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MARINE OIL POLLUTION AND LIABILITY AT SEA: AN ANALYSIS OF INTERNATIONAL AND INDIAN LEGAL REGIMES FOR ENVIRONMENTAL DAMAGE AND COMPENSATION

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ABSTRACT

Marine oil spills continue to be a serious hazard for the marine environment, as well as coastal livelihood and economy despite the emergence of extensive international and domestic legal systems regulating the phenomenon. The legal consequences of oil spills not only include physical contamination but involve complex issues relating to liability, compensation, environmental rehabilitation, and allocation of loss as well. In this paper, the international and Indian laws dealing with liability of marine oil pollution will be examined in detail, focusing in particular on the differences of cargo oil pollution and bunker oil pollution. For this purpose, the Convention on Civil Liability for Oil Pollution Damage, the Fund Convention, the Supplementary Fund Protocol and the Bunkers Convention will be discussed along with UN Convention on the Law of the Sea and MARPOL convention. Moreover, the developments in the Indian legal system through the Merchant Shipping Act, 2025, Rules thereunder and the Environment (Protection) Act, 1986 will be analyzed along and particular importance will be given to the valuation of ecological damages, compensation limits, bunker oil pollution and the relationship between maritime and environmental laws.

(I) INTRODUCTION

Oil pollution at sea raises a legal question that extends well beyond the immediate effects of an unfortunate marine incident. Oil spillage from a tanker or any other vessel could bring

about damage to coastal ecosystems, fisheries, tourism, property, public authorities and communities reliant on the sea. The challenge for law therefore is not just to determine whether pollution has occurred, but to locate the person legally responsible, to assess the extent of compensation recoverable and to devise a mechanism to obtain appropriate reparation. The Torrey Canyon disaster of 1967 serves as an illustration of the origins of this problem. The grounding of the tanker off the coast of the United Kingdom led to a major oil spill and laid bare the inadequacies of the international system of liability and compensation for marine pollution in place at the time. The International Maritime Organization ("IMO") cites the Torrey Canyon disaster as a catalyst for the development of an international liability and compensation regime thereafter.¹ In response, the international community developed the International Convention on Civil Liability for Oil Pollution Damage, 1969 followed by the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971. And these in turn became the precursors to the modern 1992 liability and compensation regime.² The contemporary legal framework however does not apply a uniform approach to all forms of marine oil pollution. The primary international regime under the 1992 Civil Liability Convention relates to pollution caused by persistent oil carried as cargo by tankers, while pollution caused by bunker oil used as fuel by ships is governed by a separate 2001 Bunkers Convention³.

This distinction is significant since the applicable rules of liability, insurance and mechanisms for supplementary compensation may differ depending on the source and the function of oil⁴. The problem becomes even more complex when the nature of environmental damage is taken into account. While the international regime has moved beyond coverage for conventional personal injury and property claims, academic literature highlights the fact that challenges in compensating collective ecological interests persists, especially when environmental damage cannot be readily translated into conventional economic loss⁵.

With this background, this article explores the allocation of liability for marine oil pollution under international and Indian law. It especially examines the distinction between cargo-oil

¹ Int'l Mar. Org., *Liability and Compensation*,

² Int'l Oil Pollution Compensation Funds, *History*

³ International Convention on Civil Liability for Oil Pollution Damage arts. I, III, V, VII, Nov. 27, 1992, 1953 U.N.T.S. 330.

⁴ International Convention on Civil Liability for Bunker Oil Pollution Damage arts. 1, 3, 7, Mar. 23, 2001, 40 I.L.M. 1493.

⁵ Michael Mason, Civil Liability for Oil Pollution Damage: Examining the Evolving Scope for Environmental Compensation in the International Regime, 27 *Marine Pol'y* 1, 1–12 (2003)

and bunker-oil pollution, the mechanisms of compensation and insurance as well as the extent to which existing liability regimes adequately address ecological and socio-economic damage caused by oil spills.

