms. Furthermore, benthic animals like clams and mussels are harmed when oil settles over time. Mangrove swamps, coral reefs, and various marine resources are other natural features impacted.

## 3. Agencies involved in the oil spill management

All states must develop plans for responding to pollution incidents nationally or internationally under the OPRC Convention, 1990, adopted by the IMO<sup>2</sup>. The Indian Government, therefore, instructed the ICG<sup>3</sup> to create a NOSDCP<sup>5</sup>.

The ICG was founded in 1977 to protect maritime and other national objectives in Indian Maritime Zones. The responsibility of mitigating oil spills in India's maritime zones rest with the The Indian Coast Guard and has been recognised as the Central Collaborating Agency for combatting petroleum contamination in the marine ecosystems of various coastal areas. The Coast Guard's responsibilities are outlined in the Coast Guard Act of 1978. In 1986, the Ministry of Shipping handed its obligations for

<sup>1</sup> US National Oceanic and Atmospheric Administration

<sup>2</sup> International Maritime Organization

<sup>3</sup> Oil Pollution Preparedness, Response and Cooperation

<sup>4</sup> Indian Coast Guard

<sup>5</sup> National Oil Spill Disaster Contingency Plan

safeguarding the marine ecosystem to the ICG. These responsibilities covered the EEZ and the territorial waters<sup>6</sup>. The Committee adopted the NOSDCP in 1993, and the ICG released and disseminated it in 1996 to address the national oil spill issue at sea. Moreover, the Allocation of Business Regulations, 1961, was amended in 2002.

The NOSDCP envisages the DGICG<sup>7</sup> as the CCA<sup>8</sup> to enforce the provisions of the NOSDCP as defines the obligations and responsibilities of each participating agency in the Maritime Zones of India.

#### 4. Legal Provisions relating to oil spill

The consequences of oil spills are enormous, and many different types of negligence and consequential claims exist.

##### 4.1. Liability under Common Law Principles

The main source of energy for state economies is oil. The impacts of an accident are sure to be remote when oil wastes away on the ocean floor. The loss of oil, a valuable commodity, comes first. The ship, tanker, or offshore facility that was involved in the disaster and spilled the pollutants is immediately lost. Beaches are damaged, which immediately has an impact on the tourism sector. Hotel owners along the coast and owners of other tourist-based businesses experience financial losses. A tiny island state whose whole economy depends on tourism may have its entire economic foundation destroyed by an oil disaster. The fishing business is once again adversely affected by the devastation of fisheries. Eliminating the fisherman's source of income causes a loss in export and revenue.

Cleaning up is really expensive. The most crucial issue is who will pay the expenses and how much the cargo owners and carrier will be held accountable. It is crucial to examine the insurer's obligation as well as the other parties participating in a transaction chain since there are several parties connected with the whole of an arrangement concerning oil transport. What degree of injury will be suffered—strict or absolute—and how much? What if someone is negligent?

A spill may result from a crew member's careless performance of their duties, inadequate maintenance and bad construction, or, all of which categorically be blamed on the party.<sup>9</sup> On the other hand, there may be circumstances in which failure cannot be explicitly linked to an accident. It might be simple to demonstrate that the stranding or collision resulting in the casualty and the spillage resulted from negligence for which one or more shipowners were responsible.<sup>10</sup>

It's important to remember that in negligence cases, the consequential loss cannot be recovered in regular court proceedings. The physical harm done to a person or piece of property is the subject of the negligence tort. Oil spills undoubtedly result in physical damage, but claims may not always include individuals whose interests are immediately impacted. Losses result from pollution for people who depend on clean, unpolluted water and the beach for their livelihoods, such as those who rely on fishing or tourism.<sup>11</sup> Most importantly, the state or national government agency suffers the most significant loss and expends huge amount for cleanup up process.

Thus, it becomes clear that it is not practical to use standard common law principles to calculate the costs and effects of an oil spill. The fact that there are several parties participating in oil transactions is a key justification for not relying on common law rules.

