



FACULTY OF LAW  
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Vessel-source Oil Pollution  
Prevention and Compensation

Master thesis  
20 points

L-G Malmberg

Environmental Law

Fall 2000

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## **Summary**

Marine pollution is an increasingly serious environmental problem. Close to half of the total marine pollution comes from vessels and the pollutant that is the most obvious is oil. Fortunately, this problem has been recognized almost all over the world. Vessel-source oil pollution has attracted large numbers of international legislation, as well as national. As we will see in this paper, it often takes a major disaster to get things moving in the right direction. It is, however, a little bit of a comfort to know that something good will come out of a bad maritime environmental accident.

The scope and implications of marine pollution in general, and ship-source pollution in particular, are wide and transcend national boundaries and solutions. Therefore the rules and standards relating to pollution prevention should be discussed, adopted and implemented at an international level. During the second half of last century this was done with a great deal of success. Many international conventions, aiming at preventing and mitigating accidental pollution, reducing operational discharges and compensating oil pollution victims, were drafted and implemented. Despite some imperfections, they have had a substantial positive impact on decreasing oil pollution from ships.

This paper tries to cover the most important international conventions concerning vessel-source oil pollution that exist today. It also discusses the approach of the United States in this field. One of the goals is to show some of the main differences between international and US legislation.

The march towards successful protection of the marine environment requires the international community as a whole to continue the good work and develop new rules, standards and guidelines as needed. Only through diligent efforts will our oceans remain clean and healthy for future generations to come.

## Abbreviations

CLC	International Convention on Civil Liability for Oil Pollution Damage
CRISTAL	Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution
dwt	deadweight tons
FC	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
FWPCA	Federal Water Pollution Control Act
ICJ	International Court of Justice
ILO	International Labour Organization
IMF	International Monetary Fund
IMO	International Maritime Organization
Intervention Convention	International Convention Relating to Intervention on the High Seas in Cases of Pollution Casualties
IOPC Fund	International Oil Pollution Compensation Fund
LDC	London Dumping Convention
LOT	load on top
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978
NCP	National Contingency Plan
OECD	Organization for Economic Cooperation and Development
OILPOL	International Convention for the Prevention of Pollution of the Sea by Oil
OPA	Oil Pollution Act
OPPRC	International Convention on Oil Pollution Preparedness, Response and Cooperation
OSLTF	Oil Spill Liability Trust Fund
ppm	parts per million
SBT	segregated ballast tanks
SDR	Special Drawing Rights
TOVALOP	Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea

# 1 Introduction

Vessel-source oil pollution may occur in many different ways. A tanker may sink, it might catch on fire or be grounded, all of which could lead to oil leaking out into the sea. Often the oil pollution is intentional. In some cases the cause of oil pollution is a collision involving oil tankers. The *Torrey Canyon*, the *Amoco Cadiz* and the *Exxon Valdez* incidents are all well known examples of oil tanker disasters that resulted in enormous oil spills with catastrophic consequences for the marine environment.

Oil spills are almost impossible to predict and there is no saying when or where the next major spill will occur. As long as transportation across the seas continue, there will always be another accidental spill and there will always be another intentional oil discharge. Some of the things that we can do to try to reduce the incidents and lessen the impact of them, are making the ships safer and more technically advanced, improve the level of preparedness and response, see to that the regulations are easier to follow and make the penalties stiffer and more noticeable for the parties involved.

A large oil spill is often followed by a number of different claims and resolving these may sometimes be a very complicated procedure. A lot of times the parties involved in such an incident are of different nationalities, the place where it takes place may be on the high seas or even in the territorial waters of a state that does not have any connection with the transport.<sup>1</sup> It is far from always a cut and dry case of what laws and regulations that should apply.

The purpose of this thesis is to take a closer look at some of the issues involving oil pollution from ships. What has been done to prevent these incidents from happening? How do we best prepare for an oil pollution incident? What kind of response can we expect in case of a pollution emergency? What kind of compensation can the victims of marine pollution count on when such an incident

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<sup>1</sup> Oya Ozcayir, “*Liability for Oil Pollution and Collisions*” (hereinafter Oya Ozcayir), p. ix.

does in fact occur? I will primarily be looking at the international arena and at the US standpoint. Is the oil pollution problem best served by international or national solutions?

The thesis will begin with some general background information and then move on to international regulations concerning oil pollution, which in turn will be followed by the American position in this field.

Liability is obviously a very important part of this discussion and with it comes the issue of limitation of liability, which has more or less always been a part of the world of maritime transport. There exist a number of different international conventions and other instruments, as well as national legislation in this area. Some of these will be examined, compared and evaluated.

Later on in this thesis I will try to underline some of the differences between international and US legislation and I will bring the thesis to an end with some conclusions.

## **2 Background**

As long as oil is moved by sea oil pollution will always exist, both deliberate and accidental. You might think that single accidents, like the before mentioned *Torrey Canyon*, the *Amoco Cadiz*, and the *Exxon Valdez*, cover a large percentage of the total oil pollution. This is however completely untrue, they are only responsible for less than 10 per cent of marine pollution.<sup>2</sup> The tanker accidents have, however, often a very dramatic impact on the environment of sensitive coastal areas. This is why these incidents get so much public attention. Even though smaller environmental accidents occur regularly, it is the major accidents, especially if due to technical defects or operator incompetence, that will make the public demand better governmental control.<sup>3</sup>

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<sup>2</sup> Oya Ozcayir, p. 159.

<sup>3</sup> Douglas Brubaker, "*Marine Pollution and International Law - Principles and Practice*" (hereinafter Douglas Brubaker), p. 10.

Another type of incident that does not get as much public attention and news media coverage as the large oil spills is the operational discharges of oil and other substances from vessels. Here we are talking about intentional pollution. After an oil tanker has discharged its cargo there is a certain amount of oil still clinging to the tanks. This oil has to be disposed of before new cargo can be taken on board. This can be done in two different ways, either the “empty” tanks get washed out at sea or they get filled up with sea water as ballast to stabilize the tankers during the return trip and then pumped out before new cargo is taken on. As much as 80 per cent of the total vessel-source oil pollution comes from these operational discharges.<sup>4</sup> This quiet marine pollution occurs every day and it has a much higher cumulative effect than the individual accidents.

National measures aimed at limiting, eliminating and preventing oil pollution caused by shipping activities are commendable and should be encouraged. But the truth of the matter is that even the best national efforts would face a very difficult task in passing the adequacy test because the scope and implications of marine pollution in general, and ship-source pollution in particular, are wide and transcend national boundaries and solutions. The oil emitted from a ship in motion could be carried for a very long distance, damaging the environment in several countries or in areas beyond jurisdiction.<sup>5</sup> Even if a state would be able to eliminate pollution within its own jurisdiction by unilateral action, that same state would be powerless when it comes to protecting itself from discharges of oil occurring just beyond its territorial waters. And if it were not for international laws and regulations, a single ship visiting ports in numerous countries over the course of a year, would be hard pressed to comply with a number of opposing, possibly conflicting, standards imposed by each port state.

Oil pollution is very much an international problem, so even though most sectors of national law are involved, some parts still have to be solved by international law. The need to protect the marine environment has been

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<sup>4</sup> Oya Ozcayir, p. 159.

increasingly recognized by international law, and principles and rules have been established. There is, in international law, a general duty on all states to cooperate in establishing these rules and standards to prevent, reduce and control pollution of the marine environment. Since marine environmental law is a specialized branch of international law, it primarily derives from the traditional sources, namely customary law, international conventions, general principals of law and as secondary sources, judicial decisions and the writings of eminent lawyers.

Marine environmental law has a relatively short history and the most extensive sources can be found in the conventions and in customary law. International organizations, including the UN and its specialized agencies, intergovernmental bodies and non-governmental groups at global, regional and sub-regional levels have all played an important role in promoting new conventions and in finding new ways of contributing to the process of customary law making.<sup>6</sup> Although conventions are the most frequent method of establishing binding rules, some problems are tied to this method. The negotiation and ratification process can prove to be very slow due to so many different interests involved. A lot of times the convention will, more or less, only consist of general principles to satisfy as many parties as possible. The downside to this is that states that are parties to the convention might have to pick up the slack by enacting national legislation to cover for the missing parts. Another problem is that if the convention does not codify existing or generate new custom it will only be binding to its parties.

Customary law also plays an important role in maritime law, especially in laying down fundamental guiding principles. It basically derives from a generalization of frequent and uniform state practice. The states have to practice

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<sup>5</sup> Emeka Duruigbo, “*Reforming the International Law and Policy on Marine Oil Pollution*”, in *Journal of Maritime Law and Commerce*, Vol. 31, No. 1, January 2000, (hereinafter Emeka Duruigbo), pp. 66-67.

<sup>6</sup> Patricia Birnie, “*Protection of the Marine Environment: The Public International Law Approach*” in Colin M. De La Rue, “*Liability for Damage to the Marine Environment*” (hereinafter Patricia Birnie), p. 2.

and accept it as a law for it to be considered customary law. Because of this, it is not an appropriate tool for developing specific regulations. An advantage to customary law is that it lacks the burdensome procedure of treaty making. It also often provides the framework for enactment of more specific national and international laws. But since marine environmental law only has existed for such a short time it is, however, questionable whether there has actually been any customary law formed based on state practice and its acceptance as law.<sup>7</sup>

General principles of law recognized by civilized nations are according to the Statute of the International Court of Justice<sup>8</sup> (ICJ) also a source of international law. They have in the past generally been given a very restricted interpretation, confining them to principles that have frequently been used in municipal systems to ensure equitable legal processes. The ICJ seems, however, to be going towards a more broad interpretation. There are certain equitable principles that are used not as rules of law, but as the means of facilitating an equitable solution.<sup>9</sup>

## **2.1 Concepts underlying the oil pollution system**

There have always been two traditional principles that the law of the sea has rested on, namely the freedom of the high seas and the sovereignty of the coastal state on the territorial sea.<sup>10</sup> Not too long ago very little consideration was given to marine pollution, but over the years it has become clear that the oceans cannot keep on absorbing the waste dumped into it and still stay healthy. It is no longer possible to allow unrestricted pollution into the sea. There is a need for a balance between the rights and responsibilities of the maritime shipping industry and the coastal states.

Nowadays states are, according to customary international law, required to take measures to control and regulate all sources of marine pollution that lie within their territory or that are subject to their jurisdiction and control. States do not have to guarantee that all harm to the environment will be prevented, but they

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<sup>7</sup> Douglas Brubaker, p. 58.

<sup>8</sup> ICJ Statute, Article 38.

<sup>9</sup> Patricia Birnie, p. 4.

have to exercise due diligence, which means that they have to take the best measures available to them when protecting the environment. It generally requires the states to enact the necessary legislation and to adopt effective administrative measures. The protection of the marine environment is in international law based on two principles, the “precautionary principle” and the “polluter pays principle”.

The “precautionary principle” is not yet a binding principle of international customary law, but it is used more frequently now than ever before. It is in some cases no longer necessary to wait for conclusive scientific proof of actual or imminent harm before taking action to control harmful activities taking place in the marine environment.<sup>11</sup> There are now a number of declarations that include recommendations saying that where there is a threat of serious or irreversible damage, the lack of full scientific certainty cannot be used as a reason for postponing actions to prevent environmental harm.

The “polluter pays principle” is often referred to as an economic rather than a legal principle. It was developed by the Council of the Organization for Economic Cooperation and Development (OECD) and it is nowadays widely applied. The principle means that the polluter should be the one to bear the expenses of carrying out measures decided by public authorities to ensure that the environment is in an acceptable state. The main object of this principle is to stop governments from subsidizing the industry by carrying their environmental costs.<sup>12</sup> It provides a way to distribute the costs of pollution, assuming that the polluter in a specific case can be identified, which obviously far from always can be done in cases of discharges at sea. It also acts as a deterrent for the potential polluter to engage in a polluting activity.<sup>13</sup>

The “polluter pays principle” has been referred to in some treaties, such as for example the 1986 Single European Act, where it is stated that:

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<sup>10</sup> Oya Ozcayir, p. 162.

<sup>11</sup> Patricia Birnie, pp. 5-7.

<sup>12</sup> Oya Ozcayir, p. 163.

<sup>13</sup> Patricia Birnie, p. 9.

“Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that *the polluter should pay*”.<sup>14</sup>

The “polluter pays principle” is also referred to as a general principle of international law in the Preamble to the International Maritime Organization’s (IMO) 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation (OPPRC). After recommendations by OECD, the principle has been applied in several national laws. It might even be in the process of becoming a principle of customary international law, although there is one thing that might stand in its way, namely the principle’s economic basis.

There are some threats to this principle, the biggest one being the limitation of liability that exists in certain international conventions. The limitation of liability will be examined more thoroughly later on in this thesis, but the system is being more and more criticized. The US Oil Pollution Act of 1990 is a good example of how the “polluter pays principle” may in some cases outweigh limitation of liability.<sup>15</sup>

## **2.2 Enforcement available under the oil pollution system**

The regulations existing for the protection of the marine environment obviously need some kind of enforcement to be effective. The doctrine of state responsibility and liability is the cornerstone for the enforcement.<sup>16</sup> If the enforcement would be left solely to the traditional processes of international customary law, it would probably be pretty weak, since the main mechanism would be the bringing of claims by one state against another for reparation of an injury that is a result from an alleged violation of an obligation imposed upon them by international law.<sup>17</sup> The inter-state claims are, however, still important instruments in the case of securing compensation when no relevant treaty exists or when a treaty is considered insufficient in any way.

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<sup>14</sup> Single European Act (1986), Article 25 (my italics).

<sup>15</sup> See chapter 6.2 on the 1990 US Oil Pollution Act.

<sup>16</sup> Two elements, one objective (breach of obligation) and one subjective (state as actor), constitute the sole prerequisites to state responsibility. See Brian D. Smith, “*State Responsibility and the Marine Environment-The Rules of Decision*”, p. 6.

<sup>17</sup> Patricia Birnie, p. 10.

Another problem is the lack of international fora in which to bring the claims. States have attempted to avoid this and other problems, such as the difficulty of identifying the precise nature of the international obligation breached, the delays in international court proceedings, the evidentiary problems of proving damage to the marine environment and its limitation to claims by states, by resorting to treaties. Some of the state liability is by this channeled back to the owners or operators involved in the specific cases. It seems like the general trend is going towards relying on civil liability rather than state responsibility as the primary remedy.

Yet another disadvantage of relying solely on state responsibility is that it under international law has remained unclear whether the liability should be based on fault or whether it should be strict. The liability conventions solve this problem by imposing strict liability.

It is considered much more advantageous to prevent and control marine pollution than trying to compensate the victims after an environmental accident, since it is basically impossible to restore the environment or even to fully compensate the alleged victims. The state responsibility and liability doctrine is also inappropriate for the situation where the damage might be building up over a long period of time, which often is the case after a marine accident. International tribunals do often not have the scientific and technical knowledge necessary and are therefore not encouraging such claims. Due to this, states often resolve their disputes by negotiation. In their negotiations they frequently use international organizations to help them monitoring the activities and as a forum for receiving reports and possible complaints. There are methods of enforcement, other than those relying on the general principles of state responsibility, that are deemed necessary, as for example monitoring, reporting and inspections.<sup>18</sup> Many of these international obligations are however delegated by treaty to national means of inspection, as for example port state control under IMO and International Labour Organization (ILO) conventions.

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<sup>18</sup> Patricia Birnie, pp. 12-13.

### 3 Protection of the marine environment

Shipping is, as mentioned before, essentially international in character, and therefore the rules and standards relating to maritime safety and pollution prevention should be discussed, adopted and implemented at an international level.<sup>19</sup> There are two major categories of treaties, namely comprehensive treaties that try to regulate all polluting activities affecting the seas and conventions dealing with specific sources.<sup>20</sup> These exist both at global and regional levels.

The IMO, which is the United Nations' (UN) specialized agency responsible for improving maritime safety and preventing pollution from ships,<sup>21</sup> is recognized as the competent international organization in this field. It has during the last four decades developed a number of conventions, codes and guidelines.

It is estimated that around 40-45% of the total marine pollution comes from vessels.<sup>22</sup> Pollution of the sea by oil from ships is the most obvious and widely publicized source of marine pollution and it is perhaps for that reason that oil pollution has priority over pollution by other sources. Vessel-source oil pollution has attracted by far the greatest volume of international legislation, some of which have later been adopted to other forms of pollution.<sup>23</sup> Some conventions might seem pretty far fetched to be included, as for example the regulations that deal with human problems. However, these regulations will also limit the marine pollution, because much of the pollution is due to human failure.

There are a number of different measures you can take to prevent, control and mitigate marine pollution. They include:

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<sup>19</sup> Y. Sasamura, "Prevention and Control of Marine Pollution from Ships", in Alastair Couper and Edgar Gold, "The Marine Environment and Sustainable Development: Law, Policy, and Science" (hereinafter Y. Sasamura), p. 313.

<sup>20</sup> An example of the first is the UNCLOS and of the second any IMO Convention.

<sup>21</sup> <http://www.imo.org> (3 pm, November 9, 2000).

<sup>22</sup> Douglas Brubaker, p. 119.

<sup>23</sup> E.D. Brown, "The International Law of the Sea", Vol. I, p. 377.

- Prevention of accidental pollution, by regulating construction, equipment and operation of ships, and by training the crew;
- Prevention of operational pollution from ships, by prohibiting or limiting the amount of discharges of oil and other pollutants;
- Reduction of the amount of oil or other pollutants spilled in case of an accident, by requiring certain specifics in design, construction and equipment of ships;
- Mitigation of the pollution due to a maritime accident, by defining the right of coastal states to intervene and by promoting global and national efforts for combating pollution;
- Compensation to the victims of marine pollution, by establishing liability and compensation schemes.<sup>24</sup>

The most important conventions in the field of oil pollution at sea will be examined more thoroughly in the following. I will start with the one major global comprehensive convention that exists today, the United Nations Convention on the Law of the Sea (UNCLOS) and then move on to the conventions dealing with more specific areas.

### **3.1 UNCLOS**

At the time of the first UNCLOS in 1958 there had been no attempt to change the well-established doctrine of freedom of the seas, which according to most states included the right to dispose waste into the sea from any source.<sup>25</sup> Even this convention made very little reference to pollution problems. It merely had some very undefined and unspecified regulations referring to the problem of oil pollution. No reference whatsoever was made to state responsibility for damage, this was left to the customary doctrine. There were clearly big gaps in this field that needed to be taken care of.

The situation had to be resolved and it was left to the Third UN Conference to make improvements by bringing all the sources of marine pollution together in

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<sup>24</sup> Y. Sasamura, pp. 313-314.

one convention and clearly describing the rights and duties of states in protecting the marine environment. The 1982 UNCLOS was adopted. The provisions found in the convention are not intended to cover all the different areas and problems of marine pollution. It does, however, try to resolve the issues on general principles and basic jurisdictional questions dealing with the legislation and enforcement on marine pollution. Instead of giving detailed rules and standards for the control of marine pollution, the convention is intended as an umbrella treaty, which sets out general procedural rules on marine pollution.<sup>26</sup>

The convention extended the coastal state's jurisdiction over protection and preservation of the marine environment by increasing the limits in which it can exercise control,<sup>27</sup> and in many cases it also specified the exact matters over which such jurisdiction can be exercised. The most important part in the convention, as far oil pollution is concerned, is Part XII, which is exclusively devoted to the protection and preservation of the marine environment.

### *3.1.1 The regulatory provisions*

The convention deals with six sources of marine pollution<sup>28</sup> and it lays down a comprehensive framework for the taking and enforcing of measures on all of these sources. It clarifies the obligations breach of which state responsibility will be invoked, but it is pretty weak when it comes to defining exactly when a violation occurs and what consequences will come out of it as far as liability is concerned.<sup>29</sup> The level of standards in the convention has been heavily criticized due to their generalization, which makes it hard to implement them in an objective manner. They do not define a state's responsibility in a sufficient way.<sup>30</sup> An example of a general standard is found in Article 194(3)(b), where a state's responsibility is

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<sup>25</sup> Patricia Birnie, pp. 13-14.

<sup>26</sup> Oya Ozcayir, pp. 164-165.

<sup>27</sup> The territorial sea was extended to 12 nautical miles and the exclusive economic zone to 200 nautical miles.

<sup>28</sup> Land-based pollution, pollution from seabed activities, pollution from activities in the Area, pollution by dumping, pollution from vessels and pollution from or through the atmosphere.

<sup>29</sup> Patricia Birnie, pp. 15-17.

<sup>30</sup> Oya Ozcayir, p. 166.

defined with regard to vessel-source pollution. It just states that a state is required to undertake measures to control vessel-source pollution “to the fullest possible extent”, it does not clearly define the state’s responsibility, nor does it mention the standards of measures. Another example is the term used in Article 194(1), “best practical means available”, it would most likely be adopted differently in developing and developed countries.

In order to prevent pollution from dumping, seabed activities and vessels, states have to establish international rules and standards.<sup>31</sup> When these rules and standards, as far as vessel-source pollution is concerned, are established, the standard applied must have the same effect as generally recognized international rules and standards established through *the* competent international organization or diplomatic conference. This implies that only one organization is competent for this purpose. Although the competent international organization is nowhere defined in the Convention, it is generally agreed to be IMO.<sup>32</sup> The question that then springs to mind is if this means that the requirements of MARPOL 73/78, the IMO Codes and other relevant international guidelines should be incorporated into the state’s obligation to prevent marine pollution. This seems to be the view of most commentators. Does this then also mean that even if a state has not ratified some of these Conventions, it will still be bound by their standards as international customary law? It is unclear which of the rules in these Conventions that must be applied, but once they are identified, a breach thereof resulting in pollution could invoke state responsibility. These provisions do, however, definitely have the effect of emphasizing the state’s obligation to protect the marine environment.

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<sup>31</sup> UNCLOS, Articles 208, 210-211.

<sup>32</sup> Patricia Birnie, pp. 15-16.

### *3.1.2 The enforcement provisions*

Since it is always difficult to enforce regulations like these only by application of state responsibility, UNCLOS also introduces other means of enforcement. Anti-pollution laws have traditionally been enforced under coastal-state and flag-state jurisdiction. UNCLOS continues to recognize the primacy of the flag state's jurisdiction over ships, but it also emphasizes on the increasing role of coastal and port states as they control and ensure conformity with international law.

A vessel on the high seas has traditionally been subject to the exclusive jurisdiction of the flag state. The convention, however, also gives some powers to the port states. According to Article 218, port states may exercise jurisdiction and even institute proceedings, subject to a number of conditions, over foreign vessels entering their ports and offshore terminals. For this rule to apply the foreign vessel either must have discharged on the high seas in violation of applicable rules and standards<sup>33</sup> or in the waters subject to the jurisdiction of another state.<sup>34</sup> In the last case the port state can only act if requested by that state, the flag state or a state that is damaged or threatened by the discharge.<sup>35</sup>

A coastal state has full sovereign powers in its territorial sea; it can enforce its pollution laws there. If a foreign vessel, while passing through the territorial sea, is suspected to have violated the coastal state's anti-pollution laws or other applicable international rules concerning this matter, the coastal state has the right to undertake a physical inspection of the ship and might even have the right to institute legal proceedings.<sup>36</sup>

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<sup>33</sup> See previous chapter on the regulatory provisions.

<sup>34</sup> Oya Ozcayir, pp. 168-169.

<sup>35</sup> Patricia Birnie, p. 17.

<sup>36</sup> UNCLOS, Article 220.

### 3.1.3 Provisions on state responsibility

When it comes to issues of responsibility and liability the UNCLOS is weak and not very innovatory. The Convention does not have any detailed provisions regarding state responsibility. It simply states that:

“States are responsible for the fulfillment of their international obligations concerning the protection and the preservation of the marine environment. They shall be liable in accordance with international law”.<sup>37</sup>

It is left to national legislation to make sure that these aspects are covered.

## 4 Marine pollution prevention

In maritime law there are basically two sets of different rules, rules that are designed to prevent pollution and rules that provide compensation for the victims of pollution. I will first examine the rules that try to prevent the pollution from happening and also the ones that are designed to mitigate the environmental consequences when it does happen and after that I will be moving on to the rules that are designed to compensate the victims.