(II) UNDERSTANDING MARINE OIL POLLUTION

Marine oil pollution is not limited to the dramatic picture of a ship breaking apart and unleashing a trail of crude oil in the sea. Legally speaking, the concept encompasses a much broader canvas. The United Nations Convention on the Law of the Sea ("UNCLOS") defines "pollution of the marine environment" as the introduction, directly or indirectly, of substances or energy into the marine environment that causes, or is likely to cause deleterious effects such as harm to living resources, hazards to human health, interference with fishing and other legitimate uses of the sea or impairment of the quality of seawater.⁶ This definition is important in that it focuses on the environmental and socio-economic consequences of marine pollution rather than the amount of oil discharged. Oil pollution can be of both accidental and operational origin. Accidental pollution arises from incidents such as ship collisions, groundings, structural failure and other maritime casualties causing oil to escape.

Operational pollution may arise from activities such as tank cleaning, discharge of oily mixtures and machinery related activities. MARPOL Annex I addresses both categories through normative standards aimed at preventing pollution by oil from ships.⁷ It accordingly implies that the international legal framework includes a preventive element in addition to the law in relation to liability and compensation. Another distinction relates to the function of the oil on board the vessel. Oil carried as cargo by an oil tanker is principally governed under the 1992 Civil Liability Convention ("1992 CLC"), wherein the notion of "persistent oil" includes substances like crude oil, fuel oil, heavy diesel oil and lubricating oil.⁸ In contrast however, bunker oil refers essentially to hydrocarbon mineral oil used or intended for operation or propulsion of a ship and is governed separately under the 2001 Bunkers Convention when spilled from a vessel.⁹

⁶ United Nations Convention on the Law of the Sea art. 1(1)(4), Dec. 10, 1982, 1833 U.N.T.S. 3

⁷ International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 Relating Thereto, Annex I, Nov. 2, 1973, 1340 U.N.T.S. 61.

⁸ International Convention on Civil Liability for Oil Pollution Damage art. I(5), Nov. 27, 1992, 1953 U.N.T.S. 330.

⁹ International Convention on Civil Liability for Bunker Oil Pollution Damage arts. 1(5), 3, Mar. 23, 2001, 40 I.L.M. 1493.

This distinction has important legal implications. When a spill of oil (carried as cargo) and a spill of oil (used for the operation of the vessel) could have similar ecological consequences, the applicable legal regime of compensation and liability could be altogether different. The 2001 Bunkers Convention for instance provides a distinct regime for pollution caused by bunker oil, while the CLC is part of a larger regime supplemented by the IOPC compensation regime.¹⁰ Accordingly, marine oil pollution needs to be understood in a classified manner. The source of the oil, its characteristics, the vessel involved, the location of the pollution and the nature of the damage caused can determine which liability regime becomes applicable. And such a classification will be the basis for understanding the historical development in the international oil-spill liability regime.

(III) HISTORY AND EVOLUTION

The modern law of oil-spill liability developed primarily as a result of significant maritime disasters which demonstrated the deficiencies of the traditional principles of maritime liability. Before the rise of a specialized international regime, the victims of oil pollution had to make primary use of the domestic law of maritime and tort. Such solutions proved problematic, as concerns arose as to the identity of the responsible party, the quantum of damages and the availability of compensation on a cross-border basis. The turning-point was the Torrey Canyon disaster of 1967. The tanker Torrey Canyon, carrying some 120,000 tons of crude oil, ran aground off the coast of Cornwall, United Kingdom, causing one of the biggest oil-spills of the time. The resultant pollution impacted significantly on the coastlines of the United Kingdom and France and demonstrated that the effects of a single tanker accident could reach far beyond the jurisdiction within which it occurred. More significantly, however, the disaster highlighted the lack of a coherent international framework of liability apportionment and compensation for large-scale marine pollution.¹¹

The disaster prompted the creation of the International Convention on Civil Liability for Oil Pollution Damage, 1969 ("1969 CLC"). The Convention marked a significant departure from the principles of ordinary fault by placing primary fault on the shipowner on the basis of strict liability, subject to certain exemptions. The Convention also gave shipowners the right to

¹⁰ International Convention on Civil Liability for Oil Pollution Damage arts. III, V, VII, Nov. 27, 1992, 1953 U.N.T.S. 330; International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage arts. 2, 4, Nov. 27, 1992, 1953 U.N.T.S. 330.

