Compensation for marine environmental damage from ship-source pollution

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COMPENSATION FOR MARINE ENVIRONMENTAL DAMAGE FROM SHIP-SOURCE POLLUTION

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DECLARATION

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

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ABSTRACT

Title of Dissertation: **COMPENSATION FOR MARINE ENVIRONMENTAL DAMAGE FROM SHIP-SOURCE POLLUTION**

This research paper is about environmental damage, otherwise referred to as ‘damage to the environment’ caused by ship-source pollution. The discussion focuses on compensability for such damage, which, needless to say, is relevant only where the polluter is found to be liable. Thus, the application of the ‘polluter pays’ principle is germane to the major elements addressed in the paper. Following the introductory discussion on the legal framework for environmental damage, the paper delves into the topic of compensation in the next chapter and examines the problems related to it, which, in the view of the author, largely stem from the definition of ‘pollution damage’ in the Civil Liability Convention (CLC). In the third chapter, the discussion centres on the issue of actionability of claims for environmental damage. The focus is on standing of the claimant, otherwise referred to as *locus standi*, and contextually examines the public trust and *parens patriae* doctrines. The problem of quantification of damages is also addressed and the intangible elements of environmental damage are mentioned. In conclusion, proposals for law reform are made in unison with those previously suggested by a well-known author in the field.

Degree: Master of Science

KEYWORDS: Locus Standi, Public trust doctrine, Environmental Damage, Quantification of Environmental Damage,
### DECLARATION

![DECLARATION](image)

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<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation and Liability Act</td>
</tr>
<tr>
<td>CLC</td>
<td>International Convention on Civil Liability for Oil Pollution Damage</td>
</tr>
<tr>
<td>CWA</td>
<td>Clean Water Act</td>
</tr>
<tr>
<td>DOI</td>
<td>Department of the Interior</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>EEZ</td>
<td>Exclusive Economic Zone</td>
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<td>HNS</td>
<td>International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea</td>
</tr>
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<td>IMO</td>
<td>International Maritime Organization</td>
</tr>
<tr>
<td>IOPC FUND</td>
<td>International Oil Pollution Compensation fund</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution From Ships</td>
</tr>
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<td>NRDA</td>
<td>Natural resource damage assessment</td>
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<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>OPA</td>
<td>Oil Pollution Act</td>
</tr>
<tr>
<td>P&amp;I Club</td>
<td>Protection and Indemnity Club</td>
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<td>SDG</td>
<td>Sustainable Development Goal</td>
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CHAPTER 1

INTRODUCTION

1.1 Legal Framework of Environmental Damage

From ancient times, humans have continued to develop their ability to utilize the oceans. From ancient fishing to modern deep-sea bed mining, there have been multifarious human activities in every part of the oceans. However, human activities in the oceans nowadays such as transportation of oil and seabed drilling for oil have caused severe damage to the oceans and mankind itself. There is common understanding of mankind that there can be no sustainable development while there is unregulated and disruptive human activity in the oceans.

Human activity in the oceans is mainly carried out by ships, which means it can be controlled only if shipping is regulated. That is why the International Maritime Organization (IMO) was established and the Organization is working hard to reach the Sustainable Development Goal 14 of the United Nations, which aims at conserving and fostering prudent use of the seas and marine resources for sustainable development.

The spirit of SDG 14 was reflected in Part XII of the United Nations Convention on the Law of the Sea, 1982 (UNCLOS), which is considered to be the constitution for the law of the marine environment. UNCLOS in its Part XII establishes a comprehensive legal framework for the management and protection
of the oceans and their living resources. Several UNCLOS rules in Section 5 of Part XII covering all kinds of pollution sources from Articles 207 to 212, refer to pollution from land-based sources, pollution from seabed activities subject to national jurisdiction, pollution from activities in the area, pollution by dumping, pollution from vessels, and pollution from and through the atmosphere.

Under these provisions, states together with competent international organizations are obligated to establish global and regional rules, standards and recommended practices and procedures in order to prevent, reduce and control pollution of the marine environment from various pollution sources mentioned above. Among four main sources of marine pollution, the greatest amount of pollution from ships comes from their cargoes, such as oil, which causes severe environmental damage to the oceans.

In this context, IMO, which is the relevant competent international organization, therefore produced MARPOL and the International Convention on Civil Liability for Oil Pollution Damage (CLC) to address pollution problems caused by ship-source oil, which is considered to be a major pollution source. The former as regulatory law includes regulations aimed at preventing and minimizing pollution from ships whether it is accidental or operational pollution by setting technical standards for ships. The latter as civil liability law, ensures that adequate compensation is available to those who suffer from oil pollution damage after a pollution accident. In this paper, mainly issues of environmental damage under the CLC and FUND Convention regimes are dealt with due to their crucial importance in the field of ship-source oil pollution.

CLC 1969 imposes strict liability for pollution damage on the ship-owner. The Fund Convention 1971 establishes the International Oil Pollution Compensation (IOPC) Fund on the basis of the national share of international oil receipts. Together they provide a comprehensive compensation system. There was concern in the 1980s that compensation limits of the ship-owner were insufficient considering the rising damage mitigation costs and inflation. Concerns were raised by contracting states at the diplomatic Conference, leading up to the 1992 protocols to the convention, about the growing number of substantial claims for environmental damage compensation allowed by national
courts under the international liability regime. As a consequence of the replacement of CLC 1969 and Fund Convention by the CLC and Fund Convention of 1992, the compensation limits were raised and the geographical scope of CLC extended beyond the territorial seas to cover the EEZ of states.

Article I (6) of CLC 1969 defines ‘pollution damage’ as including the cost of preventive measures with the absence of any mention of environmental damage. However, significant changes were made in CLC 1992 concerning pollution damage by inclusion of the phrase ‘impairment of the environment that should be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken’.

Although compensation for environmental damage is possible under CLC 1992, there are several legal loopholes in the convention and incorrect interpretation of convention articles in national state practice regarding compensability for environmental damage. Right of action of public entities and quantification of environmental damage, are major challenges in compensation with regard to environmental damage. In this paper, the focus is on those key challenges.

1.2 Objectives of Research

Reflecting the preliminary stage of the research, in the first part of this paper, the objective is to provide a critical overview of the convention provisions and identification of existing problems in national legislation whether or not it implements the convention. Then, the main purpose of this paper is to carry out an examination of the law relating to right of action of claimants and quantification of environmental damage.

1.3 Methodology

The relevant literature including the writings of distinguished scholars have been carefully reviewed in order to carry out the research. The main methodology used is comparative analysis of the law from the perspectives of Chinese, United States and international convention law by reviewing different legal systems and the case laws in the mentioned jurisdictions countries.
1.4 Structure of Research Paper

The paper consists of four chapters, the first being the Background and Introduction and the last presenting the Conclusion of the paper. Chapter two carries out a critical overview of current convention provision and identifies problems regarding decisions of national courts in contrast to decisions of the IOPC Fund. Chapter three introduces the theory of environmental damage and discusses the public trust doctrine and the doctrine of parens patriae to deal with problems of right of action or locus standi of public entities in environmental damage cases given the absence of proprietary rights. Chapter four presents an overall summary and conclusion.

CHAPTER 2

PROBLEMS RELATING TO COMPENSATION FOR ENVIRONMENTAL DAMAGE

2.1 Introductory Remarks

When there is a need to carry out research in terms of compensation for marine environmental damage, the first question that arises is - what is the marine environment and what is marine environmental damage? These terms need to be clarified at the very beginning.
2.2 Definition of Marine Environment and Environmental Damage

2.2.1 Marine Environment

The definition of ‘marine environment’ begins with the significant question as to what is the environment in general term? In some literature on environmental law, definitions of ‘environment’ are given which provide good reference points. The environment includes water, air and land, and the correlations among them and humans, other living creatures, plants, micro-organisms and property. In other words, the normal meaning of ‘environment’ relates to the surroundings, but obviously that is a concept relatable to whatever objects with which it is surrounded (Leela Krishnan, 2006, pp.5-6).