### 4.1 International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL) 1954

The pollutant that has the longest history of international attention is definitely oil. The first time oil pollution was the subject of an international conference was in 1926, after the United States recognized the international nature of this problem. The conference drafted a treaty to regulate intentional discharge, but it was never signed and entered into force.<sup>38</sup>

After the initial regulatory attempt failed, the OILPOL was signed in London in 1954. This was achieved even though only eight of the 32 countries present

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<sup>37</sup> UNCLOS, Article 235(1).

<sup>38</sup> Ronald B. Mitchell, “*Intentional Oil Pollution at Sea - Environmental Policy and Treaty Compliance*”, p. 70.

actually thought of oil pollution as a problem.<sup>39</sup> This was the first convention to deal exclusively with the oil pollution problem. The convention was, however, only concerned with operational oil pollution from merchant ships; it made no attempt to deal with accidental pollution at all.

Proceeding from the premise that prohibiting all discharges of oil was impossible, it gave room for the discharge of oil without any restrictions in an area outside a prohibited zone of 50 miles from the coasts of parties to the convention. Within that zone only discharges of less than 100 parts per million (ppm) were permitted. Under the convention the ships registered in contracting states had to be fitted with certain pollution prevention facilities and the main ports of these states had to install facilities for the disposal of oily substances. Each ship also had to carry an oil record book showing the details of oily discharges.

The convention attracted a lot of criticism; it was described as possessing very few real teeth and as being unenforceable in practice. Especially the 100 ppm rule was criticized because it was possible to leave a visible film behind a ship even though the oil content was well below 100 ppm, thus the breaches could not be proved through observation.<sup>40</sup>

Even though this convention lacked some important parts, you cannot take away the fact that this was the first real attempt to address this problem. It was a significant convention at the time and it has since served as a basis for establishing more detailed conventions.

#### **4.2 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (Intervention Convention) 1969**

The Intervention Convention was a result of the *Torrey Canyon* disaster. The right of a coastal state to take action against a foreign vessel in the territorial sea was something that had never been disputed, but the right to do so beyond that limit had remained challengeable in international law. The question of the existence of a coastal state's right to intervene on the high seas following a pollution disaster

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<sup>39</sup> Oya Ozcayir, p. 172.

arose after the grounding of the *Torrey Canyon*. When the *Torrey Canyon* ran aground just off the Isles of Scilly in mid March of 1967, it triggered one of the worst pollution emergencies the world had ever witnessed.<sup>41</sup> It caused a major oil spill and damaged the coastlines of Britain and France. The British government first tried to rescue the tanker, but they did not succeed. They then decided to bomb the wreck in order to set it on fire. Since the British actions seemed to be contrary to the principles of international law, they did their best in trying to justify their actions by invoking everything from the principle of necessity to the right of self-defense.<sup>42</sup>

The actions of the British government were heavily criticized both in and outside of the United Kingdom. It eventually led to a referral of the issue to the IMO. An international conference<sup>43</sup> was held in Brussels in late 1967 and it resulted in the adoption of the Intervention Convention.

The convention is a global convention and it recognizes the coastal state's right to intervene on the high seas in cases of oil pollution casualties. The right to intervene exists not only in the case of actual pollution, but also when there is a threat of pollution, provided that there is a grave and imminent danger to the coastline or other related interests.<sup>44</sup> This right can be exercised anywhere on the high seas. The coastal state has the right to use the measures that it finds suitable at the time of the incident. The measures must however be proportionate to the actual or threatened damage and cannot unnecessarily interfere with the rights and interests of the flag state or any other states.<sup>45</sup> Before the coastal state takes measures they must however, except in cases of extreme urgency, consult the flag state and other states affected by the incident and also notify anyone who is likely

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<sup>40</sup> Emeka Duruigbo, pp. 69-70.

<sup>41</sup> <http://www.cornwall-online.co.uk/msw/torrey-canyon.htm> (1 pm, January 5, 2001).

<sup>42</sup> Patricia Birnie, p. 18.

<sup>43</sup> Three specific problems were to be studied at this conference; Preventive measures against oil pollution, measures to limit the extent of the damage and what necessary changes that had to be made in international law.

<sup>44</sup> Intervention Convention, Article I.

<sup>45</sup> Intervention Convention, Article V.

to be affected by the actions. Under all circumstances, after the actions have been taken, the before mentioned parties all have to be informed, as well as the IMO.

The right of intervention is limited to maritime casualties resulting in pollution and to privately owned ships of the contracting parties. Thus, this right does not apply to cases of operational discharges, nor where the ship involved is either a warship, a state-owned ship used for government non-commercial activities or a ship of a flag state not party to the convention.

This convention has obviously caused some debate since it was a big departure from the traditional principle of freedom of the high seas.<sup>46</sup> You could say that this convention puts a limitation on that freedom. This was the first time that states other than the flag state were granted permission to take preventative and mitigating action against foreign vessels on the high seas in cases where oil pollution was a probable result.

The Intervention Convention was obviously meant to mitigate the environmental damages in the aftermath of a maritime accident and to a large extent it does. But for intervention to be effective the coastal state needs to be informed quickly when an accident has occurred and the convention fails to provide for this.

### **4.3 International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)**

Since OILPOL had proven unsatisfactory to deal with marine pollution, an international conference on the subject was held in 1973. The result was the global convention MARPOL 73, which today, along with its amendments, is the main convention controlling vessel-source pollution. The 1973 convention was very slow in entering into force, and if it would not have been for the 1978 Protocol, an amendment to the convention, it would have taken even longer.<sup>47</sup>

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<sup>46</sup> Oya Ozcayir, p. 176.

<sup>47</sup> Douglas Brubaker, p. 123.

By 1978 the convention was still a long way from receiving the necessary number of ratifications so that it could enter into force, largely due to the considerable economic cost and the technical difficulties it would take to comply with the provisions. The opposition to MARPOL 73 was by now very strong. And as if this was not enough, during a two-month period, from December 76 to January 77, a series of very serious tanker accidents had taken place.<sup>48</sup> In order to speed up the ratification process the IMO convened an international conference on tanker safety and pollution prevention in 1978, which resulted in the 1978 Protocol. There were two main changes made in the 1978 Protocol in order to streamline state ratifications. The first one was that the MARPOL 73 and the 1978 Protocol were both to be merged into one legal instrument and the provisions found in both of them were to be read and interpreted together. Thus ratification of one meant that a state was a party to both. The other one was that ratification of Annex II of MARPOL 73 was postponed for 3 years from the date of entry into force of the 1978 Protocol.<sup>49</sup>

MARPOL 73/78 entered into force in October 1983. In the convention detailed pollution standards are set out in five annexes. The one that I will take a closer look at is Annex I, which deals with oil.<sup>50</sup> The acceptance of this annex, along with number two, is obligatory for all contracting parties, while the rest are optional. The goal of MARPOL is to achieve complete elimination of intentional pollution of the marine environment by oil and other harmful substances from ships and to minimize the accidental discharge of such substances.

#### 4.3.1 Articles 1-6

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<sup>48</sup> Douglas Brubaker, p. 127. The disasters included the *Argo Merchant*, the *Sansinena*, the *Oswego Peace*, the *Olympic Games*, the *Daphne*, the *Grand Zenith*, the *Barcola*, the *Mary Ann*, the *Universe Leader* and the *Irenes Challenge*. These disasters were all caused by human error or negligence.

<sup>49</sup> Annex II could be postponed even longer if so decided by a two-thirds majority of the Marine Environment Protection Committee of the IMO. Annex II did enter into force on April 6, 1987.

<sup>50</sup> The remaining annexes deal with noxious liquid substances in bulk (Annex II), harmful substances carried by sea in packaged forms (Annex III), sewage (Annex IV) and garbage (Annex V).

Articles 1-6 deal with prescriptive and enforcement jurisdiction. In Article 1 you will find the provision stating that the original convention and the 1978 Protocol should be read and interpreted together as one single instrument.

Article 2 covers definitions and includes the following.

- “Harmful substance” means any substance, which if discharged into the sea is liable to create hazards to human health, to harm living resources and marine life and to damage amenities or interfere with other legitimate uses of the sea.
- “Discharge” means release howsoever caused from a ship and includes any escape, disposal, spilling, leaking, pumping, emission and emptying. It does not include dumping as defined by the London Dumping Convention (LDC).
- “Ship” means any vessel of any type whatsoever operating in the marine environment, including hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed and floating platforms.
- “Incident” means an event involving the actual or probable discharge into the sea of a harmful substance or effluents containing such a substance.

Under Article 3, convention provisions do not apply to state ships, such as warships or others on non-commercial service. Each party to the convention must however ensure, by adopting appropriate measures not impairing the operation of such ships, that they act as far as is reasonable and practicable in accordance with the convention.<sup>51</sup> Other than that, the convention applies to all ships under the flag of a state, which is party to it and also to ships that, even though they are not flying the flag of a state that has accepted the convention, are operating under the authority of a party to it.

Violations of the convention requirements must be prohibited and sanctions must be established under the law of the flag state for ships anywhere.<sup>52</sup> If notice is given and the evidence is sufficient that an alleged violation has occurred, the flag state must bring proceedings. In addition, any violation of the requirements of the convention within the jurisdiction of any party must be prohibited and sanctions must be established under national law. In the case of a violation, the

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<sup>51</sup> Douglas Brubaker, p. 123.

state must either bring proceedings or give the flag state evidence that a violation has occurred and the flag state must in turn inform the state and the IMO of actions taken.

All states must hold a certificate of compliance, an International Oil Pollution Prevention Certificate, with MARPOL 73/78 standards, both technical and operational. In the event that a ship is not carrying the necessary documents and it is clear that the condition of the ship or its equipment does not comply with the necessary certification standards, the port authority of the state party carrying out the inspection must take such steps to ensure that the ship does not sail until it can proceed “without presenting an unreasonable threat of harm to the marine environment”.<sup>53</sup> This certificate is one of the most important elements in detecting violations in the MARPOL system.<sup>54</sup>

According to Article 6, state parties have to cooperate in the detection of violations and the enforcement of the provisions. This article gives the port state power to inspect foreign vessels entering its ports and terminals in order to verify whether any discharge has been made contrary to the convention. However, the port state may not bring any legal action for violations outside its jurisdiction. Proceedings can only be brought by the flag state, after receiving evidence from the port state.

#### 4.3.2 *Annex I*

As mentioned before, Annex I is mandatory and it deals with operational oil pollution. Oil that is covered by this annex generally includes crude oil, fuel oil, sludge, oil refuse and refined products and specifically includes over 40 varieties of asphalt solutions, oils, distillates, gas oil, gasoline blending stocks, gasoline, jet fuels and naphtha. Operational discharges of oil are permitted outside the special areas or beyond 50 nautical miles from land.<sup>55</sup> The special areas include the Mediterranean, the Baltic, the Black Sea, the Red Sea, the “Gulfs area” and the

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<sup>52</sup> MARPOL 73/78, Article 4.

<sup>53</sup> MARPOL 73/78, Article 5.

<sup>54</sup> Douglas Brubaker, p. 124.

Antarctic area, in which oil tankers and other ships of 400 tons and above are not allowed to discharge oil at all. Except for cases where the oil content does not exceed 15 ppm, discharges from ships of less than 400 tons are prohibited. In the Antarctic area oil discharges are completely prohibited.

The rate of discharge cannot exceed 30 liters per nautical mile and the maximum quantity of oil discharged on a ballast voyage is 1/15000 of the particular cargo or for new tankers 1/30000. All parties to MARPOL 73/78 are required to provide facilities for the reception of residues and oily mixtures at oil loading terminals and repairs ports. All vessels 400 tons and above have to be equipped with oily water separating or filtering systems for the discharge of machinery space bilges. New tankers<sup>56</sup> over 20000 deadweight tons (dwt)<sup>57</sup> must be provided with segregated ballast tanks (SBT) of sufficient capacity to facilitate safe operation on ballast voyages without the need to use cargo tanks for ballasting. They also have to be protectively located in such a way that they will protect the cargo tanks in cases of stranding or collision.

The tanker also has to be fitted with the necessary equipment for the load on top (LOT) system. The LOT system attempts to reduce the amount of oily ballast water discharged and to retain on board slop from the separation process. What this system basically means is that the cargo tanks get washed with seawater, then allows the water to settle downward from the residue oil and then the lower layer of water gets pumped into the sea. After that the process may be repeated once and then new cargo will be loaded on top of the slop oil residues.<sup>58</sup> Prior to MARPOL the LOT system had much depended on the conscientious application of the tank vessel operators. In order to reduce reliance on the human element, MARPOL introduced the requirement of using a discharge monitoring and control system. The LOT procedure was made obligatory for all oil tankers of 150 tons or more. Even the already existing tankers had to meet this requirement; they got three years to fit the necessary slop tanks and discharge and monitoring systems.