¹¹ Int'l Oil Pollution Compensation Funds, *History*, <https://iopcfunds.org/about-us/history/>; Int'l Mar. Org., *Liability and Compensation*,

limit their liability (subject to the terms of the Convention) and obliged ships carrying substantial quantities of oil as cargo to have insurance or other financial security.¹²

The 1969 CLC was however accompanied by a significant limitation: the sums recoverable under the Convention would often be significantly below the amounts required to compensate for a particularly large disaster.

The 1971 Fund Convention, International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 ("1971 Fund Convention") filled this gap by introducing a supplementary compensation scheme, funded primarily out of contributions by entities receiving oil by sea.¹³ The combined system meant that the burden of such costs was spread between ship owners, insurers and the oil industry, rather than placed exclusively on individual victims. The international regime was subsequently amended by the 1992 Protocols, which increased the levels of liability and compensation and broadened the scope of the Convention. The 1992 CLC and the 1992 Fund Convention, together with the 2003 Supplementary Fund Protocol, constitute the primary international compensation regime for pollution caused by persistent oil carried as cargo by ships.¹⁴

The evolution of the regime reflects a significant shift in international maritime law: from reliance primarily on fault and the application of ordinary domestic remedies to a specialized regime involving strict liability, compulsory insurance, limitation of liability and collective compensation. Yet developments in this area have not resolved all the difficulties which remained unsolved since the dawn of the regime: the adequacy of compensation, the effects of ecological damage and the adequacy of the treatment of oil pollution which originates elsewhere than the cargo oil of tankers.

(IV) CARGO OIL AND BUNKER OIL

One of the most important distinctions in the international law of marine oil pollution concerns the distinction between oil carried as cargo and bunker oil used to operate a vessel. However, although a spill of either type may have comparable environmental and economic

¹² International Convention on Civil Liability for Oil Pollution Damage arts. III, V, VII, Nov. 29, 1969, 973 U.N.T.S. 3.

¹³ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage arts. 2, 4, Dec. 18, 1971, 1110 U.N.T.S. 57.

¹⁴ International Convention on Civil Liability for Oil Pollution Damage arts. III, V, VII, Nov. 27, 1992, 1953 U.N.T.S. 330; International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage arts. 2, 4, Nov. 27, 1992, 1953 U.N.T.S. 330; Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, May 16, 2003, 2227 U.N.T.S. 94.

consequences, international law does not apply the same liability and compensation regime to the two different types of oil pollution. This distinction is based primarily on the function and source of the oil and not upon the nature of environmental harm that it may cause.

The International Convention on Civil Liability for Oil Pollution Damage, 1992 ("1992 CLC") primarily governs pollution arising from the escape or discharge of persistent oil carried by a ship as cargo.¹⁵ The Convention applies primarily to tankers carrying persistent oil in bulk as cargo. "Oil" for the purposes of the Convention includes persistent hydrocarbon mineral oils like crude oil, fuel oil, heavy diesel oil and lubricating oil.¹⁶

The central principle of the CLC is strict liability of the ship owner. Under Article III, the owner of a ship at the time of an incident is liable for pollution damage resulting from the incident, subject to limited exceptions. The claimant thus does not have to prove negligence of the ship owner. This principle reflects the practical difficulties of establishing fault in the complex context of maritime accidents and ensures that victims have a party against which they can make a claim. However, the CLC gives the ship owner a right to limit its liability, subject to the circumstances described by the Convention. Ships carrying more than the prescribed quantity of oil are also required to maintain insurance or other financial security in relation to their potential liability. This mechanism aims to balance the competing interests of ensuring compensation for victims and providing predictable liability for ship owners and the maritime industry.

In addition, if compensation under the CLC is insufficient, the 1992 Fund Convention provides a second level of compensation funded by contributions from entities receiving certain quantities of oil by sea.¹⁷ The 2003 Supplementary Fund Protocol may provide a further level of compensation in States which are parties to it. Thus, the law on cargo-oil pollution generally comprises a multi-tier regime of ship owner liability, compulsory insurance and international compensation funds.