‘Environment’ according to the Oxford dictionary\(^1\) means the surroundings or conditions in which a person, animal, or plant lives or operates. It also means the natural world, as a whole or in a particular geographical area, especially as affected by human activity. Having mentioned several definitions of ‘environment’, the words ‘surrounding’ and ‘inter-relationship’ come to mind. These elements can also be seen in the definition of ‘marine environment’. According to the Free dictionary\(^2\), ‘marine environment’ means the oceans, seas, bays, estuaries, and other major water bodies, including their surface interface and interaction, with the atmosphere and with the land seaward of the mean high water mark.

In the author’s opinion the several definitions of ‘environment’ mentioned above are too general to facilitate the carrying out of legal research. Therefore, further definitions of ‘environment’ should be sought. Based on that premise, defining ‘environment’ is a complex task, in which several approaches need to be adopted. For instance, a narrow definition of environment is limited to natural resources

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such as air, water, soil, flora and fauna and the interactions among them. A broader definition includes natural resources and public services and uses stemming from the existence of natural resources, such as the enjoyment of nature because of its aesthetic qualities and recreational activities associated with the presence of natural resources (Brans, 2001, pp.10). Furthermore, this broader definition of ‘environment’ could also be separable based on its characteristics. It is submitted that the environment, in terms of how it is characterized has two dimensions, a tangible one that is physically perceptible, and an intangible one that pertains and appeals to the human sense, often imperceptible in physical terms. Tangible refers to the natural resources of the environment while intangible means aesthetic attributes of the environment, which translate into the human enjoyment factor. These tangible and intangible elements of the environment are clearly recognized in UNCLOS\(^3\).

The marine environment as a part of the environment also includes tangible and intangible elements. Therefore, the definition of ‘environment’ is also applicable. For the purposes of research, a broader definition of environment is more desirable than a narrow one. The author would like to accept a broader definition in this paper.

### 2.2.2 Environmental Damage

Damage in its legal context means loss, harm or injury. Under the CLC and Fund convention, the term ‘pollution damage’ means damage that is compensable under the law. It encompasses damage to property, economic loss and damage to the environment. The CLC, by the words ‘other than loss of profit’ are used which clearly point to the non-economic characteristic of environmental damage

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\(^3\) Article 1.1.(4) of UNCLOS says “… 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”. Living resources and marine life refer to tangible aspect of marine environment and reduction of amenities as a human enjoyment factor, refer to intangible aspects of the marine environment.
to distinguish environmental damage from other kinds of damage.\textsuperscript{4} The terms ‘ecological damage’ and ‘natural resource damage’ are most often used to indicate damage to the environment itself.

The term ‘ecological damage’ mainly comes from environmental ecology\textsuperscript{5} that is a branch of biology, which studies the interactions among organisms and their environment. The term is object-oriented and mainly indicates damage caused to nature or the ecosystem. The advantage of using this term is that it covers many natural resources and takes the environment as a whole. However, the term ‘ecological damage’, damage to ecosystem is too scientific and from a legal viewpoint, can easily lead to confusion and interpretation problems in practice.

The term ‘natural resource damage’ is used primarily in the United States in a legal context. The word resource\textsuperscript{6} comes from the economic connotation that properties and opportunities which are used in the process of producing goods, including natural resources as well. Natural resource is, therefore, something that is valuable in its relatively natural form. The Oil Pollution Act of 1990 of the United States (OPA) provides a comprehensive definition of ‘natural resources’\textsuperscript{7}.

The term ‘natural resource damage’ used in the United States legal framework includes not only damage to the natural resources themselves but also damage suffered by the public at large due to injury to or destruction of the natural resources (Brans, 2001, pp.21).

In the present author’s opinion, these two terms show different characteristics or attributes of the environment. ‘Ecological damage’ mainly refers to ecological attributes of the environment while ‘natural resource damage’ depicts the economical attributes of the environment. Therefore, it is more desirable to use

\textsuperscript{4} See chapter 2.3 for further information where specific analysis to provisions is carried out.
\textsuperscript{5} \url{https://www.toppr.com/guides/general-knowledge/basic-science/environmental-ecology/}, retrieved in 20, June, 2019.
\textsuperscript{7} OPA SEC.1001.(20) says "natural resource includes land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States…"
the term ‘environmental damage’ to indicate damage done to the environment itself.

However, it is argued by some scholars that the term ‘environmental damage’ does not seem appropriate for damage to the environment itself (Brans, 2001, pp.12). It is argued that the expression is not very specific and includes all damage caused via the environment such as pure economic loss, consequential loss, clean up costs and personal injury. Strictly speaking, this definition is too broad, and a narrow definition of ‘environmental damage’ is needed. Concerning the broader definition of ‘environment’ made in the previous section, which includes tangible and intangible aspects of the environment, ‘environmental damage’ can mean damage to natural resources, loss of amenities and deprivation of quiet enjoyment in relation to the environment.

2.3 The Definitional Issue of Environmental Damage under Convention Regime

At the outset of this paper, the CLC Convention was mentioned as a legal basis for compensability for environmental damage. It is notable that the CLC definition of ‘pollution damage’ is unclear and ambiguous. The definition of ‘economic loss’ is equally unclear which is why the heading above refers to ‘definitional issue of environmental damage’ emanating from the convention. There was no mention of damage to the environment in CLC 1969 until the inclusion of ‘impairment of the environment’ was made in Article 6 of CLC 1992. The definition of ‘pollution damage’ under CLC 1992, is -

(a) loss or damage caused outside the ship by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur, provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken

(b) the costs of preventive measures and further loss or damage cause by preventive
measures

The Hazardous and Noxious Substances (HNS) Convention, 1996 provides a definition of ‘damage’ although it is somewhat different from that of ‘pollution damage’ of the CLC as the former includes a factor involving safety and human life or personal injury. Under HNS Article 1(6), “damage” means -

(a) loss of life or personal injury on board or outside the ship carrying the hazardous and noxious substance caused by those substances
(b) loss of or damage to property outside the ship carrying the hazardous and noxious substance caused by those substances
(c) loss or damage by contamination of the environment caused by the hazardous and noxious substance, provided that compensation for impairment of the environment other than loss of profit from such impairment shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken
(d) the costs of preventive measures and further loss or damage caused by preventive measures

In the definition of ‘pollution damage’ under CLC 1992, loss of life or personal injury on board or outside the ships is not included. The rationale may be that the hazardous and noxious nature of some substances may be fatal to human health. (Xu, 2013)

A number of observations can be made regarding the definitions of ‘pollution damage’ in the CLC 1992 (Mukherjee, 2010).

First, the words ‘loss or damage caused outside the ship’ may be interpreted as loss or damage caused to the marine environment itself or to loss or damage arising out of or consequential to damage caused to the environment. The latter interpretation
raises implications in respect of compensability for economic loss, as do the words ‘other than loss of profit from such impairment’. Although compensability of economic losses is not clear under the Convention provision, certain kinds of economic losses are compensable by the IOPC Fund.\(^8\)

Second, rather than directly referring to environmental damage or damage to environment, CLC 1992 uses the phrase ‘impairment of the environment’. This raises the question of whether the word ‘impairment’ has the same meaning as the word ‘damage’. It should be noted that ‘damage’ has a legal implication while ‘impairment’ is more likely a scientific term. (Mukherjee, 2010)

Third, the phrases ‘provided that’ and ‘other than’ were inserted in the provision. In legal drafting, the expression ‘provided that’ is referred to as a proviso.\(^9\) It sometimes operates as an exception such as in ‘unless’ or ‘other than’. Intension of drafter was to clarify that claims for damage of a non-economic nature are excluded by inserting the proviso ‘other than loss of profit’ that follows after the words ‘impairment of the environment’. Two proviso appear in the same provision can arise confusion. (Mukherjee, 2010)

Among various observations made above, the major deficiency in the Convention is the absence of any expression of liability for environmental damage. Liability for environmental damage mainly relates to the validity of claims and that depends on locus standi of claimants.\(^10\) Without any mention of liability, the Convention goes directly into the quantification methodology (Mukherjee, 2010).

