MARINE OIL POLLUTION BY SHIPS IN KENYA: LIABILITY AND COMPENSATION

BY

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DECLARATION

I, **GRACE WAIRIMU WAINAINA**, do hereby declare that this is my original work and has not been submitted and is not currently being submitted for a degree in any other university.

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GRACE WAIRIMU WAINAINA

This thesis is submitted for examination with my approval as University Supervisor.

SIGNED: _____

DR. JANE DWASI

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ABBREVIATIONS

COMESA	-	Common Market for East and Southern Africa
DEPI	-	Division of Environment Policy Implementation
EEZ	-	Exclusive Economic Zone
EMCA	-	Environmental Management and Co-ordination Act No. 8 of 1999
GESAMP	-	Group of Experts on Scientific Aspects of Marine Pollution
HNS Fund	-	Liability and Compensation for the Carriage of Hazardous and
ILC	-	International Law Commission
IMO	-	International Maritime Organization
IOPC Fund	-	International Oil Pollution and Compensation Fund
ISM	-	International Safety Management
KMA	-	Kenya Maritime Authority
KNOSRCP	-	Kenya National Oil Spill Response Contingency Plan
KPA	-	Kenya Port Authority
MEPC	-	Marine Environment Protection Committee
NEC	-	National Environmental Council
NEMA	-	National Environmental and Management Authority
OSMAG	-	Oil Spill Mutual Aid Group
UNECE	-	United Nations Economic Commission for Europe
UNEP	-	United Nations Environmental Programme

TABLE OF INTERNATIONAL POLICY AND LEGAL INSTRUMENTS

1. 1954 International Convention for the Prevention of Pollution of the Sea by Oil (London (Oilpol)

2. 1969 International Convention on Civil Liability for Oil Pollution Damage, (Civil Liability Convention)

3. 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties.

4. 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, IOPC(Fund Convention)

5. 1972 Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (Oslo)

6. 1972 Convention on Prevention of Marine Pollution by Dumping of Wastes and other matter (London)

7. 1972 Declaration of the United Nations Conference on the Human Environment (Stockholm)

8. 1973/78 International Convention for the Prevention of Pollution from Ships (MARPOL)

9. 1974 Safety of Life at Sea Convention (SOLAS)

10. 1976 International Convention on Limitation of Liability on Maritime Claims: London (LLMC)

11. 1982 United Nations Convention on the Law of the Sea. (LOSC)

12. 1985 International Convention for the Protection, Management and Development of the Marine and Coastal Environment of the East African Region (Nairobi Convention)

13. 1985 International Convention for Protection of the Ozone Layer (Vienna Convention)

14. 1989 London Convention On Salvage.

15. 1990 Convention on Oil Pollution Preparedness Response, and Co-operation (OPRC)

16. 1992 UN Conference on Environment and Development (Rio Declaration)

17. 1992 United Nations Framework Convention Climate Change (FCCC)

18. 1993 International Convention of Civil Liability Resulting from Activities Dangerous to the Environment (Lugano Convention)

19. 1996 International Convention on Liability and Compensation for Damage in connection with the Carriage of Harzadous and Noxious Substances by Sea (HNS Convention) not yet in force).

20. 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage.

21. 2002 World Summit on Sustainable Development (WSSD Johannesburg)

21. 2007 International Diplomatic Conference on Wreck Removal Convention.

22. Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising Out of Hazardous Activities.

23. OECD Council on Grading Principles Concerning International Economic Aspects of Environmental Policies.

TABLE OF CASES

1) Amoco Cadiz Case: On 16th March 1978

2) Commonwealth of Puerto v. S. S. Zoe Colocotroni

3) Cosmos 954 Accident in Canada 181 ILM 907 (1992)

4) Gabcikovo – Nagymaros Project, Hungary versus Republic, 32 ILM (1993) 1293 Compendium of Judicial Decisions on Matters Related to Environment, Vol. One (1998) 255

5) Rylands v Fletcher (1868 – LR3 – HL – 330)

6) The I'm Alone' 1933 – 1935 Canada – United States: Special Joint Commission: I. C. Green International Law Through The Cases, 4th Edn. 1978 Ocean Publications, Inc, Dobbs Ferry New York, U.S.A. 472

7) The case concerning the Factory at Chorzow (Claim for Indemnity; Merits), PCIJ-Ser. A, No. 17 (1928),47.