Bunker oil involves a different situation. Bunker oil is fuel which is carried for the operation or propulsion of the ship rather than oil which is transported as cargo. The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 ("Bunkers

¹⁵ International Convention on Civil Liability for Oil Pollution Damage art. II, Nov. 27, 1992, 1953 U.N.T.S. 330.

¹⁶ *Id.* art. I(5)

¹⁷ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage arts. 2, 4, Nov. 27, 1992, 1953 U.N.T.S. 330.

Convention") establishes a separate system of liability for the pollution damage resulting from the escape or discharge of bunker oil from ships.¹⁸

The Bunkers Convention places liability on the shipowner for pollution damage resulting from bunker oil. However, unlike the CLC regime, the Bunkers Convention does not create an equivalent IOPC-style international compensation fund designed specifically for bunker-oil pollution. Instead, the Bunkers Convention has compulsory insurance or other financial security as its principal financial mechanism, and the right of the victims to bring a claim directly against the insurer or the person providing financial security.

This distinction is important in the case of a major spill. A tanker carrying crude oil is likely to come under the CLC and enjoy the additional compensation mechanism of the 1992 Fund and, where available, the Supplementary Fund. A non-tanker vessel releasing large quantities of bunker fuel may come under the Bunkers Convention, and the compensation mechanism may be based primarily upon the liability of the ship owner and the insurance available.

Herein a distinction between the situations in relation to cargo oil and bunker oil poses a relevant question of legal policy: should the right to compensation depend substantially upon the function that the oil served aboard the vessel when the consequences upon the environment may be similar? This is a matter which the international law addresses as two separate regimes rather than a comprehensive regime. This does not necessarily mean that the distinction is legally unjustified but cargo oil and bunker oil involve different commercial activities, risks and actors. The international compensation funds in the case of cargo oil are partly financed by the oil industry because entities which receive oil transported by sea will benefit from the system and contribute towards its financing.¹⁹ Bunker-oil pollution is primarily connected with the operation of the vessel and thus relates to ship owner liability and compulsory insurance.

Nevertheless, the distinction is important for examining the adequacy of the law on marine pollution. The legal system may contain different financial mechanisms for substantially similar damage depending on the source of the oil. Thus, the distinction between the two situations is crucial for evaluating whether international law and Indian law adequately implement the polluter-pays principle and provide for effective compensation for ecological and socio-economic losses.

¹⁸ International Convention on Civil Liability for Bunker Oil Pollution Damage arts. 1, 2, 3, Mar. 23, 2001, 40 I.L.M. 1493.

¹⁹ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage arts. 10–12, Nov. 27, 1992, 1993 U.N.T.S. 330.

(V) INTERNATIONAL LEGAL FRAMEWORK

Marine oil pollution is not regulated by one single treaty but by a number of treaties which cover environmental protection, the prevention of pollution, civil liability, compulsory insurance and compensation. The key treaties are the United Nations Convention on the Law of the Sea ("UNCLOS"), the International Convention for the Prevention of Pollution from Ships ("MARPOL"), the 1992 Civil Liability Convention ("1992 CLC"), the 1992 Fund Convention, the 2003 Supplementary Fund Protocol and the 2001 Bunkers Convention; together these treaties form a system that includes not only measures for prevention and response but also rules for apportioning the financial consequences of pollution.

A. UNCLOS

UNCLOS offers the most comprehensive international legal basis for the protection of the marine environment; under Part XII of the Convention, States are required to take action in order to protect and preserve the marine environment. Although Article 192 lays down on States a general duty to protect and preserve the marine environment, Article 194 obliges States to take the necessary measures to prevent, reduce and control pollution of the marine environment from all sources.²⁰