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<sup>55</sup> MARPOL 73/78, Annex I, Regulation 9(1)(a)(ii).

<sup>56</sup> Tankers for which the building contracts were placed on the January 1, 1976 or later.

<sup>57</sup> In the original MARPOL the limit was 70000 dwt.

All ships have to carry a comprehensive oil record book in which all operations involving oil has to be recorded. Any state party to MARPOL may inspect this book. Tankers of 150 tons and above and other ships of 400 tons and above also have to carry an emergency plan, which has to be approved by the administration of the vessel's flag state.

One very important regulation was added to Annex I in 1992. It applies to all new tankers ordered after 6 July 1993, whose keels were laid on or after 6 January 1994 or which are delivered on or after 6 July 1996. Under the regulation<sup>59</sup> all tankers of 5000 dwt and above have to be fitted with double bottoms and double hulls extending the full length of the ship's side. A mid-deck design is permitted as an alternative. Other designs may be permitted in due course, provided that they can ensure the same level of protection against pollution.<sup>60</sup> Other amendments made it mandatory for existing tankers to be fitted with double hulls or equivalent design when they reached the age of 25. There was growing concern about the condition of some of the ageing tankers because a large percentage of them were built before MARPOL 73/78 became mandatory. A solution had to be found in order to improve the maintenance of these ships. A new regulation was adopted<sup>61</sup> and it states that pre-MARPOL ships have to have side or bottom protection that covers at least 30 per cent of the cargo tank area, no later than 25 years after delivery.

The requirement of double hulls did however get a cold reception from the shipowners. They questioned the choice and effectiveness of the double hull design and argue that there are other, less costly, solutions which should have been favorably considered.<sup>62</sup>

#### *4.3.3 What does MARPOL 73/78 mean for the protection of the marine environment?*

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<sup>58</sup> Douglas Brubaker, p. 122.

<sup>59</sup> MARPOL 73/78, Annex I, Regulation 13F.

<sup>60</sup> Oya Ozcayir, p. 184.

<sup>61</sup> MARPOL 73/78, Annex I, Regulation 13G.

<sup>62</sup> Emeka Duruigbo, p. 73.

The MARPOL convention has been accepted as the most important international treaty dealing with the prevention of pollution from ships. It has proven itself to be a very effective instrument when it comes to combating marine pollution. Since its entry into force it has had a substantial positive impact on decreasing the amount of oil that has entered the sea as a result of marine transportation activities.<sup>63</sup>

The MARPOL convention has not escaped criticism however. It has been said that the convention took way too long to enter into force and even so it has not been widely ratified. The ratification process did take longer than anticipated due to technical and economical difficulties, but when it comes to the number of states that have ratified the convention, the numbers are somewhat misleading. If you look only to the numbers of states alone, there does not seem to be that many, but the fact is that the parties to the convention collectively own over 94 per cent of the total world shipping tonnage.<sup>64</sup>

All in all, the MARPOL convention has done and is doing a lot of good for the protection of the marine environment. If all the contracting parties would follow all of its requirements, the convention would probably be a sufficient instrument in dealing with ship-source pollution. One author argues this point however, by stating that the inability of the convention to promote a mechanism by which compliance with its provisions is ensured, is itself an inadequacy and thus a shortcoming of the convention.<sup>65</sup>

The problem is not the structure or content of the convention, but the inability to enforce and the lack of motivation for compliance. It is therefore very important to find a way to motivate states to comply with all the provisions set out in the convention.

#### **4.4 International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC) 1990**

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<sup>63</sup> Oya Ozcayir, p. 187.

<sup>64</sup> As of November 30, 2000, the number of contracting states to MARPOL 73/78 (Annex I/II) is 113; see <http://www.imo.org/imo/convent/summary.htm> (2 pm, January 5, 2001).

<sup>65</sup> Emeka Duruigbo, p. 74.

The OPRC convention was adopted by a diplomatic conference convened by IMO in London in November of 1990. The conference was attended by over 90 countries and 17 international organizations.<sup>66</sup> To enter into force the convention had to be accepted by 15 states. This was achieved in the spring of 1993 and one year later it became international law.

This convention fills a gap in the international framework of treaties dealing with marine pollution. Even though there are a lot of international rules and regulations on prevention and control of marine pollution from ships, prior to this convention there had been no global framework for co-operation and mutual assistance in this field. The aim of the convention is to increase the level of effective preparation to combat oil pollution incidents, to improve the response to such incidents and to promote international co-operation in this area. A key element of this convention is the commitment of the parties to co-operate with each other in responding to oil spills and to provide assistance to others who request help to deal with them.

In the event of an oil pollution incident, prompt and effective action is crucial. The parties to the convention undertake individually or jointly to take all the appropriate measures to prepare for and to respond to an oil pollution incident.<sup>67</sup> It does not matter whether the incident takes place on the high seas, in territorial waters or even in internal waters; the convention applies in any case. The incident only has to pose a threat to the marine environment for the convention to apply.

It stands clear that a fast and coordinated response to an oil spill depends on timely pollution reporting and assessment. Therefore the convention obliges its parties to ensure that ships, offshore units, aircraft, seaports and oil-handling facilities report without delay any event involving a discharge to the nearest coastal state or responsible national authority. When a party receives this pollution report it has to assess the nature and the possible consequences of the incident and then it has to inform all states, even the ones that are not parties to the

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<sup>66</sup> W. A. O'Neil, *"The International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC)"*, in Colin M. De La Rue, *"Liability for Damage to the Marine Environment"* (hereinafter W. A. O'Neil), p. 23.

convention, whose interests are affected or are likely to be affected of the actions taken or intended to be taken.

The first line of defense in the event of an oil pollution emergency is often recognized to be a viable national response strategy.<sup>68</sup> Therefore the convention imposes an obligation to establish a national system for responding promptly and effectively to oil pollution incidents. Each party has to establish, as a part of contingency planning, either individually or through bilateral or multilateral co-operation and, as appropriate, in co-operation with the oil and shipping industry, port authorities and other relevant entities:

- a minimum level of pre-positioned oil spill response equipment, proportionate to the risk involved, and programs for its use;
- a program of exercises for oil pollution response organizations and training of relevant personnel;
- detailed plans and communication capabilities for responding to oil pollution incidents;
- a mechanism or arrangement for coordinating response to oil pollution incidents with capabilities to mobilize the necessary resources.

The convention underlines the importance of international co-operation in responding to an oil pollution incident. The lack of adequate resources and technical infrastructure can often be a problem when preparing for and responding to an oil pollution emergency. Therefore the parties have undertaken to co-operate and provide advisory services, technical support and equipment at the request of any other party affected or likely to be affected by a particular incident.<sup>69</sup> A party's response to such a request is however subject to its economic strength and the availability of relevant resources. The party in question also only needs to comply with its undertaking "when the severity of the incident so justifies", which basically means that a party can refuse assistance because it considers the incident not being severe enough.

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<sup>67</sup> OPRC, Article 1(1).

<sup>68</sup> W. A. O'Neil, p. 25.

<sup>69</sup> OPRC, Article 7.

## **5 Liability and compensation for damage arising from oil pollution**

Shipowners are liable for damage caused by the negligence of themselves, their servants and agents.<sup>70</sup> But in order to protect the shipping industry this liability has been limited through time. The basic idea behind the limitation of liability was to encourage shipowners to carry on with their business and to get capitalists to keep investing their money in the maritime industry in spite of the frightful perils of the sea.<sup>71</sup> Obviously the conditions of the old days were very different from the ones of today and yet limitation of liability is still accorded to shipowners in a variety of circumstances. Aside from the law in the United States, there appears to be no indication of any strong movement against what seems to be a subsidization of shipping interests.<sup>72</sup>

I will try to sort out the issues of compensation in cases of oil pollution in the following. When it comes to liability for damages from vessel-source pollution there are quite a few instruments that deserve a closer look.

### **5.1 International Convention on Civil Liability for Oil Pollution Damage (CLC) 1969**

As we read above the *Torrey Canyon* incident highlighted the need for rights of coastal states to protect themselves from pollution damages and it led to the implementation of the Intervention Convention. The same incident also raised the question of civil liability for oil pollution damage. As a private law counterpart to the public law Intervention Convention the 1969 CLC was adopted. The purpose of the convention is defined as:

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<sup>70</sup> Oya Ozcayir, p. 210.

<sup>71</sup> Oya Ozcayir, p. 299.

<sup>72</sup> Gotthard Gauci, “*Oil Pollution at Sea - Civil Liability and Compensation for Damage*”, p. 152.

“[...]the need to ensure that adequate compensation is available to persons who suffer damage caused by pollution resulting from the escape or discharge of oil from ships, [...]and] to adopt uniform international rules and procedures for determining questions of liability and providing adequate compensation in such cases”.<sup>73</sup>

There were a lot of questions that needed to be sorted out. For instance, who should be liable for the pollution? What kind of liability should there be? Should there be limits to the liability? Since many different interests were involved a lot of compromising had to take place before the final draft was agreed upon.

The convention applies only to pollution damage caused on the territory, including the territorial sea, of a contracting state and to measures taken to prevent or minimize such damage. Thus the domicile, residence or nationality of the defendant has no bearing whatsoever in this case. It applies to seagoing vessels of any type carrying oil in bulk as cargo. Thus dry cargo ships, as well as ships on rivers and lakes, are not covered. Under the convention oil means any persistent oil such as crude oil, fuel oil, heavy diesel oil, lubricating oil and whale oil, whether it is carried on board the ship as cargo or in the bunkers of the ship. The convention covers both incidental and intentional discharges. Pure threat situations are not covered. There are three fundamental elements of the CLC, namely strict liability, higher limits of liability and compulsory insurance.<sup>74</sup>

### *5.1.1 Strict liability*

The traditional concept of liability based on fault is abandoned by the CLC. The convention instead imposes strict liability on shipowners for oil pollution damage. There is no liability placed upon any other person. The liability of the shipowner does not depend on his residence or domicile or even on the state in which the ship is registered. So even if the flag state is not a party to the convention, the

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<sup>73</sup> 1969 CLC, Preamble.

<sup>74</sup> Mans Jacobsson, “*The International Convention on Liability and Compensation for Oil Pollution Damage and the Activities of the International Oil Pollution Compensation Fund*”, in Colin M. De La Rue, “*Liability for Damage to the Marine Environment*” (hereinafter Mans Jacobsson), p. 40.

shipowner is still liable. There are only a few particular cases in which the owner can be exempt from liability, namely if he proves that the damage:

- resulted from an act of war or a grave natural disaster; or
- was wholly caused by sabotage by a third party; or
- was wholly caused by the failure of authorities to maintain lights or other navigational aids.<sup>75</sup>

The convention states that no claim for compensation damage shall be made against the owner otherwise than in accordance with the convention. Accordingly, if an incident is covered by the convention, it is not possible to bring a claim against the owner under general principles of law. If the damage suffered within the scope of the convention would for some reason be exempted from liability, there would be no remedy against the owner.

The introduction of strict liability was only agreed upon after very delicate negotiations. Replacing a fault liability by a strict liability may not seem as such a big deal today, but in 1969 the maritime world was fairly conservative and strict liability was a major innovation. It has definitely helped in strengthening the position of victims of oil pollution.<sup>76</sup>

### *5.1.2 Limitation of liability*

As is traditional in maritime law, the shipowner is entitled, under certain conditions, to limit his liability to an amount linked to the tonnage of the vessel. If there is no actual fault or privity by the owner he is entitled to limit his liability in respect of any one incident to an aggregate amount of 2000 gold francs for each tonnage of the ship. The amount cannot exceed 210 million francs. The gold franc was supposed to be converted into local currency and it was thought of to be fair in measuring the limits of liability. A major flotation of the world currencies occurred however, and conversion of the gold franc at an official rate was destroyed. A protocol to the 1969 CLC was adopted in 1976 and it established that the gold franc should be replaced by Special Drawing Rights (SDR) as

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<sup>75</sup> 1969 CLC, Article III (2).

defined by the International Monetary Fund (IMF). The limitation amounts in SDR are 133 and 14 million respectively.