An appropriate example might be the ship *Erika*, which sank in the Bay of Biscay in December 1999. The Paris Criminal Court delivered its judgement in January 2008 after an eight-year legal battle. It expanded the customary definition of criminal and civil liability for oil pollution to include the ship's classification society and her charterer in addition to the traditionally at-fault ship owner. The court determined that many parties involved in the marine safety chain had behaved inappropriately, either directly or indirectly assisting in the oil contamination. The requirement was for the first time extended to the classification society and charterer in addition to the shipowner and insurance.

The question of recovering damages for harm to or loss of natural resources is not addressed by property rights, in along with standing and cause of action. Natural resource damage assessment is a complicated matter because it is difficult to estimate the market value of the same. Several ways of calculating liabilities are based on economic value methodologies or restoration prices.<sup>12</sup> It's fascinating to see how the US handled the oil leak case involving *Amoco Cadiz*. The French state and municipal governments filed claims in response to the spill for damage to unclaimed natural resources, the cost of which was estimated to be 4.8 million US dollars.<sup>13</sup> The claim was an "attempt to evaluate the species killed in the intertidal zone by the oil spill and to claim damages following that value determination. It was a "attempt to assess the species killed in the intertidal zone by the oil spill and to make a claim for damages after that assessment of value."<sup>14</sup> The *res nullius* concept applies to the resources alleged to have been damaged,

<sup>6</sup> Exclusive Economic Zone

<sup>7</sup> Director General Indian Coast Guard

<sup>8</sup> Central Coordinating Authority

<sup>9</sup> Robert P. Grime, *Shipping Law*, 218 (Sweet and Maxwell London 1<sup>st</sup> ed/1978).

<sup>10</sup> Cases where crude oil discharged to save the vessel, or a vessel might catch fire as the result of the act of some malicious third party for whom no one identifiable is responsible.

<sup>11</sup> *Supra* note 54 at 220.

<sup>12</sup> Edward H.P. brans, *Liability for Damage to Public Natural Resource Standing Damage and Damage Assessment*, (Kluwer Law International 2001) *retrived from* [www.dundee.ac.uk/cepmlp/journal/html/vol10/article10-1.pdf](http://www.dundee.ac.uk/cepmlp/journal/html/vol10/article10-1.pdf).

<sup>13</sup> "Assessing the Social costs of Oil Spills: The *Amoco Cadiz* case Study" National Ocean Service, U.S Dept of Commerce, (1983) *retrived from* <http://www.archive.org/details/ecologicalstudy00noaa>.

<sup>14</sup> *In re Oil Spill Amoco Cadiz*, 1998 U.S. Dist. Lexis 16832 29.



will not be applicable to floating infrastructure constructed to research or use the natural resources of the sea bottom or its subsurface until the central government determines otherwise.

If the person(s) provided with notice disregarded the instructions included in the notice, Section 356 K gives the central government the authority to prevent or control oil pollution. Subject to Part XB, any cost or liability faced by the government of the nation as a consequence of failing to comply by those who received notification under section 356 K(1) will be a debt owed to the central administration by the person(s) on whom the notification was delivered and may be recovered from every one of them and charged against all of their tankers, ships other than tankers, mobile offshore installations, or offshore installations of any other type that they own. This suggests that the owner, agent, and operator, rather than the state, has the major responsibility for preventing and limiting the oil leak. The state would make sure that the designated individuals took all required measures to stop or contain the spill. If they will not then the authority will move in to prevent or control the leak, for which it may subsequently seek reimbursement from the parties principally accountable for doing so.<sup>31</sup>

## 5. Recent Oil Spills in India

### 5.1. Uran Oil Spill

ONGC reported an oil spillage on October 2013 due to a rupture of its Mumbai High-Uran pipeline at Uran Plant, Mumbai. The ONGC reported that the spill occurred post-power failure at the Uran plant. The power cut resulted in a shutdown of processing units, and during this period, there was an increase in oil line pressure, due to which oil leakage occurred inside the plant. The leakage was arrested by clamping. Some amount of crude oil was spilt onto the shoreline/sea.