Article 194 is of particular importance because it obliges States to address pollution from ships and from other sources as well as to take steps to ensure that activities carried out within their jurisdiction or control do not result in damage to other States or to areas beyond their national jurisdiction. The article therefore shows the trans-boundary character of marine pollution since an oil spill in one part of the sea can have an effect on the coastline, fisheries or marine ecosystem of another State. UNCLOS also takes into account the importance of liability and compensation. According to Article 235, States must make sure that, in accordance with their legal systems, means are available to enable prompt and adequate compensation or some other form of relief in relation to damage caused by the pollution of the marine environment. It furthermore requires States to cooperate in the implementation of existing international law and in the development of rules on responsibility and liability for environmental damage. UNCLOS therefore lays down the general duty of protecting the marine environment, but it does not provide the detailed compensation scheme which applies

²⁰ United Nations Convention on the Law of the Sea arts. 192, 194, Dec. 10, 1982, 1833 U.N.T.S. 3.

in the case of a tanker oil spill; that role is mainly carried out by specialized maritime conventions.

B. THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION BY OIL AND THE PREVENTION OF OIL POLLUTION

The principal international treaty with regard to the prevention of pollution by ships is the International Convention for the Prevention of Pollution from Ships of 1973, as amended by the 1978 Protocol ("MARPOL 73/78"). Annex I to MARPOL specifically covers pollution by oil.²¹ MARPOL is mainly preventive not compensatory and includes various areas such as operational discharges, the requirements regarding equipment, construction and design standards, monitoring of oil discharges and the related procedures all aimed at reducing both the likelihood and the extent of oil entering the marine environment. The difference between prevention and compensation is important. While MARPOL can set standards whose breach could have consequences for regulation or enforcement, it does not function as the main international mechanism through which private victims obtain monetary compensation when a major oil spill takes place; civil liability and compensation are mainly handled by the CLC and other related instruments.

The international regime can be understood in general terms as having two complementary parts: MARPOL is aimed at preventing pollution, while the conventions relating to liability and compensation decide who is to pay the financial costs when pollution takes place.

C. THE 1992 CONVENTION ON CIVIL LIABILITY

The principal international framework relating to civil liability for pollution resulting from persistent oil carried as cargo is the 1992 CLC, and its most important feature is that it imposes strict liability on the ship owner. Article III states that the ship owner must be liable for pollution damage resulting from an incident involving the ship, with certain exceptions.²² Consequently, the claimant is not required to prove that the ship owner was negligent or had acted intentionally. This offers a simple means of obtaining compensation since the ship owner is designated as the main party financially responsible.

Although the Convention does provide for a limitation of liability, Article V sets a maximum limit on liability in relation to the ship's tonnage, on the conditions specified by the

²¹ International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 Relating Thereto, Annex I, Nov. 2, 1973, 1340 U.N.T.S. 61.

²² International Convention on Civil Liability for Oil Pollution Damage art. III(1), Nov. 27, 1992, 1953 U.N.T.S. 330.

Convention. The ship owner will lose the advantage of limitation if the pollution was caused by the owner's own personal act or omission which was done with the intent to cause such damage, or which was carried out recklessly and with the knowledge that such damage would very probably result.

The Convention also mandates that any ship carrying a quantity of oil exceeding that prescribed as cargo shall have insurance or some other financial guarantee to cover its liability.¹⁰ Moreover, Article VII enables individuals who have suffered pollution damage to take direct action against the insurer or the person who has provided the financial guarantee.¹¹ The CLC thus combines three important principles:

1. Strict liability;
2. And a limitation of liability;
3. Compulsory financial security.

The scheme is an effort to give victims a reliable means of obtaining compensation, at the same time as it safeguards ship owners against unlimited liability.

D. THE CONVENTION ON THE FUND IN 1992

The CLC system recognizes that it is still possible for victims to receive no compensation after a major oil spill even if strict liability and compulsory insurance are in place; that is why the 1992 Fund Convention creates an international compensation fund as a second level of protection. The "1992 Fund" (International Oil Pollution Compensation Fund) pays out compensation in cases where victims are unable to secure full reparation under the CLC, for instance when the damage goes beyond the ship owner's liability limit or when the ship owner is financially unable to fulfill its obligation.²³

A key aspect of this system is that the Fund is mainly financed through contributions made by companies which receive certain amounts of contributing oil in the Member States. The financial responsibility is therefore shared not only by individual ship owners but also by the wider oil industry. The Fund offers compensation for a wide range of recognized claims, such as the costs of clean-up and preventive measures, damage to property, losses incurred by fisheries and mariculture, losses linked to tourism, and certain expenses relating to the reinstatement of the environment.