8) Trail Smelter Arbitration, 33 AJIL (1939),

TABLE OF STATUTES

1 Environmental Management and Co-ordination Act No. 8 of 1999 (EMCA)

2 Kenya Maritime Authority Bill of 2004 (KMA) Government Printer

3 Kenya Maritime Shipping Act Chapter 389 Laws of Kenya

4 Kenya Port Authority Act (KPA) Chapter 391 Laws of Kenya

5 Marine Insurance Act Chapter 390 Laws of Kenya

6 Marine Pollution Bill of 2003 Government Printer

Introduction:

International concern for environmental degradation is competently demonstrated by various authors across the globe. Specific regimes that have been well documented are *inter alia*, preservation, conservation and sustainable use of the environment. However, sound environmental conservation programmes must go hand in hand with liability and compensation mechanisms. Kenya has in recent years made commendable progress in addressing the prevailing environmental matters culminating in the enactment of the Environmental Management and Co-ordination Act (EMCA) [1].

Kenya however remains at risk of marine environmental damage arising from oil spills by ships along its coastal waters of Mombasa. The risk is further magnified by lack of effective laws and institutions.

The issues that this dissertation will address are threefold; Firstly, is Kenya ready to defend itself against oil pollution damage by ships. Secondly, if not, does Kenya have a liability and compensation legal regime that can adequately cushion consequential environmental damage. Thirdly, if the existing liability and compensation facilities are found to be insufficient this study will give recommendations for improvement.

The rationale for developing a liability and compensation regime is to ensure that the polluter pays for the resulting damage or reinstates the victim to his original economic position. Liability and compensation rules ultimately facilitate environmental conservation

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1. Kenya's framework environmental law entitled the Environmental Management and Co-ordination Act 1999 (EMCA) It came into force on 4th January 2000.

because the polluter will prefer to avoid additional expenses. To this effect, liability and compensation is a fundamental expression of the 'Polluter Pays Principle'. [2]

On 7th April 2005 at Kilindini Habour in Mombasa, an oil spill occurred involving an Indian Tanker christened *M V Ratna Shalini* which hit the Kipevu Oil Jetty and punctured its single hull tank. 150,000 tones of oil spilled into the port waters. [3] This single incident revealed the state of unpreparedness of the emergency response of local oil pollution control actors. The unfolding events that followed have to a large extent inspired this study, and highlighted the need to investigate the adequacy of Kenyan laws concerned with preparedness and the oil pollution emergency response. The spill also confirmed that the Kenyan coast is in danger of oil pollution from ocean going vessels that call at Mombasa with large quantities of oil. Despite measures for the phasing out of single-hull tankers and a new regulation banning carrying of heavy grade oil in single-hull oil tankers entering into force on April 5 2005, Kenya still allows in the ships. [4]

Scope of the Study

Following the *M V Ratna Shalini* oil spill incident, it is safe to conclude that firstly, Kenya lacks effective enforcement of laws concerning prevention of oil pollution damage, secondly, there is no clear cut policy concerning formulation and implementation of a national oil spill response contingency plan and further and thirdly, there is lack of a

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2. Supra note 1, Part 1 Preliminary at page 59
   The Polluter Pays Principle is the latter day evolution of the cardinal English common law doctrine contained in the case of *Rylands v Fletcher* (1868 – LR3 – HL – 330). It states that a person who for his own purposes brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and if he does not, is *prime facie* answerable for all the damage which is the natural consequence of its escape.
3. Saturday Nation, April 9th 2005 at page 4.
4. Marpol 73/78 consolidated Edition 2002 (IMO) Annex 1, Regulation 13 F and 13 G (prevention of oil pollution in the event of collision) at page 76 - 78.

practical liability and compensation legal regime to cater exclusively for environmental damage arising from oil pollution damage. This study will address itself to the three problem areas highlighted hereinabove. The method to be adopted will be to outline the global environmental discourse concerned with oil pollution of ocean waters. This will be followed by establishing the *status quo* both locally and internationally. Noting that even where the most stringent mechanisms are put in place to prevent oil spills such as the one concerning the *M V Ratna Shalini,* accidents will nonetheless occur, this study will move the oil pollution discourse to the next level, and examine pertinent issues involving liability and compensation, both locally and abroad.