In order for the shipowner to use the benefit of limitation of liability, he has to set up a fund for the total sum representing the limit of his liability with the court or other competent authority of any one of the contracting states in which action has been brought. He can do this either by depositing the sum or by producing a guarantee that is acceptable to the court. If he is granted right of limitation, the fund will be distributed among the claimants proportionally.

### *5.1.3 Compulsory insurance*

The owner of a tanker carrying more than 2000 tons of persistent oil is obliged to maintain insurance to cover his liability. Legal action can thus be brought directly against the insurer. The owner does not have to be insured beyond the amount to which he could limit his liability. Every ship has to be issued with a certificate attesting that insurance or other financial security is in force in accordance with the convention. The certificate will be issued by an authority of the flag state after determining that the requirements have been complied with. The obligation to maintain a financial security certificate not only applies to ships in contracting states, but also to ships that are registered in non-contracting states and wishes to trade to a contracting state.

As stated above, proceedings may be brought directly against the insurer. The insurer can limit his liability to the amounts mentioned above. His right to limit is absolute. Even if there would be a case of actual fault or privity of the owner, the insurer can still limit his liability. The insurer has all the defenses, which the owner could have invoked, except for bankruptcy and winding-up of the business. In addition the insurer may avail himself of the defense that the pollution was a result of willful misconduct of the owner.

### *5.1.4 What has the 1969 CLC done for the victims of oil pollution?*

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<sup>76</sup> Mans Jacobsson, p. 41.

The three key elements of the convention, the introduction of strict liability, of higher limits of liability and of compulsory insurance, have together with the right of direct action against the insurer, definitely contributed to the improvement of the position of oil pollution victims.<sup>77</sup> It is now a great deal easier for the victims to get some kind of compensation for their damages. In addition, the need for litigation in oil pollution cases has also been reduced.

## **5.2 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FC) 1971**

Already at the time of the adoption of the CLC it was recognized that the regime of compensation established in the convention was insufficient. A majority of the parties involved were in favor of combining the strict liability for the shipowner found in the CLC, with liability for the cargo interests in the form of a fund.<sup>78</sup> IMO was requested to elaborate a draft for a compensation scheme based on the existence of an international fund. Such a scheme, known as the 1971 FC, was adopted. The main functions of the convention are to fully and adequately compensate the victims under a system based on the principle of strict liability and to indemnify the shipowner for a portion of his liability under the CLC. The convention establishes an intergovernmental organization financed by the oil industry to administer the system of compensation created by that convention, namely the International Oil Pollution Compensation Fund (IOPC Fund). A state that becomes a member of the FC becomes at the same time a member of the IOPC Fund. Membership of the FC is only open to states that are parties to the CLC.

The 1971 FC has the same scope as the 1969 CLC; it applies to damage caused on the territory, including the territorial sea, of a contracting state and to measures taken to prevent or minimize such damage. The flag of the ship is irrelevant. There are four main elements in this convention, which are; supplementary compensation for victims, indemnification of the shipowner for part

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<sup>77</sup> Mans Jacobsson, p. 41.

of his liability, establishment of an intergovernmental organization to administer the system of compensation and a financing system.<sup>79</sup>

### 5.2.1 *Supplementary compensation*

The IOPC Fund will pay compensation to any person suffering oil pollution damage in an IOPC Fund member state, if that person is unable to obtain full compensation under the CLC for one of the following reasons:

- No liability for pollution damage arises under the CLC because the owner invokes one of the exemptions from liability under that convention.
- The owner is financially incapable of meeting his obligations under the CLC and his insurance is insufficient to satisfy the claims for compensation for pollution damage.
- The damage exceeds the owner's liability under the CLC.

The last reason is by far the most common.

There is a maximum amount payable under the CLC and the FC. In respect of any one incident the limitation is 900 million gold francs, which equals 60 million SDR.<sup>80</sup> The amount of compensation recovered under the IOPC Fund is calculated by subtracting the amount of compensation actually recovered under the CLC.

### 5.2.2 *Indemnification of the shipowner*

The indemnification of the shipowner for part of the total amount of his liability under the CLC was part of a political compromise. It was a *quid pro quo* for shipowning nations accepting strict liability, higher liability limits and compulsory insurance.<sup>81</sup> It was in principle supposed to relieve the shipowners of the additional financial burden put on them by the CLC. The FC does, however, not

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<sup>78</sup> Oya Ozcayir, p. 219.

<sup>79</sup> Mans Jacobsson, p. 42.

<sup>80</sup> The maximum was originally set to an amount of 450 million gold francs. See chapter 5.1.2 on SDR.

<sup>81</sup> Mans Jacobsson, p. 44.

indemnify the owners for the whole of the increased liability, but only about half of the increased amount.

### *5.2.3 Organization of the IOPC Fund*

The IOPC Fund was set up to administer the system of compensation. The IOPC Fund is not technically a United Nations specialized agency, but it does have most of the features of such an agency. You might think that the IOPC Fund is part of IMO, but it is a totally independent organization.

There are very few provisions in the FC relating to the functions of the IOPC Fund in dealing with claims for compensation. This was, to a large extent, left to be set out in internal regulations to be adopted by the IOPC Fund Assembly. This has greatly contributed to making the contribution system work smoothly.

### *5.2.4 Financing of the IOPC Fund*

The IOPC Fund is financed by persons who receive crude oil and heavy fuel oil by sea transport in member states. Every year the member state has to give to the Fund the name and address, as well as the quantity of oil received, of any person in that state who is liable to contribute to the Fund. The contributions are payable directly to the IOPC Fund by the individual contributors. A state is not responsible for the contributions getting there unless it has assumed such responsibility. What the level of contribution will be varies from year to year depending on the payments of compensation.<sup>82</sup>

When this fund was set up, the concept of an international fund was something new and there were fears that the money required to compensate the victims was going to be difficult to collect. These fears have proven to be totally unjustified however, the oil industry has generally responded in a remarkable manner.

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<sup>82</sup> I will give you an example of how much it can vary from year to year. The contribution for 1million tons of oil was in 1983 over 26000 Pounds. This can be compared to the following year when the contribution was zero. *See* Mans Jacobsson, p. 46.

### 5.2.5 Are oil pollution victims better off now?

When the FC was adopted it was an innovation in international law. The fund is basically a mutual insurance company for oil pollution incidents set up by governments but financed by the oil industry. The system of compensation established by the CLC and the FC has worked extremely well. The IOPC Fund has created a system for fast payment of compensation to victims of oil pollution and it has managed to do so at a low cost. In addition, it has contributed to the harmonization of law and legal practice in the field of oil pollution damage and compensation. Together the CLC and the FC provide for an adequate cover for oil pollution damage.

### 5.3 Revision of the 1969 CLC and the 1971 FC

Only four years after the FC entered into force a revision of the CLC/FC system was initiated. There were two main factors that prompted this revision. The first one was inflation. Since the adoption of the conventions the inflation had led to an erosion of the limitation amounts to such an extent that they were no longer thought of as sufficient compensation in case of a major incident.<sup>83</sup> The second one was the *Amoco Cadiz*. The results of this disastrous oil spill were taken as evidence that the assumptions with regard to the inadequacy of the limitation amounts set out in the CLC and the FC were correct.

An international conference was held in the spring of 1984 and two protocols were adopted. The 1984 Protocols provide higher limits of liability and a wider scope of application than the original conventions. I will not go into details about these protocols, but solely focus on the limitation amounts. At the conference there was a number of different views of the “proper” way of changing the limitation amounts. Some states wanted to increase the shipowner’s liability up to the maximum of 30 million SDR and some as high as 120 million SDR. There were also different opinions of how fast the maximum should be reached and of

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<sup>83</sup> Magnus Goransson, “*The 1984 and 1992 Protocols to the Civil Liability Convention, 1969 and the Fund Convention, 1971*”, in Colin M. De La Rue, “*Liability for Damage to the Marine Environment*” (hereinafter Magnus Goransson), pp. 71-72.

the size of the ship when this would happen. Another issue was what tonnage should constitute a “small ship” and what minimum limit should apply. The proposals for the maximum amount available under CLC/FC differed from 100 to 250 million SDR. The proposal was definitely a true compromise.

The proposal contained the following: A liability of 3 million SDR was introduced in the CLC for ships with a tonnage of less than 5000. For ships above that size the liability per unit of tonnage was increased and the maximum liability would be 59,7 million SDR. This limit would be reached at 140000 tons. The limit in the FC was to be established in two steps. The first step was a limit of 135 million SDR. The second step was that the liability would be increased to 200 million SDR when the amount of contributing oil, which had been received in three member states during the same year, had reached 600 million tons. This two-step approach was an idea introduced by the United States. The approach seemed to have two purposes, the first one being that the conditions for the application of the higher limit would only be met if the US became a party to the instrument and the second that the accession of the US would inspire other states that could contribute to this condition being met to also become parties.<sup>84</sup>

When it came to the entry into force of these protocols there was a lot of discussion of how this should be accomplished. It came down to a compromise here too. For the CLC Protocol to enter into force a minimum of ten states, including no less than six states with a minimum tonnage of one million tons, have to ratify it. The FC Protocol’s entry into force depends on eight states ratifying it.

After the protocols were adopted it seemed as if most delegates were pretty happy with the outcome, but the limited number of ratifications of the protocols pointed in a different direction. Many states that were prepared to become parties waited to see what would happen in the United States. After a while it was obvious that without the US ratification there were very limited chances for the FC Protocol to ever enter into force. What then happened in the US is part of modern history in the field of maritime law. Following the *Exxon Valdez* oil spill

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<sup>84</sup> Magnus Goransson, pp. 72-74.

in Alaska in the spring of 1989, many supporters of the protocols started to believe that liability for oil pollution should not be limited. The United States adopted new legislation, the 1990 Oil Pollution Act (OPA) and rejected the international solutions found in the 1984 Protocols to the CLC and FC.<sup>85</sup> The fact that these protocols would never enter into force was now recognized and a new conference was held in late 1992 under the auspices of IMO.

Two new protocols were adopted. They contained the same substantive provisions as the 1984 Protocols, but lower entry-into-force provisions. The 1992 Protocols require ratification by four states with not fewer than one million units of gross tanker tonnage. The protocols entered into force on 30 May 1996. Apart from the new entry-into-force provisions, there was one main issue that was different from the previous protocols. The 1992 Protocol to the FC sets a cap on contributions to the IOPC Fund payable by oil receivers in any given state. This cap was fixed at 27,5 percent of the total annual contributions. The capping system is however temporary and will cease to apply when the total quantity of contributing oil received during a calendar year in all member states exceeds 750 million tons or on the expiry of a period of five years from the entry into force.<sup>86</sup>

The 1992 protocols have obtained quite a large number of ratifications, which indicates that the international community has found the system of compensation created by the CLC/FC a viable one, providing fast compensation to oil pollution victims.

#### **5.4 The voluntary oil spill compensation agreements**

The *Torrey Canyon* incident did not only stimulate the development of the CLC and the FC, but also two voluntary instruments through which compensation for

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<sup>85</sup> See chapter 6.2 on OPA.

<sup>86</sup> The first condition was met and the system ceased to apply in 1998. See Oya Ozcayir, p. 237.

oil pollution damage is available following oil spills from tankers.<sup>87</sup> The tanker incident occurred at the time when an awareness of the fragility of the earth's environment was growing and a consensus was emerging that the polluter should pay. The instruments that were produced due to these factors are called TOVALOP and CRISTAL.<sup>88</sup> I will only cover the basics of these two instruments since they are no longer in force.

#### 5.4.1 TOVALOP

TOVALOP's full name is Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution and it came into effect in October 1969, when owners of 50 per cent of the world's tanker tonnage became parties to the agreement. TOVALOP is an agreement entered into by tanker owners and bareboat charterers under which the parties agree to assume certain obligations for which they might not otherwise be legally liable. It applies when a participating tanker spills, or threatens to spill, persistent oil, in which case the owner or bareboat charterer will take appropriate action and reimburse governments and others who incur reasonable costs in responding to the incident or who suffer pollution damage.

The responsibility for settling claims under TOVALOP falls to the participating party. The Federation, which administers the agreement, is not itself liable for the settlement of claims and there is no TOVALOP fund money. In the event of a dispute between the claimants and the TOVALOP party the agreement provides for arbitration.