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\(^8\) According to information provided by IOPC Fund website, under the section of admissibility of claims for compensation, economic loss by fishermen or those engaged in mariculture and economic losses in the tourism sector are all compensable. [https://www.iopcfunds.org/compensation/](https://www.iopcfunds.org/compensation/), retrieved in 20, June, 2019.

\(^9\) It indicates that the statement preceding it is to be construed subject to a statement following it.

\(^10\) The problems arising from locus standi or right of action of claimants especially in the absence of proprietary right are further discussed in Chapter 3. See Chapter 3 for further information.
2.4 Environmental Damage under the IOPC Fund and National Laws

2.4.1 IOPC Fund

The IOPC Fund mainly consists of two intergovernmental funds, namely, the 1992 Fund\(^\text{11}\) and the Supplementary Fund\(^\text{12}\). The 1992 Fund together with the Supplementary Fund works as second tier and third tier to cover the compensation caused by pollution damage if the damage exceeds the ship-owner’s compensation limit set by the CLC 1992 which is considered as the first tier. IOPC Fund comes into play when the ship-owner is not known or cannot meet its liability or it is not liable under the CLC.\(^\text{13}\) Pollution from an unidentified ship, where the ship-owner is exonerated from liability under CLC 1992, ships not bound by compulsory insurance requirements, insurance cover and other assets insufficient, non-compliance with compulsory insurance provision of CLC, are instances which could cause the IOPC Fund to pay compensation pursuant to the Fund Convention. There are also cases of mega spills where compensation may exceed the ship-owners limits. In such case, the IOPC Funds are inevitably involved in the very first place of process of damage claims.

The IOPC Funds have made their position clear with regard to admissibility of environmental damage claims in the Claims Manual\(^\text{14}\) and Guideline for environmental damage\(^\text{15}\), which are updated annually.

\(^{11}\) The 1992 Fund was established in 1996 according to 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage

\(^{12}\) The Supplementary Fund was established according to Protocol to the 1992 Fund Convention that was adopted in 2003.

\(^{13}\) The ship-owner is not liable if the incident, which caused the pollution, was caused by natural disaster, or if it was entirely caused intentionally by somebody or by faulty lights or navigation aids, which should have been maintained by the authorities. See CLC Convention Article III.2.


Paragraph 1.4.12 states that “Compensation is payable for the costs of reasonable reinstatement measures aimed at accelerating natural recovery of environmental damage. Contributions may be made to the costs of post-spill studies provided that they relate to damage which falls within the definition of pollution damage under the Conventions, including studies to establish the nature and extent of environmental damage caused by an oil spill and to determine whether or not reinstatement measures are necessary and feasible.” Furthermore, paragraph 1.4.13 regarding the quantification of environmental damage, states that “Compensation is not paid in respect of claims for environmental damage based on an abstract quantification calculated in accordance with theoretical models. Nor is compensation paid for damages of a punitive nature on the basis of the degree of fault of the wrong-doer.”

Regarding environmental damage, the IOPC Funds’ understanding is that although ‘impairment of the environment’ is not defined in the Conventions, it is generally understood to mean an adverse alteration to the environment leading to a deterioration or weakening of its functioning.\(^{16}\) It continues to state - “The Conventions do not provide compensation for what is sometimes referred to as ‘pure’ environmental damage that is, compensation for the loss of environmental services. Rather they cover the costs of reinstatement of the damaged environment to restore those lost services as far as that is possible”.

According to its guideline, environmental damage, which is concerned with costs resulting from damage to non-economic resources that can be admissible under the IOPC Funds includes cost of post-incident studies and reinstatement measures. Furthermore, the guidelines set several specific criteria for post-incident and reinstatement measures to meet.

\(^{16}\)Supra footnote 15 paragraph 1.10 of Guidelines for presenting claims for environmental damage.
In view of the fact that it is virtually impossible to bring a damaged site back to the same ecological state that would have existed had the oil spill not occurred, the aim of any reasonable measures of reinstatement should be to re-establish a biological community in which the characteristics of organisms of that community at the time of the incident are present and are functioning normally. Reinstatement measure taken at some distance from, but still within the general vicinity of, the damage area may be acceptable, so long as it can be demonstrated that they would actually enhance the recovery of the damaged components of the environment.

On the question of who can claim on the issue of *locus standi* or right of action of the claimants, the guidelines indicate that claims are most likely to be represented by national or regional governments or government agencies mandated to manage natural resources on behalf of the nation or region in the case of environmental damage. The IOPC Funds leave open the possibility of claiming damages by individuals or organizations under certain circumstances, but only with respect to the natural resource owner or manager or with the cooperation, consent and coordination of the resource owner or manager. For instance, when oil-spill pollution affects seabirds and destroys its habitat, wildlife organizations or non-governmental organizations (NGO) come into the picture.\(^{17}\)

The IOPC Fund, as mentioned above, insist that environmental damage that is of a non-economic nature, what Fund refers to the ‘pure’ environmental damage, does not fall under the category of admissible claims. However, that position of the IOPC Fund was not taken into account in some cases by national courts. The *Prestige* case is a good case in point. The facts were as follows.\(^{18}\) On 13 November 2002, the Bahamas-registered tanker *Prestige* carrying 769,272 tonnes

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\(^{17}\) *Supra* footnote 15 paragraph 2.1 of Guidelines for presenting claims for environmental damage.

\(^{18}\) Information as presented at the October 2018 session of the 1992 Fund Executive Committee.
of heavy fuel oil, began listing and leaking oil some 30 kilometres off Cabo Finisterre, Galicia, Spain. On 19 November, while under tow away from the coast, the vessel broke in two and sank some 260 kilometres west of Vigo, Spain. The bow section sank to a depth of 3,830 metres. The break-up and sinking released an estimated 63,200 tonnes of cargo. Over the following week, oil continued to leak from the wreck at a declining rate. It was subsequently estimated that approximately 13700 tonnes of cargo remained in the wreck. As a consequence of the incident, the west coast of Galicia was heavily contaminated and oil eventually moved into the Bay of Biscay affecting the north coast of Spain and France. Traces of oil were detected in the United Kingdom.

The main issues arising from civil proceeding were liability of the IOPC Fund for environmental damage and quantification of damage. In November 2017, the Court in La Coruna Spain delivered a judgment in respect of the *Prestige* incident. The judgment recognized that the IOPC Fund has a strict liability for damage caused from the accident under the 1992 Fund Convention. It also recognized both the moral and environmental damage which in terms of moral damage included not only the sense of fear, anger and frustration that may have affected many of the Spanish and French citizens. Thus, the court awarded more than 1.57 billion euro to the Spanish Government. However, the wording of the operative part of the judgment was ambiguous as to which party must pay for the environmental damage concerning the other parties including London P&I club and the ship-owner.

The IOPC Fund together with other several parties appealed to the Supreme Court. The IOPC Fund requested the Court to declare that, the Funds’ liability does not include environmental damage and moral damage. In December 2018, the Spanish Supreme Court delivered its final judgment. The Court partially

19 Protection and Indemnity club, the ship-owners insurer in the case.
accepted the Fund’s appeal in that moral and pure environmental damages were not recoverable from the 1992 Fund. It held that “[I]n the first section, it (the Fund as appellant) questions whether the Fund, whose appeal we are considering, has to be liable for what the decision calls environmental damage since, under Arts.1.6 and V of the Convention on Civil Liability, CLC92, this damage is excluded. The ground will be allowed.”