The Indian Ocean is a transboundary natural resource, and the scope of international co-operation in combating oil pollution by ships will be examined. The extent to which Kenya has conformed with "the polluter pays principle," [5] "the precautionary principle" [6] due diligence" [7] and " self defence' [8] will also be high lighted.

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5. EMCA, Supra, note 2 at page 59
6. Bergen Ministerial Declaration on Sustainable Development in the ECE Region, May 16 990; U.N. Doc. A/CONF.51/PC/0, Annex 1 (1990). In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific knowledge should not be used as a reason for postponing measures to prevent environmental degradation.
7. Articles 207 and 212 of the 1982 INTERNATIONAL CONVENTION ON THE LAW OF THE SEA (1982 LOSC) The due diligence principle calls on all states to take all measures necessary to prevent and control pollution damage to other states, but it moderates this requirements by allowing use of the best practicable means at their disposal and in accordance with their capabilities, where the risk is to the marine environment in general, rather than to other states. http://www/un.Org/Depts/Los/Convention
8. Article 1 (i) of the 1969 INTERNATIONAL CONVENTION RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF OIL POLLUTION. Coastal states are permitted to take' *"such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests form pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty which may reasonable be expected to result harmful consequences".* http://www//IMO.org/Conventions/Mainframe.asp

The role of insurance in the transportation of oil will be specifically addressed since oil transport is a mobile insurance risk. Most civil liability regimes require an oil operator to establish financial security, usually in the form of insurance to ensure that the risk of an oil spill is covered. [9]

Damage resulting from oil pollution has now been expanded to include loss of life or personal injury; loss of, or damage to property including property which forms part of the cultural heritage; the costs of reasonable measures of reinstatement of the property, or environment, including natural resources; the costs of reasonable response measures and loss or damage by impairment of the environment.[10] The latter category may be classified as "pure environmental damage" [11].

There exists a lacuna concerning liability and compensation of pure environmental damage discourse in Kenya. Whereas financial compensation is readily available for material loss such as life, injury and property through the civil law process, pure environmental damage may be incapable of classification in economic terms. [12] Such damage may be occasioned to flora and fauna existing on the continental shelf, for example

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9. Wu Chao, POLLUTION FROM THE CARRIAGE OF OIL BY SEA: LIABILITY AND COMPENSATION, (1996) Kluwer Law International – London, at page 50.
10. The International Law Commission adopted the definition at its 56th session in 2004, the Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising Out of Hazardous Activities. http://www.imo.org
11. UNEP: Division of Environmental Policy Implementation (DEPI) ENVIRONMENTAL LIABILITY & COMPENSATION REGIMES: A REVIEW, (2003).54. *http://www/unep.Org/depi/ implementationlaw.asp*
12. Gabcikovo – Nagymaros Project, Hungary versus Republic, 32 ILM (1993) 1293 Compendium of Judicial Decisions on Matters Related to Environment, Vol. One (1998) 255
In the case of Gabcikovo – Nagymaros Project on the Danube River, Hungary claimed that Czechoslovakia was under an obligation to "*cease* the internationally wrongful act, *re- establish* the situation which would have existed if the act had not taken place and *provide compensation* for the harm which resulted from the wrongful act." (italics provided.)

to the highly diverse coral reefs, oysters, crabs, sea turtles, pelagic and sedentary fish species, sea grasses and generally, the entire delicate Kenyan marine biodiversity. Cognizance is hereby made of the fact that these biological assets are also founds in Kenya's inland waters, particularly in the Lake Victoria region. However, today the main pollution problems in the Great Lakes are land based and caused by organic residues, suspended matter, toxic wastes, and the biological pollutants. Fertilizers and detergents are increasingly becoming important. The in-organic reducing agents, petroleum products and heat are not yet a big problem but may become so as industrialization proceeds. Some problems with oils disposed of in public sewers, however, are being experienced in places such as Kisumu.[13] Since the thrust of this study relates to oil pollution by ships, this study will restrict itself to the coastal region only.