#### 5.4.2 CRISTAL

CRISTAL is short for Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution and it came into effect in April 1971. It was devised to

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<sup>87</sup> I.C. White, "*The Voluntary Oil Spill Compensation agreements-TOVALOP and CRISTAL*", in Colin M. De La Rue, "*Liability for Damage to the Marine Environment*", p. 57.

<sup>88</sup> Lawrence I. Kiern, "*The Oil Pollution Act of 1990 and the National Pollution Funds Center*", in *Journal of Maritime Law and Commerce*, Vol. 25, No. 4, October 1994, p. 507.

serve as a voluntary system for compensating states and persons while they were waiting for the FC to enter into force and at the same time provide compensation supplemental to that available from tanker owners and bareboat charterers under TOVALOP.<sup>89</sup> When the FC came into force in 1978, CRISTAL was changed to be complementary rather than temporary.<sup>90</sup>

For CRISTAL to apply certain criteria must be fulfilled. First, the incident must involve an escape or discharge of persistent oil, or the threat thereof, from a tanker carrying a cargo that is owned, or deemed to be owned,<sup>91</sup> at the time of the incident by a party to CRISTAL. Second, the tanker owner or bareboat charterer first has to pay compensation up to the applicable limit calculated in accordance with TOVALOP. The tanker does not, however, have to be actually entered in TOVALOP. CRISTAL does not apply to incidents that are covered under the FC. It specifically begins to apply when other regimes, such as the CLC and TOVALOP are inadequate. Unlike TOVALOP, CRISTAL itself maintains a fund of money from which claims are met.

#### *5.4.3 The end for voluntary agreements?*

When the 1992 Protocols to the CLC and FC entered into force in May of 1996, it became clear that the two voluntary agreements had served their purpose and it made no sense to have two sets of regimes working parallel to each other. Therefore the agreements were not renewed and they expired on 20 February 1997. Another reason for the discontinuance of these agreements was that they were considered to slow down the progress towards widespread ratification of the 1992 Protocols.

The termination of the agreements means that claimants who suffer oil spill damage as a result of a tanker accident in the future have to rely on the provisions of the international compensation conventions. Therefore it is very important that maritime states at risk from tanker spills ratify these protocols, or there might be

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<sup>89</sup> Oya Ozcayir, p. 228.

<sup>90</sup> Douglas Brubaker, pp. 159-160.

cases where tanker and cargo owners could face an uncertain liability and compensation situation, in the event of an oil spill in a country that has not ratified any of the international conventions.<sup>92</sup> The disappearance of the voluntary agreements will have a significant effect on the handling of oil pollution compensation claims from tankers in non-convention states, since the claim would be brought under the domestic legislation of that state against, in many cases, the only vessel of the company and a flag of convenience company with no assets.<sup>93</sup>

Governments may also be attracted to follow the lead of the United States and enact their own legislation, which will lead to a patchwork of liability and compensation laws around the world. This will obviously hurt the owners, but the major losers are probably going to be the genuine claimants, who might be forced more and more into lengthy and costly litigations trying to get compensation for damages.

As mentioned above, ratification of international conventions is vital and that alone might have been a good enough reason to let go of these voluntary agreements in particular. However, this system of compensation has definitely proven to be a noteworthy example of successful co-operation between industry and governments.

## **6 The position in the United States**

On August 18, 1990, President Bush signed into law the Oil Pollution Act of 1990 (OPA). The new law establishes a comprehensive system of liability, prevention and removal of oil spills. Prior to OPA the law in the US regarding water pollution was often described as a patchwork of overlapping statutes and

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<sup>91</sup> “Owned” is a very broad definition and can include situations where a party to CRISTAL does not actually possess legal title to the oil cargo.

<sup>92</sup> Oya Ozcayir, pp. 232-233.

<sup>93</sup> Oya Ozcayir, p. x.

common-law remedies on both the federal and state levels.<sup>94</sup> OPA is an attempt to bring uniformity to the field of oil pollution. It does not, however, completely repeal existing laws. Prior federal legislation remains in effect except where specifically amended or repealed by OPA. However, OPA is definitely the main federal legislation when it comes to oil pollution today.

Prior to OPA's enactment there were under federal law a number of statutes that dealt with oil pollution. I will briefly discuss a few of them in the following.

### **6.1 Pre-existing law**

Federal legislation addressing oil pollution is not a recent development in the US. Regulation of water pollution began very timidly and expanded only modestly during much of the last century. The first legislation enacted by Congress to reduce pollution damages caused by vessels to the nation's waters was the New York Harbor Act of 1888. The Rivers and Harbors Act of 1899 soon followed and it applied to water pollution in general. It did however not establish any right of recovery at law for the damages caused by the pollution.<sup>95</sup> Next in line was the Oil Pollution Act of 1924, which like its predecessors did not prove to be very effective in preventing pollution of the waters. It did, however, provide penalties for the discharge of oil into the nation's coastal waters, but made exemptions for emergencies, unavoidable accidents and collisions. It was designed to protect the public health and navigation, but not private parties, nor the environment.

Congress became a little bit more ambitious with the enactment of the Federal Water Pollution Control Act of 1948 (FWPCA). Unlike any of the earlier legislation, this act introduced the idea of cooperative federalism into pollution law. The federal government encouraged the states to establish and enforce pollution standards for the nation's waters. This act remained the principal item of oil pollution legislation until OPA entered into force. The FWPCA created

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<sup>94</sup> Colin De La Rue and Charles B. Anderson, "*Shipping and the Environment*" (hereinafter Colin De La Rue and Charles B. Anderson), p. 161.

<sup>95</sup> Lawrence I. Kiern, "*Liability, Compensation, and Financial Responsibility Under the Oil Pollution Act of 1990: A Review of the First Decade*" (hereinafter Lawrence I. Kiern) in *Tulane Maritime Law Journal*, Vol. 24, 2000, p. 502.

a comprehensive federal water pollution program covering a diversity of different areas. It covers both tankers and inland bargers and it applies to spills in the inland navigable waters, the territorial sea, the contiguous zone and the exclusive economic zone. It prohibits, with very limited exceptions, the discharge of any oil in or on navigable waters of the US, its shorelines or its contiguous zone. Civil liabilities are imposed on the owner, operator, or person in charge of the vessel.

## 6.2 OPA

The incident that really got things moving in the US was the *Exxon Valdez* grounding. On March 23, 1989, the *Exxon Valdez* grounded and spilled about 11 million gallons of crude oil into the delicate waters of Prince William Sound off the coast of Alaska. There has probably been at least 20 oil spills around the world larger than this one. For instance, the *Torrey Canyon* spilled three times as much and the *Amoco Cadiz* six times as much oil.<sup>96</sup> However, the spill from the *Exxon Valdez* was the largest oil spill in US history coming from a vessel. The incident attracted enormous news media coverage all around the world and it has become one of the most famous environmental disasters ever. Obviously the spill was devastating for the marine environment in Alaska, but more importantly it changed the way the Americans will deal with oil pollution in the future.

The *Exxon Valdez* incident was a very good example of the chaos that existed in US oil pollution legislation. It proved that a major oil spill could involve several laws, both federal and state. The US Congress had over the years considered a number of measures to combine all state and federal oil spill liability laws into one uniform national program, but never managed to enact anything. It took a major disaster to finally get the ball rolling.

OPA was designed to complement the FWPCA and while comprehensive in scope, it neither preempts state law nor implements the international instruments. It expands the liability and limitation programs of former law and addresses particular concerns respecting prevention and removal programs. Just like the

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<sup>96</sup> Oya Ozcayir, p. 256.

international instruments, OPA channels liability to designated parties and provides a fund to respond for catastrophic losses and for claims, which are not compensated by dischargers.<sup>97</sup> I will in the following focus upon some of the more important parts found in this new act.

### *6.2.1 Liability, defenses and limitations*

The act imposes liability upon the responsible party for a vessel or facility for removal costs and a wide range of damages if oil is, or is threatened to be, discharged into navigable waters, onto adjoining shorelines or into waters within the exclusive economic zone of the United States. The act applies to discharges of “oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse and oil mixed wastes other than dredged spoil”. The term “discharge” is broadly defined to mean “any emission, intentional or unintentional, and includes, but is not limited to, spilling, leaking, pumping, pouring, emitting, emptying, or dumping”. The responsible party’s liability is joint, several and strict. The party responsible for a vessel is in the act defined as “any person owning, operating or chartering by demise, the vessel”. The term “vessel” has a very broad meaning, its definition being “every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel”.

OPA does not impose liability as a responsible party on the cargo owner or the owner of the oil involved in the discharge, unless the owner also is the owner or the operator of the vessel. At the legislative stage there were proposals made that some liability should also fall on the cargo owner, but it proved to be too controversial and no such provision was incorporated in the act. This has later been criticized and it has been pointed out that the cargo owner’s escape from any form of liability is especially noteworthy in the light of the more limited international conventions, which recognize that oil cargo interests should share in

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<sup>97</sup> Thomas J. Wagner, “*The Oil Pollution Act of 1990: An Analysis*”, in *Journal of Maritime Law and Commerce*, Vol. 21, No. 4, October 1990 (hereinafter Thomas J. Wagner), p. 573.

the financial consequences of an oil spill.<sup>98</sup> It has even been suggested that the insulating of the cargo owners from any liability may thwart OPA's overriding purpose, which is to prevent spills, not pay for them once they occur, because without a threat of liability a cargo owner has no real incentive to selectively choose its carriers.<sup>99</sup> However, the cargo owner may in some cases under state law be included in the definition of the responsible party, since the act expressly permits individual states to impose more encompassing liability provisions.

The limits of liability in this act are substantially higher than in the FWPCA. The limit for a tanker of a size between 300 and 3000 gross tons is the greater of \$2 million or \$1200 per gross ton. For a tanker bigger than 3000 gross tons the limit is the greater of \$10 million or \$1200 per gross ton. The limit for a vessel, other than a tanker, over 300 gross tons is the greater of \$500000 or \$600 per gross ton.

OPA's underlying basis of liability is right in line with the international regime reflected in the 1969 CLC and its protocols. The liability for removal costs and damages is strict, but there exists a right to limitation. It is however much easier to break the carrier's right to limit his liability under OPA than it is under general international law. The responsible party's ability to limit liability is very much restricted by certain exceptions. There will be no limitation of liability if the spill was caused by:

- gross negligence or willful misconduct, or
- the violation of an applicable federal safety, construction or operating regulation by the party responsible, its agents or employees or any other person acting pursuant to a contractual relationship with the party responsible.<sup>100</sup>

Most accident resulting in an oil spill also involve some kind of breach of federal regulation, thus it will be fairly easy to lose the ability to limit liability. The liability

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<sup>98</sup> Colin De La Rue and Charles B. Anderson, p. 180.

<sup>99</sup> Marva Jo Wyatt, "Financing the Clean-up: Cargo Owner Liability for Vessel Spills", in University of San Francisco Maritime Law Journal, Vol. 7, No. 2, Spring 1995, p. 353.

<sup>100</sup> OPA, S. 1004.

will also be unlimited if the responsible party fails to report the incident or if he does not cooperate with the officials in a clean-up process.

As mentioned above, OPA does not preempt the individual states from imposing additional liability. According to Section 1018 nothing in the act shall affect or be construed or interpreted as preempting the authority of any state from imposing any additional liability or requirements with respect to the discharge of oil within such state or any removal activities in connection with such a discharge. This means that, in more cases than not, there will be state legislation co-existing with OPA and the owner will in many cases face unlimited liability under the state laws.

The act provides very limited defenses to liability. The party responsible is exonerated from liability for removal costs or damages if he can establish by a preponderance of the evidence that the discharge or substantial threat of a discharge of oil was caused solely by:

- an act of God;<sup>101</sup>
- an act of war;
- an act or omission of a third party; or
- any combination of the above.

The requirement that the discharge has to be caused *solely* by any of the acts mentioned above restricts the application of defenses to liability immensely. If the party responsible contributed to the discharge with the slightest negligence there will be no defense to liability. Thus it is very hard, almost impossible, to establish a defense to liability under OPA.