However, The court accepted the quantification of environmental damage based on an abstract methodology.

On the question of who is liable for environmental damage and moral damage, the Court referred to previous decisions and confirmed the liability of the London P&I Club and ship-owner since their liability is unlimited and is not subject to the limitations referred to in the Convention due to fault of the ship’s owner in the incident.

The final result of judgment was that the defendants were ordered to pay the Spanish State, French State and other claimants some 1.6 billion euro in compensation. The judgment accepted the IOPC Fund’s appeal in that moral and environmental damages are not recoverable from the 1992 Fund. Furthermore, the London P&I Club was found liable for all the damage caused by the incident, including moral and environmental damages up to the limit of its policy of 1000 million dollars.

The Chairman of the Executive Committee noted that the main issues were to ascertain how to adapt the Court’s decisions to the amounts available for compensation. In April 2019, the discussion regarding the matter of the Prestige

21 Supra footnote 20, p.23.
22 Experts report made by Mrs Loureiro from University of Santigao de compostela which established a system of calculation of environmental damage which took into account the services provided and the evaluation of damage to the system and the damage originated and caused to the ecosystem as a whole, which was affected by the spill. In this report, an appraisal is made of that damage and certain deliberation criteria are laid down that extend beyond purely pecuniary considerations and any directly derived from removal of the damage caused and remedy thereof and include those affecting the ecosystem and the damage that the spill caused to it.
incident was discussed at the session of the 1992 Fund Executive Committee. The Director at the session had this to say. He commented, that the Supreme Court awarded 554.10 million for pure environmental damages and moral damages based on 30 percent of the losses. It appears that the Supreme Court had applied internal law (criminal law, law of insurance and law of maritime transport) to the ship-owner and the Club and the international Conventions to the Fund. He lastly commented, applying in part the international Conventions and in part national law to circumvent the Convention. This sets up a dangerous precedent for the future.\textsuperscript{23}

From the above, it can be seen that the compensation for environmental damage is not treated in the same way as provided in the Conventions in proceedings in national courts which seem to have their prerogatives on what law applies to the case and the interpretation of the Convention.

\textbf{2.4.2 National Laws and Cases}

\textbf{2.4.2.1 Environmental Damage under the United States Laws}

Environmental damage under the US laws mainly refers to as ‘Natural Resource Damage’.\textsuperscript{24} The relevant US laws are the Clean Water Act (CWA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Oil Pollution Act (OPA).

The Clean Water Act (CWA)\textsuperscript{25} is the primary federal law in the United States governing water pollution. The CWA 1972 makes no explicit mention of environmental damage. The Clean Water Act as amended in 1977, in its CWA Section 311(f)(4), states that the federal government and the states are

\textsuperscript{23} IOPC/APR 19/3/2, available at IOPC Fund website: https://documentservices.iopcfunds.org
\textsuperscript{24} Supra footnote 7.
\textsuperscript{25} CWA ‘s objective is to restore and maintain the chemical, physical, and biological integrity of the nation’\textquotesingle s waters. It is one of the United States’ first and most influential modern environmental laws.
authorized to “recover costs or expense incurred … in the restoration or replacement of natural resources damaged or destroyed as a result of a discharge of oil or a hazardous substance”. According to its Section 311(a)(8), recoverable removal costs were defined to include the expense “of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches”. The provision of the Act from its words does not seem to include the loss of use of natural resources. However, in the case of Montauk Oil Transport Corp. v Steamship Mutual Underwriting Association, it was found that the provision includes implied right of recovery of lost use damages incident to clean-up and restoration activities.

It is interesting to observe that the CWA restricted the rights of both the states and private parties to recover under federal common law which means the CWA did not leave open the possibility of private party remedy for damages to natural resource. In the case of Milwaukee II, where damages were claimed for injuries to commercial fishing as a result of discharge of sewage, the Court held that “the federal common law of nuisance in the area of water pollution is entirely pre-empted by the more comprehensive scope of the CWA” (De La Rue & Anderson, 2009, pp.499-500.

CERCLA also known as Superfund, provides a federal superfund to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, United States Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their

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27 In the case, the court noted that “Congress purpose in passing the CWA was not just to insure that the public would not suffer uncompensated injury to natural resources, but also to insure that the public would not lose the use of the natural resources that the Government holds in trust. It is consistent with this purpose to hold that ‘lose of use’ damages are compensable under the CWA”.
cooperation in the cleanup. Section 107 of the CERCLA stated that the owner and operator of a vessel or facility where there has been disposal of hazardous substance shall be liable for all costs of removal or any other necessary costs of response or damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury. CERCLA does not specifically mention natural resource damage. The only mention is made in section 107 (f)(1) in terms of natural resource liability. It states, “Sums recovered by the United States Government as trustee under this subsection shall be retained by the trustee, without further appropriation, for use only to restore, replace, or acquire the equivalent of such natural resource”. It states that liability is owed to the United States Government and to any State for natural resources within the State or belonging to, managed by, controlled by, or appertaining to such state. In the re Acushnet River & New Bedford Harbor case, the court interpreted CERCLA’s liability provisions broadly to include injury to a natural resource even without evidence of actual harm, as well as aesthetic injury and loss of existence value (De La Rue & Anderson, 2009, pp.502). It should be noted that CERCLA requires the promulgation of detailed regulations to guide natural resource damage assessment (NRDA). After many years practice, the Department of the Interior (DOI) is the main body which revises the CERCLA rules.

The OPA under its Sec 1002(b)(2), stipulates that recoverable natural resource damage includes “ damages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage…”. The OPA makes responsible parties liable to the US Government, a state, an Indian

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29 In its original text of Sec.107 (f)(1), it says "In the case of an injury to, destruction of, or loss of natural resources under subparagraph (C) of subsection (a) liability shall be to the United States Government and to any State for natural resources within the State or belonging to, managed by, controlled by, or appertaining to such State and to any Indian tribe for natural resources… held in trust for the benefit of such tribe… "
30 In October 1986, Congress adopted the Superfund Amendment and Reauthorization Act. According to that, DOI was required to adopt any necessary conforming amendment to its natural resource damage assessment regulations within six months of the effective data of the amendments.
tribe or a foreign government so as to provide a legal basis for liability for natural resource damage. Private persons may recover for loss of profits or impairment of earning capacity due to injury or destruction of natural resource, and for loss of subsistence use of natural resources without regard to the ownership or management of the resources. The OPA Sec 1006(b) requires the President to designate federal officials who shall serve on behalf of the public as trustee for natural resources. The designation of federal trustees is contained in the National Contingency plan. The trustees must assess damages for natural resources under their trusteeship and must develop and implement a plan for the restoration, rehabilitation, replacement or acquisition of the equivalent of the trustee natural resources (De La Rue & Anderson, (2009), pp.516).

The measure of natural resource damages that is recoverable includes:

(A) the cost of restoring, rehabilitating, replacing, or acquiring equivalent of, the damaged natural resources;

(B) the diminution in value of those natural resource pending restoration;

plus

(C) the reasonable cost of assessing those damages.

Regarding the assessment of damage under the OPA, on 5 January 1996, the National Oceanic and Atmospheric Administration (NOAA) published its final rule. The NOAA rules, then, replaced existing CERCLA rules regarding assessment of damage caused by oil discharges that is covered by OPA. It should be noted that the CERCLA rules originally applied to natural resource damage resulting from oil discharges as well as hazardous substance releases. However, the natural resource damage assessment rules of NOAA were controversial and challenged by many other parties.

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31 OPA.Sec.1002.(b)(2)(C) and (E). In its original text, Subsistence use means “Damages for loss of subsistence use of natural resources, which shall be recoverable by any claimant who so uses natural resources which have been injured, destroyed, or lost, without regard to the ownership or management of the resources.” Profits and earning capacity means “Damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of real property, personal property, or natural resources, which shall be recoverable by any claimant.”