²³ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage art. 4, Nov. 27, 1992, 1953 U.N.T.S. 330.

The system is therefore an example of collective risk sharing. Instead of having one ship owner or insurer have to cover the whole cost of a catastrophic event, the international system sets up a mechanism by means of which the whole oil industry makes contributions towards compensation.

E. THE PROTOCOL RELATING TO THE SUPPLEMENTARY FUND IN 2003

The 2003 Supplementary Fund Protocol provided an additional method of compensation for states which take part in it. The Supplementary Fund constitutes a third level of compensation beyond that offered by the CLC and the 1992 Fund Convention.

This third level shows a significant aspect of international oil-pollution law since, in the past, compensation limits have been expanded in light of the possibility that serious accidents could result in losses greatly exceeding the individual liability of a ship owner.

The resulting framework may thus be visualized as follows:

First tier: Ship owner liability under the 1992 CLC

↓

Second tier: 1992 Fund

↓

Third tier: Supplementary Fund, where applicable

The fact that there are several levels of compensation is especially pertinent to the issue of whether the compensation is adequate. It increases the chance that victims will not go without compensation even though the damage is greater than the individual liability limit of the ship owner, without at the same time removing compensation from the substantive requirements and limits set out in the applicable conventions.

F. THE CONVENTION ON BUNKERS FROM 2001

The international system concerning bunker-oil pollution is set up by means of the International Convention on Civil Liability for Bunker Oil Pollution Damage of 2001 ("Bunkers Convention"). It covers pollution damage resulting from the escape or discharge of bunker oil from ships and imposes liability on the ship owner.²⁴

The Convention also mandates that owners who register ships exceeding a specified tonnage limit should hold insurance or other financial security in respect of pollution liability and

²⁴ SUPRA

allows individuals who have suffered pollution damage to take direct action against the insurer or the provider of such financial security.

In contrast to the CLC regime, the Bunkers Convention does not establish a similar international compensation fund; instead, its main feature is ship owner liability backed by compulsory financial security. This aspect is important when comparing the compensation that could be made available in the case of incidents involving cargo oil and bunker oil.

(VI) INDIAN LEGAL FRAMEWORKS

India's legal framework governing marine oil pollution is based on a combination of maritime statutes, environmental statutes and judicially-developed environmental principles. The Merchant Shipping Act, 2025 provides the principal modern statutory framework on civil liability for oil pollution and covers bunker-oil pollution. Its provisions function in conjunction with the Environment (Protection) Act, 1986, the National Green Tribunal Act, 2010 and India's obligations under international environmental and maritime conventions.

A. MERCHANT SHIPPING ACT, 2025

The Merchant Shipping Act, 2025 represents an important reform of India's maritime legislation. For the purpose of oil-pollution liability, the Act includes separate provisions addressing civil liability for oil pollution damage and civil liability for bunker oil pollution damage.²⁵ This distinction largely corresponds with the international CLC and Bunkers Convention regimes. Sections 175 to 195 address civil liability for oil pollution damage. The provisions impose liability of the ship owner for pollution damage arising from an incident involving oil carried by the ship and provide a statutory regime pertaining to limitation of liability, compulsory insurance and compensation. The structure reflects the fundamental principle of the international CLC regime: the person suffering pollution damage should have an identifiable party to which compensation can be claimed without having to establish ordinary negligence in each case.

The Act distinguishes bunker oil pollution damage in sections 196 to 204. This distinction is particularly important because bunker oil is fuel used for the operation or propulsion of a ship rather than cargo being delivered for commercial purposes. By including separate statutory provisions for bunker pollution, Indian legislation acknowledges that different sources of oil pollution may require different mechanisms for allocating financial responsibility. The Act

²⁵ Merchant Shipping Act, No. 24 of 2025, §§ 175–204 (India)

also includes financial-security provisions to ensure that liability is supported by insurance or other security. Such provisions are critically important in marine pollution cases because the costs of clean up, restoration and economic losses may be significant and may arise immediately after an accident.