### 6.2.2 Damages

There are six categories of recoverable damages that the responsible party may be liable for. They are the following:

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<sup>101</sup> An act of God is defined as unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable and irresistible character the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

- National resources; this includes injuries to fish, wildlife, water and a number of other resources. The cost of restoring and rehabilitating the damaged natural resources is recoverable, as well as the diminution in value of those resources. Claims in this category can only be brought by the federal government, by state governments or Indian tribes where they control resources and in rare cases by foreign governments.
- Real or personal property; this category includes economic loss, which is a definite departure from general law. Under OPA pure economic losses will be recoverable even when there is no claim for physical loss.
- Subsistence use of natural resources; you do not have to be the owner of destroyed natural resources to claim recovery; the fact that you used them is enough.
- Revenues; governmental claimants may recover for loss of taxes and other fees resulting from injuries to real or personal property or to natural resources.
- Profits and earning capacity; loss of profits and impairment of earning capacity due to the damages are covered under this category.
- Public services; governmental claimants may recover costs incurred because they had to provide additional services, such as fire and health prevention during removal activities.

### *6.2.3 Financial responsibility and the Oil Spill Liability Trust Fund*

Owners and operators of vessels are required to establish and maintain evidence of financial responsibility that are sufficient to meet their potential liabilities for oil discharge under OPA. There are several ways to establish financial responsibility, such as for example insurance, surety bonds, letters of credit or guarantees.

The US Coast Guard is mandated to promulgate regulations that implement the financial responsibility requirements. They developed a system where you

obtain a certificate of financial responsibility if you fulfill the requirements. This certificate is a precondition of entry to or departure from the United States.<sup>102</sup>

OPA established the Oil Spill Liability Trust Fund (OSLTF) to pay for fast oil removal and unrecovered damage. Funding for the OSLTF derives primarily from a 5 cent per barrel tax on imported and domestically produced oil.<sup>103</sup> The fund has a power to spend up to \$1 billion per incident. Within that limit expenditures for natural resource damages cannot exceed \$500 million. The OSLTF's main function is to provide funds for oil pollution removal activities and compensation for damage where an oil discharge affects or threatens US waters. Claimants that seek compensation must first turn to the party responsible and if that claim is not paid voluntarily, the claimant can choose between presenting the claim to the fund or to sue the responsible party. If he would choose to sue, he must refrain from seeking recovery from the fund while the action is on foot.

Although one of the fund's main purposes is to compensate claims quicker than the courts, it is not very clear if it does in fact speed up the process all that much. Since we are dealing with damages to natural resources, most cases will be pretty complicated due to the difficulty in assessing those types of damages.

#### *6.2.4 Prevention and removal*

OPA aims to modify existing legislation on prevention of spills and removal of oil. As a result of the *Exxon Valdez* accident there are now provisions in the act that deals specifically with identifying potential and current license holders with drug and alcohol problems.<sup>104</sup> The act provides for comprehensive licensing procedures of sea-going personnel to ensure that persons with drug and alcohol problems do not obtain or continue to hold merchant mariner licenses. Existing license holders must undergo periodic and random drug testing.

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<sup>102</sup> Oya Ozcayir, pp. 270-271.

<sup>103</sup> Colin De La Rue and Charles B. Anderson, pp. 196-198.

<sup>104</sup> The captain of the *Exxon Valdez* was charged with operating a vessel while intoxicated and charges were also brought against some of the crewmembers because they had been drinking ashore just before the ship sailed.

The government of the United States is under OPA allowed to evaluate the manning, training, qualifications and other standards of a foreign country that issues documents for any tanker that operates in the exclusive economic zone of the US where there is an accident to the marine environment.<sup>105</sup> The standards of the foreign tanker must be equivalent to those in the US or to international standards accepted by the US. If it is determined that a country has failed to maintain or enforce equivalent standards, vessels that are issued with documentation by such country will be prohibited from entering the US. An interesting point is that compliance with international standards is not enough; the international standards must be accepted by the United States. Thus, the American view must be that international standards are not always acceptable.

One part of OPA that got enormous media attention was the introduction of the double hull requirement for new tankers over 5000 gross tons. This was yet another result of the *Exxon Valdez* incident. Following the accident a committee was established to investigate it. The committee presented several tanker designs that could be used to prevent future oil spills. It was also concluded that the primary cause of serious oil spill incidents was grounding. On the basis of these facts it was concluded that for the prevention of major oil spills the most cost-effective solution was to fit tankers with double hulls. Therefore OPA contains a requirement for tankers carrying oil in US waters or the exclusive economic zone to have double hulls. There is a gradual, 25-year phase out for existing single-hulled tankers. If a vessel is less than 5000 gross tons it will be exempted from the double hull requirement, as long as it is equipped with approved double containment systems.

Under OPA there is a provision that empowers the President to remove a discharge and to mitigate or prevent a threat of a discharge, to direct or monitor all federal, state and private removal actions and, if necessary, to remove or destroy a vessel discharging or threatening a discharge.<sup>106</sup> The President has to ensure that effective and immediate removal action is undertaken. He has to act in

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<sup>105</sup> OPA, S. 4106.

accordance with the National Contingency Plan (NCP),<sup>107</sup> which is designed to provide for efficient, coordinated and effective action to minimize damage from oil discharges, including containment, dispersal and removal of oil. The President is obviously not the only one that has to act in accordance with this plan; the owner or operator also has to act accordingly and immediately. Apart from the party responsible, any person involved in the removal of oil consistently with the NCP is exempt from liability for removal costs and damages. This exemption is very important since it encourages salvors and clean-up operators to assist at oil spills in which they otherwise might not have taken any part of due to the great risks involved.

#### *6.2.5 Penalties*

OPA increases both the criminal and civil penalties for oil discharges. Any person in charge of a vessel must immediately notify the appropriate US agency in case of a discharge. The notification must be made as soon as he has knowledge of the discharge or the fine will be \$250000<sup>108</sup> or up to five years imprisonment or both. Any violations of the prohibitions of oil discharge are subject to criminal penalties. They range from \$2500 to \$250000 and up to 15 years imprisonment, depending on the severity of the crime.

An owner, operator or person in charge of a vessel from which oil is discharged or who fails or refuses to comply with any issued regulation may be assessed for a civil penalty.<sup>109</sup> The civil penalty for oil discharges can be as high as \$3000 per barrel of oil, which obviously can add up to a significant amount very quickly. If the owner would fail to undertake removal action under the order of the President, he will face a penalty of \$25000 per day of violation or three times the cost incurred by the Fund as a result of such failure. In other words, it can be very costly not to comply with all the regulations set out.

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<sup>106</sup> Thomas J. Wagner, pp. 576-577.

<sup>107</sup> The NCP was originally adopted pursuant to the FWPCA.

<sup>108</sup> This amount is for an individual; if it would be an organization the amount would be \$500000.

<sup>109</sup> Oya Ozcayir, pp. 279-281.

### **6.3 Conclusion**

A decade has gone by since OPA was signed into law and it is clear that the act has not fulfilled the complete measure of its promise. There is however a substantial improvement in the damage to the US environment caused by vessel-source oil pollution.<sup>110</sup>

One of the most noticeable aspects of OPA is that it has thrown the whole future of liability and compensation for oil spills into question, since under the act and the individual state laws, a tanker owner now can face unlimited liability in the event of an oil spill in US waters, even where there is no negligence on his part.

Many of OPA's goals have been reached, but there is one major deficiency of the act, namely the failure to promote a uniform national and international approach through its relationship with domestic and international laws. OPA's relationship with international law will be examined more thoroughly in the following.

## **7 US legislation versus international law**

The United States is often one of the main forces when new international treaties are under development, but unfortunately they will not always ratify the final product. Of the international conventions mentioned throughout this paper, the US has failed to ratify UNCLOS and the CLC/FC. There are also some amendments to already ratified conventions yet to be ratified.<sup>111</sup> As mentioned above, one of the main flaws in OPA is the fact that it does not comply with all the international rules covering the same field. Below, I will try to show a few of the main differences between US legislation and international regulations with respect to vessel-source oil pollution.

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<sup>110</sup> Lawrence I. Kiern, p. 589.

## 7.1 Liability

One of the greatest disappointments of OPA is the failure of Congress to make provision for the US to adopt the CLC, the FC and their protocols. In fact, the act itself states that it is in the best interest of the United States to participate in an international oil pollution liability and compensation regime that is at least as effective as federal and state laws in preventing incidents and in guaranteeing full and adequate prompt compensation for damages resulting from incidents.<sup>112</sup> As a practical matter, however, ratification of these international conventions seems to be impossible. Ratification would have been possible only if the amount of the vessel owner's liability under OPA would not have exceeded the amount imposed by the 1992 Protocols to the CLC. The act's higher limits and the potential for unlimited liability under state law put the international conventions in a position where they will never be considered as effective as OPA and thus make their ratification impossible. So instead of making the US participate in international regimes relating to oil pollution liability, OPA has the opposite effect and puts the US alone and outside the international arena.

Participation of the US is in most cases crucial for the success of international legal efforts and during the negotiations of the 1984 Protocols it was the leadership from the US that led the international community to increase liability limits and international shipping standards.<sup>113</sup> Despite the active role in the negotiations, the US did not ratify the protocols. A great opportunity might have been lost here for the US, who could have taken a lead within the international community in framing a response to oil spills that could be both practical and universally accepted.

If the protocols would have been implemented, access to a multimillion-dollar international fund, financed by mandatory oil company contributions, would have been possible. By failing to tie the protocols to the act, Congress effectively

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<sup>111</sup> See chapter 7.2 on MARPOL 73/78 amendments.

<sup>112</sup> OPA, S. 3001.

<sup>113</sup> Oya Ozcayir, pp. 281-282.

relieved the petroleum interests of substantial financial obligations.<sup>114</sup> Oil cargo interests were able to pull off the remarkable coup of escaping any form of liability under OPA for oil discharges, despite considerable opposition from certain directions. This puts the US oil cargo interests in a totally different situation than those that are parties to the international instruments.

The US Congress had a great opportunity to clear up the confusion concerning liability under federal and state laws when it passed OPA, but instead it made things more complicated by failing to promote a uniform national and international approach. The failure to enact legislation compatible with the international conventions will undoubtedly weaken the influence of the US in the negotiation of future maritime treaties.<sup>115</sup>

## **7.2 Double hull requirement**

At first sight the requirement in OPA of double hulls might seem compatible to the requirement that was added on to Annex I of MARPOL 73/78 in 1992. This is, however, very deceiving. The regulation in MARPOL 73/78 differs significantly from the standards set out in OPA. OPA requires all new tankers to be equipped with a double hull when operating in US waters or in the exclusive economic zone of the US, while MARPOL 73/78 allows for tankers to be fitted with double-sided hulls. MARPOL 73/78 also permits other methods of design and construction to be accepted, provided that they ensure the same level of protection against pollution in the event of a collision or stranding.<sup>116</sup>

After OPA was signed into law, the US proposed to IMO an amendment to MARPOL 73/78, which would make the double hull construction standard found in OPA a requirement for all new tankers. IMO conducted a major study and, among other things, compared the double hull and the mid-deck designs. The

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<sup>114</sup> Thomas J. Wagner, p. 586.

<sup>115</sup> Antonio J. Rodriguez and Paul A.C. Jaffe, "The Oil Pollution Act of 1990", in *Tulane Maritime Law Journal*, Vol. 15, 1990, pp. 24-25.

<sup>116</sup> Akintayo A. Ayorinde, "Inconsistencies Between OPA '90 and MARPOL 73/78: What is the Effect on Legal Rights and Obligations of the United States and Other Parties to MARPOL 73/78?", in *Journal of Maritime Law and Commerce*, Vol. 25, No. 1, January 1994 (hereinafter Akintayo A. Ayorinde), p. 76.

conclusion was that the two designs could be considered as equivalent, although each gives better or worse outflow performance under certain conditions. Therefore the mid-deck design was to be allowed as an alternative to the double hull, as well as future methods of design and construction, provided that they possess the same level of protection. This was not at all what the US had had in mind and therefore declared that the express approval of the US government would be necessary before the new regulations of MARPOL 73/78 would enter into force for the US.

Since the regulations now have entered into force for many states, it puts the US in a tricky situation. Should they allow a double-sided hull tanker belonging to a party of MARPOL 73/78 access to US waters? If they do, does this violate OPA, and would it violate US treaty obligations if they did not? I guess only time will show how hard the US will actually be on enforcing the double hull regulation found in OPA. MARPOL 73/78 is a global treaty and the US was a leader in the elaboration of both the original convention and its 1978 protocol. Over the years the US has been a leader in its implementation, so it would definitely be a major set-back in the development of international maritime law and environmental protection if the US would decide to implement the double hull requirement set out in OPA.