32 OPA.Sec.1006.(d)(1).
Several observations have been made in light of the above facts. Firstly, under the US laws, liability of environmental damage or natural resource damage as it is defined in US laws, has been well established by recognizing government as public trustees for natural resources. Liability for environmental damage that is not defined in CLC Convention is the legal lacuna or legal loophole in the Convention. Secondly, private parties are restricted from claiming for damages to natural resources under the CWA while various types of compensation regarding natural resource damage are available to private parties under the OPA. Apparently, the most comprehensive array of damage remedies for both governmental and private parties is contained in OPA.

Lastly but not least, the NOAA regulations apply to compensation for injury to natural resource caused by oil spills under the OPA, and the CERCLA or DOI’s rule apply to release of hazardous substances that covered by the other legal framework.

### 2.4.2.2 Environmental Damage under Chinese Law

Environmental damage under Chinese law mainly refers to ‘ecological damage’. The Chinese law does not explicitly provide any clear definitions of these terms. Provisions relating to environmental damage are rarely seen but there are some provisions relating to pollution damage caused by ship-source oil. The relevant provisions can be found in the Maritime Law, the Marine Environment Protection Law, and the Regulation on the Prevention and Control of Vessel-induced Pollution to the Marine Environment.

Despite the fact that there is no dedicated chapter dealing with compensation for
ship-source pollution damage under the Maritime Law of China, the Maritime Law in its Articles 207, 208 of limitation of liability Chapter XI provide a legal basis for the ship-owner to limit his liability under the CLC. Other than that, there is no mention of environmental damage or pollution damage resulting from ship-source pollution.

The Marine Environment Protection Law is the special law of China from the marine environment protection aspects. In its Article 89, it establishes the liability for environmental damage. It stipulates that “any party that is directly responsible for a pollution damage to the marine environment shall relieve the damage and compensate for the losses; in case the pollution damage to marine environment is entirely caused by an intentional act or fault of a third party, that third party shall relieve the damage and be liable for the compensation.” It also states pollution damage to marine ecosystems, marine aquatic resources or marine protected area.

In its original text, it says, “For any damages caused to marine ecosystems, marine aquatic resources or marine protected areas that result in heavy losses to the State, the interested department empowered by the provisions of this Law to conduct marine environment supervision and control shall, on behalf of the State, claim compensation to those held responsible for the damages.” However, under this Law, there is no specific provision regarding the scope of compensation for environmental damage, and procedures relating to the compensation.

The Regulation on the Prevention and Control of Vessel-induced Pollution to the Marine Environment that was amended in 2018 is an administrative regulation for the purpose of preventing and controlling the pollution caused by vessels and the

33 Article 207 states that “Except as provided otherwise in Article 208 and 209 of this Law, with respect to the following maritime claims, the person liable may limit his liability in accordance with the provisions of this Chapter, whatever the basis of liability may be...”. Article 208 states that “The provisions of this Chapter shall not be applicable to the following claims: (2) Claims for oil pollution damage under the International Convention on Civil Liability for Oil Pollution Damage to which the People’s Republic of China is a party”

34 Marine Environment Protection Law of the People’s Republic of China (Amendment 2017)
relevant operations to the marine environment. The State Council established the Regulation in accordance with the Marine Environmental Protection Law. In its Article 50, it regulates compensation limits of the ship-owner in cases of pollution damage. It provides that, “[T]he compensation limit for a vessel-induced pollution accident shall be governed by the provisions on the limitation of liability for maritime claims in the Maritime Code of the People’s Republic of China. However, if the persistent oil substances in bulk carried by a vessel cause pollution to the sea areas of the People’s Republic of China, the Compensation limit shall be governed by the provisions of the relevant international treaties concluded or acceded to by the People’s Republic of China.”

In terms of quantification of ecological damage, the State Oceanic Administration of China established several guidelines for ecological damage assessment. They are Technical Guideline for Ecological Damage Assessment on Marine Oil Spill 2007, Technical Guidelines for Marine Ecological Damage Assessment (trial) 2013 and Marine Ecological Damage Compensation Claims Measure 2014.

Technical Guideline for Ecological Damage Assessment on Marine Oil Spill 2007, mainly refer to NOAA’s natural resource damage assessment rules. The guideline 3.1 defines ecological damage of marine oil spill. Ecological damage based the guideline includes degradation of marine environmental capacity, damage of biological community structure, and loss of environmental services. And the guideline also defines cost of marine ecological damage. The cost includes cost of direct loss of marine ecosystem, which includes loss of marine environmental capacity and loss of environmental services, cost of marine organism restoration and assessment costs of damage.

Technical Guidelines for Marine Ecological Damage Assessment (trial) 2013 was also established to improve the mechanism of ecological damage assessment. The
difference between these two guidelines is that former guideline only covers the ship-source oil spill while the latter one covers the other pollutant source like pollution by dumping, pollution from seabed activities and so forth. The guideline 8 confirmed the principle of damage assessment, which clearly indicated that the compensation for marine ecological damage is limited to reinstatement costs. The aim of the reinstatement should be the damaged site is brought back to a theoretical baseline or pre-spill condition. The guideline 9 states measure of marine ecological damage includes

(A) the cost of restoring, rehabilitating, replacing, or acquiring equivalent of, the damaged natural resources;
(B) the diminution in value of those natural resource pending restoration; plus
(C) the reasonable cost of assessing those damages.
(D) The cost of precaution measure like cleanup operation

The guideline is quiet same with OPA provision\(^{35}\) in this respect. However, this guideline is only a trial version, it need to be completed and revised in the future.

Marine Ecological Damage Compensation Claims Measure 2014 may be the latest version of guideline in terms of the quantification of marine ecological damage. It is practical guidelines for State Oceanic Administration and its brunch Administration to claim marine ecological damage compensation that is based on Article 89 of Marine Environment Protection Law as mentioned above, which provide right of action to state parties. This document provides guidance for quantification of marine ecological damage that is caused by almost all pollution source of the marine environment including pollution by dumping, contamination by invasive species, pollution by hazardous and noxious substance and so forth. This document could be seen as comprehensive guidelines in terms of quantification of marine ecological damage compensation. However, the damage

\(^{35}\) supra footnote 32.
should exceed the 30 thousands RMB (China Yuan) to proceed the calculation of ecological damage of marine environment based on document. From whatever reason this number set up in the document, the reasonableness of this number should be tested or questioned.

The guidelines produced by the State Oceanic Administration is quiet same with NOAA’s natural resource damage assessment rules except these guidelines mentioned new notion of marine environmental carrying capacity. Damage to this so-called ‘marine environmental carrying capacity’ is also considered as recoverable cost under these guidelines.

The curious notion ‘marine environmental capacity ’ appeared in TasmanSea case that was the first case in China dealt with compensation for marine ecological damage and the first case that the State Oceanic Administration claimed the marine ecological damage compensation. That was the milestone case in China regarding with the compensation for marine ecological damage.

The facts of the case were as follows. On 23 October, 2002 in the Bohai Bay of China, the Maltese ship Tasman Sea collided with a Chinese ship and 205 tons of crude oil spilled into the sea contaminating the whole area. The Bohai Bay was heavily polluted and the State Oceanic Administration directed its Branch authority, the Tianjin Oceanic Administration, to bring an action against the insurer of the ship, UK Steamship Mutual Underwriting Association, in the Tianjin Maritime Court. The Tianjin Maritime Court delivered judgment ordering the defendant ship-owner’s UK insurer to pay 7.5 million RMB (Chinese Yuan), as compensation for damage to the marine environment including the capacity of the environment to bear the damage, and another 2.45 million RMB (Chinese Yuan) in terms of damage assessment costs. The defendants appealed to the Tianjin Supreme Court. In 2009, the Supreme Court of Tianjin upheld the judgment of the lower court by
ordering the defendant insurance company to pay compensation for all the environmental damage and the costs of assessment of the damage.