There may not be any market value for the environmental assets hereinabove mentioned, the pertinent question therefore is how to calculate the economic value that may be incapable of quantification in monetary terms. The parameter so far has been the cost of reinstitution and restoration of the damage arising therefrom. [14] This dissertation's approach to marine oil pollution damage in Kenya will be anthropocentric. The emerging concept of pure environmental damage of the marine ecosystem will also be demonstrated.

Statement of the Problem

Lack of effective legal institutions and policy framework to cater for determination of liability and award of compensation in incidents of oil pollution from ships is undermining the sustainable development agenda at the Kenyan Coast.

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13 REPORT ON LEGAL AND INSTITUTIONAL ISSUES IN THE DEVELOPMENT OF ENVIRONMENTAL STANDARDS *Volume 2* UNEP/UNDP (June 1999) at page 62.

14 Environmental Management and Coordination Act of 1999 Part IX Section 108

Research Questions

1. What constitutes marine environmental damage by oil pollution?
2. What threshold of marine environmental damage might gives rise to liability?
3. What is the status of liability and compensation for oil pollution damage from an international perspective?
4. Is the Kenyan coast at risk of oil pollution damage by ships and if so, who or what is entitled to compensation?
5. Do existing laws adequately provide adequate compensation to victims of oil pollution damage at the Kenyan coast?
6. To what extent do Kenyan laws embrace the polluter pays principle, the precautionary principle, due diligence and self defence?
7. Would the Kenyan economy benefit from improved liability and compensation laws for damage arising from oil pollution?
8. Are there handicaps existing in the enforcement of liability and compensation laws and how can they be overcome?
9. What form of compensation and/or restitution is best suited for oil pollution damage from ships on the Kenyan coast?
10. What is the scope of insurance in liability and compensation for oil pollution damage, especially in cases where the polluter can't meet the full cost or is uninsured?
11. What is the case for "pure environmental damage" in Kenya?

Objectives of the Study

This dissertation will be a point of reference for environmental lawyers who have an interest in coastal economic affairs in Kenya. It will cover legal issues arising from international litigation for recovery of damages suffered by Kenyans through an accidental oil spill caused by foreign oil tankers at the coast. This study will also validate the following points:-

a) That there is a need to review and expand our existing laws to adequately provide for a one point of reference for claims arising out of damage caused by oil pollution.

b) It is necessary to empower parastatals and private companies to carry out defense strategies against loss occasioned by a massive oil spills. Such strategies may include national and regional oil spill contingency plans, well equipped scientific laboratories to assess the extent of environmental damage, electronic surveillance to report and/or receive information regarding oil spill that may occur on the high seas.

c) Local coastal communities should familiarize themselves with beach clean up activities when an oil spill has taken place. Training through drills to mitigate the extent of damage to the environment is one example.

d) Local coastal communities will also be sensitized on their rights to compensation when an oil spill damages their fishing boats, or affects the quality and volume of their fish catches. In this category also are the beach hotel operators whose business may be affected by oil polluted beaches.

e) Kenya should be placed at par with the global oil industry through ratification and domestication of oil pollution and fund conventions and protocols. Such affirmative action will be a guarantee for recovery of full compensation payable for pollution from an oil spill by foreign ships.

f) Insurance companies should be compelled by law to provide for environmental damage in their contracts with oil transporters.

g) The use of port reception facilities [15] should be mandatory for all oil tankers docking at Mombasa port so as to eliminate spillage of oil into sea when flushing and ballasting.

This dissertation will demonstrate the need for the Fisheries Department to assist the National Environmental Management Authority (NEMA) [16] by providing data to quantify the environmental and economic value of fish available on our coastal waters. Similarly, the beach hotels require a readily available data bank to help determine financial losses that may be incurred by their establishments should a major oil spill occur and the beaches become inaccessible.