B. THE 2026 RULES

The statutory regime is supplemented by rules that have been notified in 2026. The Merchant Shipping (Civil Liability for Oil Pollution Damage) Rules, 2026 provides the detailed regime for oil-pollution liability, while the Merchant Shipping (Civil Liability for Bunker Oil Pollution Damage) Rules, 2026 address bunker-oil liability.²⁶ India has also introduced the Merchant Shipping (International Fund for Compensation for Oil Pollution Damage) Rules, 2026, which is particularly relevant to the international compensation regime for qualifying oil-pollution incidents.²⁷ The rules illustrate India's efforts at adapting the international oil-pollution liability and compensation regime to its domestic maritime legislation. The Merchant Shipping (Prevention of Pollution by Oil from Vessels) Rules, 2026 constitute a further element of this regime. Its primary function is preventive and regulatory rather than compensatory and corresponds broadly with the preventive approach in MARPOL Annex I.²⁸ Taken together, the 2025 Act and the 2026 Rules establish a framework consisting of three functionally-interlinked regimes: prevention of pollution, allocation of civil liability, and financial mechanisms for compensation.

C. ENVIRONMENT (PROTECTION) ACT, 1986

The Merchant Shipping Act is not the only legislation in India that is relevant to marine pollution. The Environment (Protection) Act, 1986 ("EPA") is the broader statutory regime for environmental protection. Section 3 empowers the Central Government to take measures for protecting and improving environmental quality, while section 5 provides extensive powers to issue directions for environmental protection.²⁹ Section 7 prohibits persons carrying on activities from discharging or emitting environmental pollutants to the extent of prescribed standards and section 15 provides penalties for contravention of the Act and its rules. The EPA is particularly relevant where an oil spill causes environmental consequences

²⁶ Merchant Shipping (Civil Liability for Oil Pollution Damage) Rules, 2026 (India); Merchant Shipping (Civil Liability for Bunker Oil Pollution Damage) Rules, 2026 (India).

²⁷ Merchant Shipping (International Fund for Compensation for Oil Pollution Damage) Rules, 2026 (India)

²⁸ Merchant Shipping (Prevention of Pollution by Oil from Vessels) Rules, 2026 (India).

²⁹ Environment (Protection) Act, No. 29 of 1986, (India).

beyond the immediate maritime liability of a vessel. The provisions allow environmental regulation to exist alongside specialized maritime liability rules.

D. NATIONAL GREEN TRIBUNAL ACT, 2010

The National Green Tribunal Act, 2010 ("NGT Act") provides an important judicial and compensatory component to environmental disputes. Section 20 requires the National Green Tribunal to apply the principles of sustainable development, the precautionary principle and the polluter-pays principle while exercising its jurisdiction.³⁰

The polluter-pays principle is especially important in litigation involving oil spills. It extends the concern beyond simply compensating private economic losses and includes the costs of preventing, controlling and remedying environmental harm. The principle has been recognized by the Supreme Court of India in environmental cases.

In *Vellore Citizens' Welfare Forum v. Union of India*, the Supreme Court recognized sustainable development, the precautionary principle and the polluter-pays principle as essential features of Indian environmental law.³¹ The Court explained that the polluter-pays principle is not restricted to compensating individuals who have suffered injury; it also includes the costs of restoring environmental damage.

Similarly, in *Indian Council for Enviro-Legal Action v. Union of India*, the Supreme Court emphasised that polluters may be required to bear the costs of remedying environmental damage resulting from their activities.³² The decision is critical in relation to marine pollution because it supports the view that environmental restoration should be considered as part of the financial consequences of pollution, rather than as a separate expense on the part of the government

E. PUBLIC TRUST AND ECOLOGICAL DAMAGE

Indian jurisprudence has also developed the public trust doctrine which is relevant to marine and coastal resources. In *M.C. Mehta v. Kamal Nath*, the Supreme Court recognised that certain natural resources are held by the State in trust for the benefit of the public.³³ The marine environment, coastal ecosystems and relevant natural resources can accordingly be

³⁰ National Green Tribunal Act, No. 19 of 2010, § 20 (India).