It is notable that China was a state party to the CLC 1992 at the time, and therefore, the whole convention applied to the case. The question regarding the scope of the compensation for environmental damage was raised and whether the totality of the damage and the capacity of the environment to bear the damage fell within the definition and concept of ‘pollution damage’ under the Convention. Compensation for environmental damage under the convention is mainly limited to ‘costs of reasonable measures of reinstatement actually undertaken or to be undertaken’. Therefore, the question was whether the costs relating to the capacity of the environment to bear the damage was the cost for reinstatement. In the opinion of the present author, the ‘object and purpose’ or teleological approach should be adopted to address this question. The intentions of the claimant should be carefully examined by the court. If the intention is to utilize the compensation received as cost for reinstatement of the marine environment, the cost claimed should be compensable under the Convention. The reinstatement measures should be reasonable in this context. However, if the intention of the claimant is to simply claim for damage to the environment itself, it should not be compensated under the Convention. Notably, the Supreme People’s Court interpretation with regard to the matter of the scope of environmental damage compensation is the same as contemplated by the Convention provisions.36

To conclude, various observations have been made in the course of the discussion; these are summarized below:

Firstly, in the existing Chinese legislation, provisions relating to compensation for

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36 Provisions of the Supreme People’s Court on Several Issues Concerning the Trial of Cases of Disputes over Compensation for vessel-induced Oil Pollution Damage (Interpretation NO.14.2011 of the Supreme People’s Court) in its Article 9 provides - “The compensation for vessel-induced oil pollution damage shall cover... costs of reasonable measures which have been taken or are about to be taken to restore the contaminated environment…”. 

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environmental damage are scattered inappropriately in several rules and regulations, which makes it difficult to adopt a systematic approach to addressing the relevant cases. It should be noted that the process of revision of the current Maritime Code of China is presently underway and a new chapter on ship-source oil pollution is on the agenda. It is hoped that a clear definition of environmental damage and the scope of environmental damage compensation will be appropriately dealt with in the new Maritime Code. Secondly, the State Oceanic Administration which is the main claimant for marine ecological damage is no longer in existence according to the State Council’s Proposal for Reviewing the Reform Scheme of the State Council’s Institutions that was launched on 13th March 2018. It is perceived that the functions of the State Oceanic Administration have been incorporated into the mandate of the Ministry of Natural Resources (Yen & Xiuhua, 2019). Therefore, in the future, the Ministry of Natural Resources will claim compensation for environmental damage. Finally, the term ‘ecological damage’ is widely used in Chinese law. In the opinion of the present author, the term is too scientific in its connotations and is subject to variable definitions. Therefore, the better term is ‘environmental damage’ or ‘damage to the environment’; incidentally, the latter is the term used in the International Convention on Salvage, 1989.

2.4.3 Inconsistencies between Decisions of the Fund and National Courts

As it can be seen from the above, by introducing national laws and the IOPC Fund’s position on environmental damage compensation, courts of states regardless of whether they are parties to the CLC/Fund, seem to adopt positions that are somewhat at variance with those of the Fund. Some specific observations are made below referring to the inconsistencies between positions taken by the Fund and national courts.
Firstly, with regarding to unexploited natural resources, which have no owner, the Fund’s position is that it would be inappropriate to provide compensation for damage to such resources. While states through their respective laws provide specifically for their ownership, as in the case of China\textsuperscript{37} or designate the government or a government entity as trustee of the resources, as in case of the United States, neither the CLC nor the Fund Convention provide for ownership recognize some other form of locus standi for claimants with respect to claims for pollution damage inflicted on unexploited natural resources.

Secondly, the CLC/Fund instruments focus solely on the goal of restoring the damaged resource to the condition it would have been in, if the damage had not occurred while national laws use a more flexible approach on this matter. Under both Chinese and US law, the cost of restoring, rehabilitating, replacing or acquiring the equivalent of the damaged natural resources is recoverable.

Having observed the several inconsistencies between Fund decisions and national laws and decisions of national courts, the question arises as to the force of law relating to IOPC Fund decisions. National courts can take into account Fund decisions in interpreting the Convention rules. However, no court is bound by Fund decisions. They may fall into the category of ‘practice in the application of the treaty’ in terms of Article 31 paragraph 3(b) of Vienna Convention on the Law of Treaties\textsuperscript{38} and can be used as tools for interpretation of the CLC and Fund Convention in their national courts. Given that Fund decisions apparently have no binding force of law, a national court is free to interpret the Convention in its own way. This can cause great difficulties with uniform application of the

\textsuperscript{37} See footnote 40.
\textsuperscript{38} Article 31 of Vienna Convention in the interpretation of treaties section, paragraph 1 says “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” Paragraph 3 says, “There shall be taken into account, together with the context… (b) Any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation.” Vienna Convention is international customary law, therefore, binding all the states.
2.5 Quantification of Environmental Damage

A major problem with regard to claims for environmental damage is quantification. How can damage be calculated and quantified in realistic terms given the intrinsic nature of the environment? As stated by Professor E.D. Brown in reference to a classic case discussed below, “One of the difficulties associated with claims for damage to natural resources is that of ascertaining what damage has been done and of quantifying it”.\(^{39}\) In the Zoe Colocotroni Case,\(^{40}\) (the oil tanker of that name owned by Panamanian owners and managed and controlled by their agents\(^{41}\) grounded off the east coast of Puerto Rico causing extensive environmental damage. The District Court of Puerto Rico found that the grounding was attributable to the vessel’s unseaworthy condition and awarded damages and compensation for cleanup costs. A part of the damages was for the replacement of marine animals killed as a result of the oil spill as well as replanting of mangroves. Limitation of liability was denied as the court found substantial evidence of privity on the part of the owners.

The District Court remarked on the difficulty with regard to any precise ascertainment of what damage had been caused and the quantification of that damage. The following passage of the judgment is illustrative of the problems associated with quantification of environmental damage:

Plaintiffs’ proven claim of damage to marine organisms covers an approximate area of about 20 acres in and around the West Mangrove. The surveys conducted by the Plaintiffs reliably establish that there was a decline of approximately 4,605,486 organisms per acre as a direct result of the oil spill. This means 92,109,720 marine animals were killed by the Colocotroni oil spill. The uncontradicted


\(^{40}\) 456 F. Supp. 1327 (1978)

\(^{41}\) They were two companies organized in Greece and the UK.
evidence establishes that there is a ready market with references to biological supply laboratories, thus allowing a reliable calculation of the cost of replacing these organisms. The lowest possible replacement cost figure is $0.06 per animal, with many species selling from $1.00 to $4.50 per individual. Accepting the lowest replacement cost and attaching damages only to the lost marine animals in the West Mangrove area, we find the damages caused by the Defendants to amount to $5,526,583.20. 42

The District Court used the same rationale for awarding damages for the cost of restoration of 23 acres of the West Mangrove area to its original state through planting of mangroves intensively, and a monitoring and fertilization program covering 5 years.43

It is interesting and instructive to note that on appeal, the Court of Appeals 44 first, rejected the Appellant’s plea of application of the “diminution of value” rule and applied a modified, albeit more appropriate standard; namely, ascertainment of what measure of damages would be fair and equitable in the circumstances, and applied a “remedy of restoration” standard. Needless to say, the key word here is “restoration’ which is virtually synonymous with “reinstatement”, and which is the language used in the definition of ‘pollution damage’ in the CLC. The difficulties associated with quantification of environmental damage are self-evident from the decisions in the above case.