The discharge from the rainwater drain into the sea was initially prevented by placing saw bags at the drain mouth and later by sand/mud. ONGC engaged a private contractor for recovery and shoreline cleanup. NEERI<sup>32</sup> and <sup>33</sup>MPCB collected samples from the affected region. CPCB<sup>34</sup> checked the Uran plant to review the spill's cause. About 25 barrels were recovered through ONGC and the private oil spill response provider's combined efforts.

### 5.2. The sinking of mv Bingo

Cargo vessel MV Bingo after passing Sagar anchorage, sank South of Sagar Island on October 2013 during the severe cyclone 'Phailin'. The vessel was carrying FFO and diesel on board during the sinking. All eighteen crew abandoned the vessel and were rescued by Digha Police off Subarnarekha river mouth. A Coast Guard pollution control vessel was deployed for help in case of an oil spill.

Under section 356 (J) of Merchant Shipping Act, 1958, a notice was issued to the vessel's owner, agent, and shipping company to take preventive action against the possible oil spill. The West Bengal, Pollution Control Board, held meetings to find a salvage agency and action plan to remove the oil in a time-bound manner.

### 5.3. Platinum Explorer Oil Spill

On August 2014, the drillship Platinum Explorer of Vantage Drilling reported oil spillage. It was found that the spillage had occurred inadvertently during the internal transfer of fluids. Approximately 3.88 kl of Synthetic Oil-Based Mud (SOBM) in a ratio of 73:27 oil and water was spilt. It was found through aircraft surveillance that the residual oil had disintegrated by the natural weathering process.

Though minor, the incident highlighted the importance of maintaining contingency plans by drillships as obliged by the Production Sharing Contract to mitigate the ever-present threat of oil spills.

### 5.4. Southern Star Oil Spill, Sela River, Bangladesh

The oil spill on December 2014 in Bangladesh was dangerous due to the mangroves' fragility in the Sunderbans Delta. M/s Padma Oil, owners of the spilt cargo of furnace oil, offered monetary payment for every litre of the oily mixture turned in by the area's locals. However, the enduring images of children scouring the swamps for the released oil highlight the importance of planning for response to such contingencies.

### 5.5. Mt Dawn Kanchipuram Collision Near Chennai

On January 2017, inbound MT Dawn Kanchipuram collided with outbound MT BW Maple near the Kamarajar Port Limited (KPL). MT Dawn Kanchipuram sustained damage and spilt Heavy Fuel Oil (HFO). No life was lost in the incident.

Coast Guard Ship was sailed from Chennai harbour in Pollution Response (PR) configuration to assess further and render necessary PR assistance. Since the incident had occurred within port limits, the port authorities were required to take appropriate actions as per NOS-DCP<sup>35</sup>. Notwithstanding, Indian Coast Guards initiated action by NOS-DCP and launched an initial aerial assessment. Indian Coast Guards issued a notice under section 356(J) of Part XIA of the Indian MSA<sup>36</sup> 1958 to the owner/Master of MT Dawn Kanchipuram for undertaking a cleanup operation and immediately initiating actions relating to the containment and recovery of spilt oil and maintenance of the sanctity of the environment as before.

Despite prompt and coordinated response initiated by the Coast Guard, State Administration, and Ennore Port, the oil reached the shores as the spill had occurred less than 3 ½ kilometres from the port. Thirty-seven agencies worked shoulder to shoulder for 14 days during the intense shoreline cleanup, removing oil and oily debris. The spill impacted thirty-seven kilometres of Tamil Nadu coastline, with the Ramakrishna Nagar Kuppam area suffering the most damage.

<sup>31</sup> Section 356 K (2).