The establishment of an environmental court conversant with the vulnerability of marine ecosystems would confer international and competent jurisdiction on Kenya to entertain any claim for compensation for oil pollution damage occurring within its Exclusive Economic Zone (EEZ). [17]

This dissertation will further sensitize stakeholders that regular and mandatory contributions to a national kitty under the auspices of the Environmental Restoration Fund would boost NEMA's ability to restore the environment when the polluter cannot be

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15. Annex I Regulation 12 (1) Marpol 73/78 http://www//IMO.org/Conventions/Mainframe.asp
16. EMCA, Supra note 5, NEMA is established by Part III Section 7 of EMCA (1999) as the principle instrument of all policies relating to the environment in Kenya.
17 The Exclusive Economic Zone(EEZ) is defined in 1982 Law of the Sea Convention (1982 LOSC)Article 56.EEZ extends 200 nautical miles form the territorial sea baseline and confers on coastal state sovereign rights over living and mineral resources, and jurisdiction over the protection and preservation of the marine environment.
Kenya ratified the 1982 LOSC in 1994 and delineated the EZZ by appropriate lists of geographical co-ordinates (SK 90 Edition 4 Published by Survey of Kenya, 2004.)

identified. Enhancement of the court fines payable for convictions for spillage of oil should be determined by the volume of oil a polluter as spilled. Such fines should be deposited with the Environmental Restoration Fund Trustees [18]. The polluter should also pay compensation directly to the victim of pollution any amount that is agreed between the parties, or determined through litigation. Effective punitive measures will discourage potential polluters, who will in turn take necessary measures to ensure that the environment is safeguarded.

A clear cut system of determination of legal liability is key to who should pay for the costs involved in pollution clean up and restoration of the damaged environment, and what are the acceptable standards for such clean ups. Enforcement of strict liability is a way of prevailing upon chronic polluters to repair the damage that they have caused or pay for irreparable damage.

The Environmental Management Coordination Act No. 8 of 1999 fell short of exhaustively providing for pure environmental damage, for its own sake. There is therefore a need to expand existing legislation to cater for liability and compensation for pure environmental damage caused by oil pollution by ships in Kenya.

Mutatis mutandis, Kenya should maintain a delicate balance in promoting the internalization of environmental costs through taxation, taking into account that the polluter should ultimately bear the costs, but at the same time safeguard the concept of encouraging both local and foreign investors in the oil industry.

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18 EMCA, Supra note 16 Part III Section 25

Research Methodology

Qualitative research study design will be adopted in this project. Literature search of secondary data sourced from books, journals, newspaper articles on the contemporary state of marine oil pollution will be reviewed. The libraries to be used are the UNEP Headquarters at Gigiri and the Faculty of Law Parklands Campus Library and the University of Nairobi(Case lap)Library. The state of insurance practice in Kenya will gave guidelines as to who are the private actors with financial capacity to venture into this hitherto unexplored business potential in environmental damage, the Commissioner of Insurance office library will be visited. The National Environmental Management Authority headquarters(NEMA)(marine section) and the International Maritime Organization (IMO) at UNEP Headquarters Gigiri will be consulted and personal interviews with key office bearers were conducted. Case law, conventions, treaties, statutes, subsidiary legislation will be examined. Relevant websites on the internet will be visited as the same are expected to yield a global perspective of the intended research. Newspaper reports on oil spills in Mombasa will be quoted.

There is a dearth of material based on compensation and liability currently in force in foreign jurisdictions and how effective implementation has been instrumental in restructuring environmental economies. There are however few, if any, supporting authorities for the many statements that are drawn on the local Kenyan situation. These will be based on the author's evaluation of the circumstances researched on.

Justification of the Study

Although the imposition of liability and compensation laws and regulations is by no means an environmental policy cure-all, liability rules do serve a variety of useful purposes. For example, they serve as an economic instrument providing an incentive to avoid

'environmental damage. In certain areas, they also encourage prevention which may not be covered by existing means. In other words, liability rules provide a technique for internalizing environmental and other social costs into production processes and other activities by implementation of 'the polluter pays principle'. [19] Liability for environmental damage is a positive inducement to prevention, deterrence, restoration and compensation as the case may be. Compliance with recommendations set out in this research will result in reduction in the number of accidents, accidental spills and illegal discharges per ship operating in the region, reduction in insurance rates for ships travelling through the region, creation of reliable and timely provision of financing for the management and operation of the marine electronic highway and environmental information systems and availability of relevant and timely information generated by the regional databases and geographic information systems.