Another dimension of the problem is to consider what is intrinsic value in relation to the environment as distinguished from added value? To put it in more precise terms, in respect of the environment, there are tangible elements that can be quantified with relative ease although as seen in the Zoe Colocotroni case discussed above, even with tangibles of sorts there are

42 See 456 F. Supp. 1327 (1978)

43 ibid at p. 1345

difficulties with quantifying and giving values to marine organisms. By contrast, there are intangibles that are virtually impossible to quantify. Typical examples would be loss of amenities, enjoyment, pleasure and mental satisfaction which are factors of human sensation and sensibility. When these are lost as a consequence of environmental damage, quantification of damages poses a significant problem. In the private law of property pertaining to leases, for example, the lessee under most legal systems enjoys the right of quiet enjoyment, which if breached by the lessor can potentially lead to his liability.

Chapter 3

RIGHT OF ACTION OF CLAIMANTS

3.1 Introductory Remarks

At the outset of this chapter, the point need to be made that the absence of any proprietary interest in the marine environment in most countries would be the obstacle to a claim for environmental damage. In the property law, ownership is the ultimate form of right in property. A proprietary interest is a legal interest in property that may reside at a lower threshold than outright ownership, although it may include ownership. Having said that proprietary interest also includes ownership, the question arises as to the owner-ship of the natural resource, which is the tangible element of the environment. The natural resource of environment is seen as res nullius\textsuperscript{45} in many countries.

\textsuperscript{45} Res nullius (nobody’s thing) is a Latin term derived from private Roman law whereby res (an object in the legal
When there is damage to the un-owned natural resources, lacking of proprietary interest in such natural resources leads to significant legal problem regarding the validity of a cause of action in respect of claims pertaining to environmental damage. It should be noted that this legal issues mainly relates to the *locus standi* or standing of the claimant. The notion of *locus standi* comes from the common law. As a matter of fact, any legal proceedings or arbitration basically require two elements. The court or forum must have jurisdiction over the disputed matter and the litigants must have *locus standi* or standing to appear in the court. The two elements must be in the place for the action to proceed. It may happen that sometimes the court has jurisdiction over the matter but the litigants have no standing in the court or the litigants have standing but the court itself has no jurisdiction over the matter. Either one of these may lead to dismiss the case. The notion of jurisdiction is familiar with the different legal systems regardless common or civil law legal system, however the notion of *locus standi* may not be shared or employed by other legal system especially in civil law system. This is the reason why the chapter title refers to ‘right of action of claimants’ rather than ‘*locus standi* of claimants’.

Regarding with claims for damage to the marine environment, the question arises as to who has the legal right to be compensated or in other words, who has standing. This question becomes more significant when the ownership of the damaged natural resources of the environment is in question or in doubt concerning the fact that the characteristic of the environment is *res nullius*.

In some jurisdictions, if private entities own the land, natural resources pertaining

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46 The *Amoco Cadiz* case may be the good example to indicate that. The *Amoco Cadiz* oil spill affected more than two hundred kilometers of French coastline and adjacent nearshore waters. In response to the spill, the French state and local governments for damage to un-owned natural resource submitted claims. However, the claims were rejected by the US court, which decided the case on the basis of French law. This is mainly because the resources claimed to be damaged were subject to the principle of *res nullius* and is not compensable for lack of standing of any person or entity to claim. The court concluded that neither the state nor the communes has standing to assert claims for damage to the ecosystem.

47 *Locus standi* (In Latin means place of standing) according to the Black’s Law Dictionary means the right to bring an action or to be heard in a given forum, also known as *Standing.*
to the land also belong to the private entities.\textsuperscript{48} If public entity wants to claim the damage done to environment or natural resource damage, it has to prove ownership or a proprietary interest of the environment. In order to do so, the States has to through its law provide public ownership of the environment and that is the most states reluctant to do based on the perception that the environment is \textit{res nullius}. However, in China, legal principles of \textit{res nullius} is not recognized or not acknowledged. Therefore, lacking of the proprietary interest regarding to the natural resources may not be the problem in China, because the owner-ship of the land and natural resources of the environment is very clearly indicated under the several provisions of laws\textsuperscript{49} and ownership of land and resource is vested in the state.

Property rights over the environment, specifically the natural resources can be vested in public entities through statute as it can be seen from the above. In such instances the body in question will no doubt have standing in respect of a claim for environmental damage. However, many countries in many cases the statutory rights are not property rights per se but rather custodial or fiduciary rights. Such custodial and fiduciary rights conferred through statute flow from the doctrine of pubic trust, of which the notion of \textit{paren patriae} is a part\textsuperscript{(Mukherjee, 2010)}. For instance, in the United States governmental entities including cities, states, and the federal government all manage lands, which are referred to as public lands. The majority public lands in the United States are held in trust for the its own people by the federal government and managed by the Bureau of Land

\textsuperscript{48} However, in some jurisdiction, private ownership of property may not include a proprietary interest in resources such as water and fish adequate to support a claim for damage caused to the resource itself. In common law jurisdictions this is a reflection of the rule relating to animals in the wild, that is, \textit{ferae naturae} as natural resources that they are not property until reduced to possession by a captor.

\textsuperscript{49} Constitution of the People’s Republic of China (2018 Amendment) under Article 9 states that “All mineral resources, waters, forest, mountains, grasslands, un-reclaimed land, beaches and other natural resources are owned by the state, that is, by the whole people. The state ensures the rational use of natural resources and protects rare animals and plants.” The Property Law of the People’s Republic of China, further indicated the State owner-ship. In its Article 45, it says, “The properties that shall be owned by the state as prescribed by law belong to the state or all the people as a whole.” Article 46 says, “Mineral deposits, waters and sea areas shall be owned by the state.” Article 47 says, “Urban lands shall be owned by the state. Lands in rural areas and suburban areas that shall be owned by the state as prescribed by law belong to the state.”
Management, Fish and Wildlife Service under the Department of the Interior or by National Oceanic and Atmospheric Administration and so forth. As it shown in figure 1, a large part of the land (non-color land) is not the state-owned and the state-owned land is (color land) divided by the several public entities.

It should be observed that the Secretary of Commerce is trustee for marine resources and associated habitats, the Secretary of the Interior is trustee for such resources as migratory birds, androgynous fish, endangered species, designated marine mammals, minerals and fresh water resources (De La Rue & Anderson, 2009, pp.516).

![Figure 1: Map of all federally owned land in the United States](https://en.wikipedia.org/wiki/Public_land#/media/File:US_federal_land.agencies.svg)

In this Chapter, the focus was made on the Locus Standi of public entities rather than private entities. It is mainly due to lack of proprietary interest regarding to marine environment with the involvement of public entities, which is more severe issues than that
of private entities.

3.2 Locus Standi of Public Entities

3.2.1 Public Trust Doctrine

The evolution of the public trust doctrine can trace back along the way to the principles of classical trust law. The trust is a three sides legal mechanism that is purporting to protect assets. The settlor as owner of assets settles a trust in favor of a designated beneficiary by appointing a trustee through deed or contract, who is then charged with the fiduciary and custodial duty of protecting the assets and dealing with them. In the trust of public resources, the public is the settlor or sometimes, may be the beneficiary while the state or public entity is trustee. The trust law requires that the public entity or state as trustee act in good faith to protect and preserve the natural resources in favor of the beneficiary, the public.

The public trust doctrine is an ancient Roman law doctrine that provides that states must hold certain natural resource, most notably submerged lands under tidal and navigable waters, in trust for the use and benefit of the public and future generations (Joseph, 1970). In another words, some resource, particularly lands beneath navigable waters or washed by the tides, are either inherently the property of the public at large, or are at least subject to a kind of inherent easement for certain public purpose, which are mainly navigation and travel (Carol, 2003). Before 1970s, the court mainly based on this understanding, generally limited application of the public trust doctrine to submerged lands under navigable waters. However, in 1970, Joseph Sax in his law review article came up with an idea that the public trust doctrine could be a vehicle to compel state and local governments to protect water and other natural resources from development and other threats. He concluded that historical scope of public trust law is quiet narrow and the principle of the public trust is broader than its
traditional application indicates. He argued that public trust doctrine need not be limited either to few conventional interest or to question of disposition of public properties. Public trust doctrine is also applicable to those problems occurred in a wide range of situations in which diffuse pubic interest need protection against tightly organized groups with clear and immediate goals (Joseph, 1970).