<sup>32</sup> The National Environmental Engineering Research Institute

<sup>33</sup> Maharashtra Pollution Control Board

<sup>34</sup> The Central Pollution Control Board

<sup>35</sup> National Oil Spill Disaster Contingency Plan

<sup>36</sup> Merchant Shipping Act

The authorities have filed compensation claims for undertaking soil spill response operations and the spill's affected party. An amount of US \$13, 80,864.00 (Thirteen Lakh, Eighty Thousand, Eight Hundred and Sixty-Four US Dollars) has been settled.

### 5.6 The "MV Wakashio", a Panamanian-flagged vessel, wrecked off the coast of Mauritius

On July 25, 2020, while en route from China to Brazil, the Panamanian-flagged "MV Wakashio" went overboard on an officially designated and ecologically sensitive coral reef undersea off the coast of Mauritius. The ship was operating under ballast and didn't have any cargo. The cause of the grounding is still a mystery. At the time of the catastrophe, the ship allegedly had 207 tonnes of diesel, 3,894 tonnes of fuel oil, 90 tonnes of lubricating oil on board. On August 5, as a result of the bad weather, the first signs of a hull breach were seen; shortly after, oil began to flow.

Unfortunately, the remarkably thorough and intricate international legal framework encompassing liability and compensation for environmental harm brought on by present oil spills from shipping vessels (IOPC-FUND regime), that was your primary emphasis of an earlier UNCTAD report, is not applicable in this particular instance as the bunker spillage came from a bulk-carrier rather than an oil tanker.

The CLC<sup>37</sup> for Bunker Oil Pollution Damage, 2001 (Bunkers Convention), which Japan, Panama and Mauritius signed domestically, extends to bunker oil spills from ships other than oil tankers, which is the main issue in the current case. The Convention was established to ensure that victims of oil spills that occur when is used as fuels in shipping bunkers get fair, prompt, and effective recompense.

### 6. Lessons to be learned from the recent oil spills

The oil spillage scale can be immense in offshore oil and gas installations where a massive amount of oil is produced, treated, and transported. Some oil spills have occurred from offshore pipelines. This may require laws that ensure adequate maintenance of the oil drilling sites.

The sinking of m.v. Bingo near Hoogly harbour, with the consequent risk of oil pollution, has highlighted the need for stringent legislation to deal with negligent ship-owners. The issue should be addressed by incorporating the Nairobi Wreck Removal Convention provisions in the Merchant Shipping Act of 1958.

A communication and contingency response crisis was the major drawback observed during the oil spill near Chennai. The initial response during an oil spill offshore is vital as environmental damage can be reduced.

### 7. Conclusion and Suggestions

Marine flora and wildlife suffer terrible consequences from an oil leak. An oil leak of extraordinary proportions, like the one that just occurred in Mauritius, may suffocate the marine ecosystem and have unanticipated effects on people's lives. When there is an occurrence like the one in Mauritius, the marine flora and wildlife are harmed, and fisheries are ruined, robbing people of their source of income. As the water becomes impassable, there is a deficient in business and operational days, which affects the tourist sector and maritime routes.

Because of the nature of maritime pollution, worldwide collaboration is essential to keeping it under control. Every oil spill incident has shown how important it is to have a strong international regime in place to assist prevent the devastating results of an oil spill, to have the nations who are ready with thier emergency policies ahead of time in an event of an occurrence, and also to fix the liability and channel them appropriately. The restriction of culpability has often come under fire, particularly in the event of dramatic oil disasters.

The trajectory of oil spill accountability indicates that the treaties have been highly responsive and have effectively raised themselves to fit the needs of increasingly substantial oil spills with each incidence with graver ramifications. All compensation claims must be resolved peacefully via discussion in the vast majority of cases. This agreement, which addresses both environmental protection as well as recompense for suffering resulting from tanker oil spills, is a superb illustration of an international response to a worldwide problem provided by the international framework, which facilitates international collaboration.

Unfortunately, not much is done to estimate the costs of damage to the natural environment, despite efforts made in the international arena to tighten the liability system. Keep in mind that each oil spill is a distinct instance, and there seems to be no option to calculate the standard and average monetary liability of an oil spill since the damage caused by each leak depends on a variety of circumstances. The main problem with the strict responsibility concept as it now exists in the international context is that ecological harm is not taken into account when calculating damages.