³¹ *Vellore Citizens' Welfare Forum v. Union of India*, (1996) 5 SCC 647.

³² *Indian Council for Enviro-Legal Action v. Union of India*, (1996) 3 SCC 212.

³³ *Indian Council for Enviro-Legal Action v. Union of India*, (1996) 3 SCC 212.

considered as part of a broader legal framework in which environmental protection is not confined to privately-owned property.

This becomes critically important in relation to oil spillage where ecological damage is not readily capable of being reduced to an individual's property loss. Damage to fisheries, marine biodiversity, beaches or coastal ecosystems may affect public property and future environmental interests even where there is no claimant who can demonstrate conventional property damage.

Accordingly, Indian law includes two partially-overlapping approaches to marine oil pollution. Merchant Shipping Act provides a specialized maritime regime for allocating liability and compensation while environmental statutes and judicial principles provide a broader regime for restoration, prevention and protection of ecological interests.

The interaction between these regimes presents an important legal question. Where a marine oil spill results in environmental damage that exceeds conventional economic losses, it becomes necessary to decide whether the specialized maritime compensation regime and the broader Indian environmental principles can be operated together to ensure effective restoration. The answer to this question is central to assessing whether India's present framework adequately addresses ecological damage from marine oil pollution.

(VII) PROBLEMS, SOLUTIONS, CONCLUSIONS

Even though there is a well-established international and Indian framework concerning marine oil pollution, there are still significant gaps between assigning liability and the actual restoration of the environmental and socio-economic damage. The main problem lies in the valuation of ecological damage. The international compensation system usually allows environmental claims only for reasonable restoration measures and does not permit an unrestricted monetary valuation of ecological loss. Although this method stops speculative claims, it may not fully take into account biodiversity loss, ecosystem services and long-term ecological impairment.

Another issue is the connection between liability limits and the actual damage caused. Both the CLC and the Fund systems aim at balancing compensation to the victims with predictability for ship owners and insurers. Yet in the case of exceptionally large spills the losses incurred may go beyond the relevant limits and the available compensation. Thus an

ongoing conflict exists between commercial certainty and the principle that the polluter should suffer the consequences of environmental damage.

There is another significant research gap concerning the difference between cargo oil and bunker oil. Cargo oil is mainly regulated by the CLC and the Fund system, while bunker pollution is dealt with separately through the 2001 Bunkers Convention.³ Unlike in the case of tanker cargo oil, the latter does not offer the same multi-tiered compensation scheme. As a result, the amount of compensation received for environmental damage can vary according to the type of oil involved.

To deal with these issues, future reform must therefore be concentrated on three points. Firstly, India should establish a methodology that is based on science for evaluating ecological damage, for distinguishing between the costs of clean-up, economic losses, the expenses of restoration and the long-term ecological harm. Secondly, the maritime authorities, the environmental authorities and the National Green Tribunal should introduce more effective mechanisms for coordinating liability, compensation and restoration procedures. Thirdly, the suitability of the compensation offered in the case of bunker-oil incidents should be regularly examined, especially in instances where pollution has seriously affected fisheries and coastal livelihoods.

The extent to which an oil-spill liability system is effective should not be judged simply on the basis of whether liability can be imposed, but rather by the degree to which it offers timely compensation, involves meaningful environmental restoration and ensures a fair distribution of the costs of pollution. Since the disasters such as Torrey Canyon have come to light, international law has developed considerably, and India's latest maritime legislation marks a significant advance in establishing a modern liability system. However, the ongoing difficulties concerning the valuation of ecological damage, compensation caps, liability for bunker oil and the coordination between maritime and environmental law show that further legal development is still needed. A regime that is to be considered sustainable must therefore provide the level of predictability necessary for maritime trade while making sure that the environmental and social costs of marine pollution are not unfairly passed on to coastal communities, the State or the marine environment.