Theoretical Framework

Even where the most stringent regulations are in force, a massive oil spill can occur through an inevitable accident or Act of God. Compensation is essential in the role it plays as a safety net where pollution prevention regulations fall short. Compensation ensures that the victim of pollution is reinstated to his/her original economic position before the damage occurred. The environment by itself may not have a '*voice*' to claim compensation. But damage to the environment will ultimately trickle down to anthropocentric interests. For example, an oil spill will damage sea grass that fish feed on and eventually fishermen will suffer economic losses through diminished fish stocks and catches. Kenyan coral reefs

19 Principle 16 of Agenda 21, Annex 11 to the REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT, Rio de Janeiro, 3rd to 4th June 1992

are among the most valuable ecosystems on earth because of their immense biological wealth and the economic and environmental services they provide. The coral reef provides humans with living resources (such as fish) and services (such as tourism). Many of Mombasa's poorer inhabitants reside within an estimated five kilometers away from the shoreline. They depend directly on reef species for their protein needs. The wide range of environmental services offered by the coral reefs are difficult to quantify, but are of enormous importance to neighbouring inhabitants. Coral reefs ecosystem have even been found to have medicinal value. In recent years, human bacterial infections have become increasingly resistant to existing antibiotics. Scientists are turning to the oceans in the search for new cures for these and other diseases. Coral reef species offer particular promise because of the array of chemicals produced by many of these organisms for self-protection. This potential has only barely been explored. Coral are already being used for bone grafts, and chemicals found within several species appear useful for treating viruses.[20] On the other hand, the Kenyan tourism industry is one of the fastest growing sectors of the economy. Coral reefs are a major draw for snorkelers, scuba divers, recreational fishers, and those seeking vacations in the sun. Kenya has some of the finest and serene beaches in the world.

The challenge therefore is how to utilize these biological assets for the development of the Kenyan coastal economy, but at the same time utilize them sustainably, in order to preserve them for future generations.

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20 REEFS AT RISK. A Map - Based Indicator of Threats to the World's Coral Reefs. Dirk Bryant. et al. United Nations Environment Programme (UNEP) (1998) at page 9.

Sustainable human development is a complex and relative concept involving potentially conflicting interests: economic progress on the one hand and intangible human-centered values such as equity and quality of life on the other; exploitation of natural resources, but also their preservation and regeneration; short-term versus long-term; one's own interests and the interests of one's neighbours.

With regard to oil pollution, Kenya has economic interest in the oil shipping industry on the one hand, and the need to preserve the marine environment on the other hand. To maintain an equilibrium between the economically powerful oil shipping magnates and coastal populations that depend on the marine ecosystems for their sustenance.

From this perspective the law must position itself between the two extremes and act a "buffer zone". The equity and predictability implicit in the law are essential prerequisites of economic development in trade and so on. But the law is also at the basis of social justice and political rights. In this sense it has the two pronged function of curbing the excesses of the oil industry and protecting the rights of those who are marginalized by it, especially the poor and underprivileged.

From a global perspective, the soft law prevailing can be traced to the UN Conference on Environment and Development (Rio Declaration).[21] Issued at the 1992 Earth Summit, the Rio Declaration affirmed the importance of law since it reflects and shapes a society's norms, and is a critical tool for sustainable development. It recognized that in its simplest terms, sustainable development is a matter of social justice-giving what is due to each and every member of society now and in the future. This is the principle of intra and

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21 Supra note. 19, Principle 16 of Agenda 21

intergenerational equity. In this context we can consider a rights-based approach to environmental issues: People have a right to a healthy environment and governments have a duty to ensure that it is not violated.