India is susceptible to oil spills due to its extensive coastline, and a spill the size of the Mauritius catastrophe would be disastrous for the country's economy. Because we rely on the water for the transportation of commodities, it would have an impact on both the economy and those who live in coastal regions. Along with the export sector, the tourist and fishing sectors would suffer significant losses in the event of a leak. We must determine whether or not we are ready for the worst-case situation.

India upholds the civil culpability rule for harm caused by oil contamination. The CLC and Fund Convention requirements are included into Parts XB and XC of the Merchant Shipping Act, holding the owner accountable for destruction inflicted by pollution from fossils and reducing the responsibility while establishing the limitation fund.

The Merchant Shipping Act's failure to include liability limitations is its first serious flaw. Contrary to the CLC, which through article V specifies the mechanism for determining the limitation of responsibility, Section 352 only states that "the owner shall be entitled to limit his liability under this Part, in respect of any one or more incidents, as may be prescribed." The MSA has rather successfully assimilated the CLC's requirements for mandatory insurance, financial guarantee, and compensatory rights through subrogation. However, the inclusion of such clauses is enough to protect our shore.

<sup>37</sup> International Convention on Civil Liability

Both MSA and CLC mark the owner accountable for "any pollution damage caused by oil which has escaped or been discharged from the ship as a result of the incident" in terms of their respective theories of responsibility. This clause may cover urgent harm done to maritime wildlife and plants. However, it cannot be expanded to take into account the harm done to natural resources. People who rely on the seashore were not permitted to file claims for damages for lost business. Under MSA's plan, there is no criminal accountability system for prosecuting the responsible party for pollution due to oil spill. However, as per the Indian Penal Code, pollution resulting from fossils oil may result in a public annoyance, and anybody who causes a public issue is guilty of doing so. Any affected person would have standing under Section 268 of the IPC in the event of "injury, obstruction, danger or annoyance" caused to any "persons who may have occasion to use any public right." According to Section 278 of the law, it is unlawful to "make the atmosphere noxious to the health of persons in general dwelling, carrying on business in the neighbourhood, or passing along a public way." However, the specified punishment for violating the oil pollution clause is a meagre fine of up to 500 Rupees.<sup>38</sup> India has not ratified the Bunker Convention, and its regulatory framework for dealing with oil pollution does not distinguish between accidental and intentional oil spills into the ocean; the merchant shipping statute would only cover occurrences like the tarring of Goa's beaches. India needs to ratify the Bunker Convention.

However, neither MSA nor CLC extend its coverage to anybody who could have been directly involved in the disaster, including the charterer, the crew, the ship's master, and the port officials who are in control of coordination of signals. The nation's responsibility regime must be strengthened to prevent maritime mishaps by holding the owner and other parties directly involved in the spill criminally liable. There are two potential methods for achieving this objective. The first approach involves the implementation of a dedicated legislation that enforces stricter consequences, similar to the Civil Nuclear Liability Bill of 2010. Alternatively, an alternative section could be appended to the existing MSA, which would impose substantial fines for instances of negligence and inadequate upkeep of vessels and offshore infrastructure.

The coastguard is in charge of safeguarding the coastal environment, and a lot hinges on how well they handle any catastrophic emergencies. They need to have the necessary education and tools to deal with challenging circumstances. Legislative support and adequate financing should be given preference for the coastguard's operations. The establishment of a Tier-1 system and particular oil spill response mechanism is under consideration by the coastguard.

Protecting seas from oil pollution is vital, and all actions must be taken to safeguard our coastlines. In the Indian Ocean, India currently holds a dominant position. It must adopt more stringent environmental protection laws in order to lead by instance for other Asian and African countries. Developing countries will suffer enormous losses, mainly when there is a risk of oil leaks. To address this, the strategy of "prevention is always better than cure" has to be followed.

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<sup>38</sup> Section 352-I of MSA and article III of CLC.