His argument was remarkable because it extended the scope of the application of the ancient public trust doctrine to include environmental preservation. As his article titles shows⁵⁰, he liberalized the public trust doctrine from its historical shackles. Based on his idea, the public trust doctrine has widespread application value in the terms of public lands management, wildlife, and ecological resources in general.

### 3.2.2 Application of Public Trust Doctrine in Various States

Following his new ideas about the public trust doctrine, the doctrine was beginning to appear among the various state laws and courts in different countries. Public entities or state authority are recognized as the trustee of the natural resources by the doctrine. Because public entities as a trust of natural resources while the pubic remains as beneficiary of that trust, public entities are able to have standings or right of action in the case of claim for environmental damage.

The flexibility of application of the doctrine satisfies the needs of the various countries at the international level, because the root of the doctrine could be found in both civil and common law. It is noteworthy that principles of the public trust doctrine can be found in not only in common law country but also in civil law countries such as Mexico, France, Spain, Portugal, Greece, Italy, Germany

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⁵⁰ In 1980, Joseph Sax published another article named as “Liberating the Public Trust Doctrine from its Historical Shackles”.

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and Austria, as well as other countries in the European continent. (Mukherjee, 2010)

The doctrine is also widely used in United States. For instance, in the 1970s, many states mended their constitutions, adding public trust language. Pennsylvania may be the one of good examples to indicate that trend. In 1971, Pennsylvania amended its state constitution to apply the doctrine of public trust.\(^51\) By including the doctrine of public trust, the statutes of United States has conferred *locus standi* on governments and public entities to make them able to compensate for environmental damage. These statues as mentioned previous chapter are the Clean Water Act (CWA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the Oil Pollution Act (OPA). These statues under its provisions provide standing for public entities and establish liability for natural resource damage\(^52\) through the operation of the public trust doctrine. Public entities under these statutes are Untied States government, local government, Indian tribe and even a foreign government. It is clear that public entities mentioned above have standing or enjoy *locus standi* conferred by statute in the cases of claims for natural resource damage. Under the National Contingency Plan the Secretary of Commerce is designate as the trustee for marine resources and their habitat and the Secretary for the Interior is designated as trustee for certain species of fish, marine mamals and fresh water resources (Collin&Charles, 2009, pp.516).

\(^{51}\) In it’s Constitution Art. I. 27 it says, ”The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s pubic natural resources are the common property of all the people, including generation yet to come. As trustee of these resource, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

\(^{52}\) *Supra* footnote 29,31.
3.2.3 Parens Patriae

The concept of *parens patriae* is a branch or variation of the doctrine of public trust. The term *parens patriae*\(^{53}\) is a doctrine that grants the inherent power and authority of the state to protect persons who are legally unable to act on their own behalf. Its root can be found in English law, pursuant to which, under the authority of the King, minor and mentally disabled person and individuals otherwise incapacitated were entitled to protection. The state, in its manifestation as sovereign, acted in *loco parentis*\(^{54}\), that is, in the capacity of a guardian of such persons (Mukherjee, 2010).

After long years practice of the doctrine in the court, it has been expanded in the United States to include protection of states interest in matters of health and welfare of the public and their natural resources. States by invoking this doctrine protect interests such as the health, comfort and welfare of the people. The doctrine provides standing or right of action for public entities to claim for damage to natural resources on behalf of the citizen. In this context, *parens patriae* is a legal principle which its legal effect is quite same with that of public trust doctrine. In the Untied States, these two doctrines could be invoked by public entities to claim compensation for natural resource damage. However, there are some differences between two doctrines. The public trust doctrine as it comes from the trust law imposes certain fiduciary obligations on states while *parens patriae* is more a matter of judicial discretion. As it shown in several cases, the doctrine *parens patriae* could be invoked in pollution cases, where there is lack of proprietary interest of natural resources. It should be noted that there are two preconditions to invoke the doctrine of *parens patriae*. Firstly, the affected interest by pollution has to be a state interest rather than individual’s interest. Secondly, a substantial part of the citizenry must have suffered from the incident (Michael, 2010, pp.89).

\(^{53}\) Latin term means parent of the country or father of his country.

\(^{54}\) Latin term means as a substitute for a parent, as an alternative for a parent, in place of parent.
3.3 Locus Standi of Private Entities

Whereas it is obvious from the above discussion that the public entities can have standing conferred by statute regarding with environmental damage case, it is unclear that private entity like an individual or an interest group can enjoy Locus Standi. It should be noted that private entities have a stronger legal basis with regard to right of action of environmental damage when there is clear evidence of a proprietary interest vested in the claimant. By virtue of the private ownership of property, claims of private entities in tort or under the CLC Conventions for environmental damage can easily arises. The claim of private entities may be in respect of land, beaches, trees, and crop, which could be recognized as part of the private entities property. However, claims based on non-possessory interests in public resources such as water or fish and seabirds may no be easily recognized because at common law wildlife and living resources only become property when they are reduced to possession.
CHAPTER 4: SUMMARY AND CONCLUSIONS

This research paper has dealt with the topic of environmental damage arising from ship-source pollution. In the first substantive chapter following the Introduction, namely, chapter 2, the problems regarding compensation for such damage have been identified. The main problem has to do with the definition of ‘pollution damage’ in the CLC which, in the 1992 version has undergone significant change from the original version of 1969. The definition is found to be unclear and fraught with confusion. To deal with it, one distinguished author has proposed a modification which has been depicted in chapter 2 above. (Mukherjee, 2010) Although the present author fully agrees with such modification, whether the convention can be amended to achieve that, is a big question mark. It is well known that convention language is a product of compromises in content combined with taking into account linguistic nuances. Reaching uniformity in this regard is an uphill task. In so far as treaty law is concerned, state parties are deemed to be in compliance so long as the essence of a convention is maintained in the domestic legislation. Thus, depending on whether the domestic jurisdiction follows the common law or civil law system, changes to convention language may be permissible in the domestic implementation process.

Another deficiency pointed out by the same author is the absence of a definition of environmental damage. As stated earlier in this paper, in the Salvage Convention, 1989, there is a definition of ‘damage to the environment’ but in the view of the present author, that definition is contextually inadequate. Indeed, a
new one can be created for the CLC along the lines proposed by the same author cited above which embraces the elements of natural resources, and loss of amenities and quiet enjoyment in relation to the environment. These have been discussed above in context of intangible rights associated with the environment.

In addition to the above, consideration may be given to articulation suitable provisions to address the question of *locus standi* of a claimant suing for damage to the environment; in other words, the question of actionability. This issue has been addressed substantially in chapter 3 of the paper. To this end as well, the previously mentioned author has made some concrete and laudable proposals. However, different legal systems in the world have different views and perspectives which is probably why, in the present convention regime, this matter has not been addressed and has been left to domestic legal regimes to deal with it. If a state were to choose to adopt domestic legislation to cover this lacuna, the drafts proposed by the author cited above should be considered. To encapsulate the above, the following provisions are highly recommended for insertion into domestic legislation:

1. The *locus standi* of a claimant in respect of a claim for environmental damage may be based on a proprietary interest vested in the claimant, or the doctrine of public trust or *parens patriae* as may be appropriate.

2. Compensation for environmental damage shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken, and may include loss of profit suffered by the claimant as a consequence of the environmental damage. (Mukherjee, 2010)

Having said that, one must take cognizance of the legal traditions in many civil law jurisdictions where the legal systems do not support the payment of any compensation for loss of intangible elements of the environment such as quiet enjoyment.
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