Article 211 of UNCLOS requires states to establish international rules and standards concerning vessel-source oil pollution. The practice of states has effectively established as customary international law the coastal states' jurisdictional powers. A coastal state may not adopt laws and regulations, which relate to design and construction standards, other than generally accepted international standards. This is a principle of law that has evolved into customary international law. So even though the US is not a party to this convention, they would be violating such principle by not allowing tankers with "equivalent standards" to enter US waters.<sup>117</sup>

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<sup>117</sup> Akintayo A. Ayorinde, p. 93.

The best thing for the US to do would be to adopt the double hull standards or other equivalent measures as required under MARPOL 73/78, because then both OPA and MARPOL 73/78 could be effectively implemented.

### **7.3 Irreconcilable differences?**

OPA is probably the harshest oil pollution legislation to this date. An unusual wide range of damages is recoverable under the act, it imposes considerably higher limits of liability on a shipowner than the international conventions do and it allows for potentially unlimited liability against the shipowner. Without limited liability there is a serious fundamental conflict between US law and the international approach of shared liability.<sup>118</sup> The act does not, however, put any form of liability on the oil cargo interests, which is pretty remarkable considering that even the more limited international conventions have recognized that oil cargo interest should share in the financial consequences of an oil spill.

OPA has stricter rules concerning the construction of tankers, which puts the US in a difficult situation in relation to the international community. If OPA would be followed literally, ships that are actually complying with international regulations might be denied entry into US waters and this would obviously put a great strain on the relationship between the US and the rest of the maritime world.

Many of the international conventions addressing the marine pollution problem would probably have been much more widely accepted and enforced if the US, which always plays a vital part in developing them in the first place, would then also choose to accept them. If an international convention no longer can provide the necessary protection of the marine environment, then newer and better measures should definitely be developed. The environment would, however, be the winner if this were to be done internationally and not unilaterally.

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<sup>118</sup> Edgar Gold, "Marine Pollution Liability After "Exxon Valdez": The U.S. "All-Or-Nothing" Lottery!", in *Journal of Maritime Law and Commerce*, Vol. 22, No. 3, July-October 1991, p. 436.

## 8 Conclusions

We have come a long way since the first careful steps made towards the protection of the marine environment from oil pollution. In 1926 the first attempts were made to internationally regulate maritime oil pollution and today it is one of the most highly regulated areas at the international level.<sup>119</sup> The international regulations concerning vessel-source oil pollution have been successful, at least to a certain extent. Even though they are not without their fair share of imperfections, the improvement of the marine environment is substantial and the scenario without them would have been a lot worse.

In the international arena of marine pollution, some sides play a more important role than others and their contribution in providing IMO with new proposals for action, and in enforcing the outcome of such action, is crucial. One of the most important players in this field is the United States, who as an economic and political superpower can influence the position of other states.<sup>120</sup> The US always plays a very important role during the discussions of any issue lying before IMO and tries very hard to achieve standards, which ensure a high level of safety and environmental protection according to the American interests. The eagerness shown at the preparatory stages is, however, not backed up by the same eagerness for the implementation of these standards within US waters. The US often applies stricter standards than those achieved through IMO. This practice of the US, even though it might be in conformity with international law, undermines the work of IMO and disregards what is considered acceptable by most of the maritime world. One of the ultimate goals of IMO is to achieve a commonly agreed standard of safety and pollution prevention through understanding and mutual consent.<sup>121</sup> Unfortunately the US has, in a number of

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<sup>119</sup> Emeka Duruigbo, pp. 68-69.

<sup>120</sup> G.P. Pamborides, *“International Shipping Law – Legislation and Enforcement”* (hereinafter G.P. Pamborides), p. 114.

<sup>121</sup> G.P. Pamborides, pp. 127-128.

cases, decided that the best way to protect its own interests is to proceed unilaterally rather than internationally.

The major defect of international law is not only that nations are failing to ratify conventions, protocols and amendments, but also that when they do in fact ratify these instruments, they may not comply with them anyway.<sup>122</sup> This brings us to one of the definite downsides of international law, which is that it is chronically weak on enforcement. There is no doubt that the greatest problem of controlling oil pollution is that of enforcement, as it is one thing to establish specific rules, but an entirely different thing to ensure that the offenders will be detected, identified and sanctioned. A lot of states refrain from enforcing international oil pollution standards because it might not be in their best interest and they do not give a lot of consideration to the interest of others. Making international law more relevant requires the cooperation of the vast majority of the international community and this can only be achieved by recognizing the role that states' interest play in the effectiveness of the international legal system and accommodate them.<sup>123</sup> The success of any international instrument depends on the compliance of the states.

MARPOL 73/78, which is described as the most ambitious international treaty covering maritime pollution ever adopted, is a good example of how important compliance and enforcement is to international regulations. The drafters of the convention expected that it would result in “the complete elimination of intentional pollution of the marine environment by oil and other harmful substances and the minimization of accidental discharges of such substances”, but the reality some 25 years later is still far from the predicted achievement, largely due to the failure of obtaining the desired compliance by the states. Effective international law requires states not just to accept, but also to implement, conventions and protocols.

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<sup>122</sup> William Tetley, “*International Maritime Law – Uniformity of International Private Maritime Law – The Pros, Cons, and Alternatives to International Conventions – How to Adopt an International Convention*”, in *Tulane Maritime Law Journal*, Vol. 24, 2000, pp. 819-820.

<sup>123</sup> Emeka Duruigbo, p. 81.

Even though international conventions contain some imperfections and there are many difficulties to overcome, it is definitely the way to go when it comes to oil pollution. Marine pollution is a condition, which knows no national boundaries. Too many elements of the situation are transnational. Oil has a tendency to spread quickly over the surface of the sea and may rapidly disperse over an enormous area, damaging the environment in a number of different states. Currents and winds often join in to make the situation very unpredictable.

The discharge of oil into the seas and other navigable waters is an increasingly serious environmental problem and fortunately the need to protect the marine environment is now recognized almost all over the world. Due to the transnational nature of oil pollution we all need to come together if we ever want to solve this problem completely. To show just how many different nations that can be involved in one single incident, I will quote a legal scholar, who put it very adequately:

“A ship may strand on the high seas and cause pollution in two neighboring states, i.e. France and England (as with the *Torrey Canyon* in 1967). She may be owned by a Liberian company, bareboat chartered to a Bermuda company, managed by an English company, time chartered to a Greek company and voyage chartered to an American company. Her cargo may have been sold during the voyage by the American company to a Japanese one. The officers may be English and the crew Indian. The international nature of the shipping business creates such a diversity of interests, with potential conflicts of law and jurisdiction.”<sup>124</sup>

Only through international efforts can solutions be found for the vessel-source oil pollution problem. The nature of maritime business demands international attention. I definitely think that international action has to be the basis for a continued march toward successful protection of the marine environment.

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<sup>124</sup> Abecassis, “*Marine Oil Pollution Laws: The View of Shell International Marine Limited*”, in 8 Int’l. Bus. Law 3 (1980), as cited by Emeka Duruigbo, p. 67.

## List of references

### Bibliography

Ayorinde Akintayo A, Inconsistencies Between OPA '90 and MARPOL 73/78: What is the Effect on Legal Rights and Obligations of the United States and Other Parties to MARPOL 73/78?, *Journal of Maritime Law and Commerce*, Vol. 25, No. 1, January 1994, pp. 55-94.

Birnie Patricia, Protection of the Marine Environment: The Public International Law Approach, in Colin M. De La Rue, *Liability for Damage to the Marine Environment*, 1993, pp. 1-22.

Brown E.D, *The International Law of the Sea*, Vol. I, 1994.

Brubaker Douglas, *Marine Pollution and International Law - Principles and Practice*, 1993.

De La Rue Colin and Anderson Charles B, *Shipping and the Environment*, 1998.

Duruigbo Emeka, Reforming the International Law and Policy on Marine Oil Pollution, *Journal of Maritime Law and Commerce*, Vol. 31, No. 1, January 2000, pp. 65-88.

Gauci Gotthard, *Oil Pollution at Sea - Civil Liability and Compensation for Damage*, 1997.

Gold Edgar, Marine Pollution Liability After "Exxon Valdez": The U.S. "All-Or-Nothing" Lottery!, *Journal of Maritime Law and Commerce*, Vol. 22, No. 3, July-October 1991, pp. 423-444.

Goransson Magnus, The 1984 and 1992 Protocols to the Civil Liability Convention, 1969 and the Fund Convention, 1971, in Colin M. De La Rue, *Liability for Damage to the Marine Environment*, 1993, pp. 71-82.

Jacobsson Mans, The International Convention on Liability and Compensation for Oil Pollution Damage and the Activities of the International Oil Pollution Compensation Fund, in Colin M. De La Rue, *Liability for Damage to the Marine Environment*, 1993, pp. 39-55.

Kiern Lawrence I, Liability, Compensation, and Financial Responsibility Under the Oil Pollution Act of 1990: A Review of the First Decade, *Tulane Maritime Law Journal*, Vol. 24, 2000, pp. 481-590.

Kiern Lawrence I, The Oil Pollution Act of 1990 and the National Pollution Funds Center, *Journal of Maritime Law and Commerce*, Vol. 25, No. 4, October 1994, pp. 487-519.

Mitchell Ronald B, *Intentional Oil Pollution at Sea - Environmental Policy and Treaty Compliance*, 1994.

O'Neil W. A, The International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC), in Colin M. De La Rue, *Liability for Damage to the Marine Environment*, 1993, pp. 23-28.

Ozcayir Oya, *Liability for Oil Pollution and Collisions*, 1998.

Pamborides G.P, *International Shipping Law – Legislation and Enforcement*, 1999.

Rodriguez Antonio J. and Jaffe Paul A.C, The Oil Pollution Act of 1990, *Tulane Maritime Law Journal*, Vol. 15, 1990, pp. 1-28.

Sasamura Y, Prevention and Control of Marine Pollution from Ships, in Alastair Couper and Edgar Gold, *The Marine Environment and Sustainable Development: Law, Policy, and Science*, 1993, pp. 306-324.

Smith Brian D, *State Responsibility and the Marine Environment - The Rules of Decision*, 1988.

Tetley William, *International Maritime Law – Uniformity of International Private Maritime Law – The Pros, Cons, and Alternatives to International Conventions – How to Adopt an International Convention*, *Tulane Maritime Law Journal*, Vol. 24, 2000, pp. 775-825.

Wagner Thomas J, The Oil Pollution Act of 1990: An Analysis, *Journal of Maritime Law and Commerce*, Vol. 21, No. 4, October 1990, pp. 569-587.

White I.C, The Voluntary Oil Spill Compensation agreements - TOVALOP and CRISTAL, in Colin M. De La Rue, *Liability for Damage to the Marine Environment*, 1993, pp. 57-69.

Wyatt Marva Jo, Financing the Clean-up: Cargo Owner Liability for Vessel Spills, *University of San Francisco Maritime Law Journal*, Vol. 7, No. 2, Spring 1995, pp. 353-391.

## **International conventions and other legal instruments**

1945 Statute of the International Court of Justice

1954 International Convention for the Prevention of Pollution of the Sea by Oil

1969 International Convention Relating to the Intervention on the High Seas in Cases of Oil Pollution Casualties

1969 International Convention on Civil Liability for Oil Pollution Damage

1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage

1973 International Convention for the Prevention of Pollution from Ships, as modified by the 1978 Protocol relating thereto

1982 United Nations Convention on the Law of the Sea

1986 Single European Act

1990 International Convention on Oil Pollution Preparedness, Response and Co-operation

TOVALOP - Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution

CRISTAL - Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution

## **US legislation**

1888 New York Harbor Act

1899 Rivers and Harbor Act

1924 Oil Pollution Act

1948 Federal Water Pollution Control Act

1990 Oil Pollution Act

## **Other sources**

<http://www.cornwall-online.co.uk/msw/torrey-canyon.htm> (1 pm, January 5, 2001)

<http://www.imo.org> (3 pm, November 9, 2000)

<http://www.imo.org/imo/convent/summary.htm> (2 pm, January 5, 2001)