In line with the international environmental law doctrine of sustainable development, and the Rio Declaration was followed in 2002 by the World Summit on Sustainable Development (WSSD Johannesburg)[22] which upheld that economic development is a basic human right. Development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized (Article 1).

The question at hand therefore is, what is the link between sustainable development and liability and compensation for oil pollution damage?

Recognizing that accidental oil spills will inevitably occur the law has yielded and moved a notch higher by providing for determination of liability and awarding of compensation to victims of oil pollution by ships. Principle 22 of the Stockholm Declaration[23] provides that states are to "cooperate to develop further the international law regarding liability and compensation for the victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such states to areas beyond their jurisdiction." Twenty years later, Principle 3 of the Rio Declaration called on states to develop national law regarding liability and compensation for victims of pollution and other environmental damage, and that states shall also cooperate in an expeditious and more

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22 2002 World Summit on Sustainable Development (Johannesburg) http://www//untreaty/un.org

23 1972 Declaration of the United Nations Conference on the Human Environment (Stockholm). UN Doc. A/CONE/48/4/REV.1; http://www/un.org/Depts/Los/Convention

determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Further, Rio Declaration in principle 15 states that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation.

In this manner, liability and compensation laws help restore the victim of oil pollution damage back to his/her original economic position, [24] thus safeguarding their right to development, and for that reason, their basic human right. Liability and compensation further restores the marine environmental assets to their original state, thus maintaining their sustainable utilization and preservation.

Notwithstanding the existence of several international conventions and agreements related to liability and compensation for environmental damage, many areas still need clarification, such as the definition of environmental damage, the threshold at which damage entails liability, and the concept of state liability for environmental damage, and the nature of restitution.

Compensation and restitution are recoverable through insurance. The standard insurance policy classifies damage caused by naturally occurring environmental phenomena for example earthquakes or floods, as an Act of God. Such damage is grouped together with

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24 Case Concerning the Factory at Chorzow (Claim for Indemnity; Merits), PCIJ-Ser. A, No. 17 (1928), 47; the relevant passage reads as follows: " The essential principle [..] is that reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear". at page 5

civil unrest, armed conflict, hostilities and insurgency. [25] The insurer declares that compensation for such damage is excluded from the insurance policy on the premise it is impossible to envisage the extent of damage. The insurable value and the determination of the anticipated risk and liability are the icons upon which the insurance contract is founded. Determination of the insurable value of the environment is elusive. [26] Quantification of damage occasioned remains a challenge if not an insurmountable task.

More often than not, it may take several years for the full impact of oil pollution damage to manifest itself. [27] This creates a Pandora's Box for the insurance industry as the extent of the damage insured against is difficult to define at the time of underwriting the insurance contract. Further, there is difficulty in establishing a limitation of time within which an insurance claim must be lodged. [28]

The majority of international conventions call for mandatory insurance against all risks pertaining to transportation of oil by ships. The rationale behind this is that individual players in the industry may lack pecuniary capacity to cater for damage caused by large oil spills. On the other hand, compulsory insurance creates a 'moral hazard' [29] whereby the insured has no incentive to engage sound measures to prevent anticipated pollution.

In Kenya, the insurance industry continues to play its role in the development of this country. However, market players prefer to insure their ships with international insurance

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25 Phillipe Sands, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW, 2nd Edn. Cambridge University Press (1994) at page 928

26 Werner Pfennigstorf; POLLUTION INSURANCE; INTERNATIONAL SURVEY OF COVERAGES AND EXCLUSIONS, (1993) Graham & Trotman/Martinus Nijhoff LONDON at page 137

27 Id., at page 150

28 UNEP " ENVIRONMENTAL LIABILITY AND COMPENSATION REGIMES: A REVIEW," (Division of Environmental Policy Implementation) at page 58

29 Wu Chao, Supra note 9 at page 66

companies. A suitable insurance policy is yet to be formulated to cater for the environment for its own sake. [30]

Literature Review

Most of the text book material that has been found relevant in this dissertation emanate from developed countries and explores the UK and United States experiences on the control of oil pollution by ships, and the effectiveness of their liability and compensation regimes.

Philippe Sands on Principles of "International Environmental Law" has in chapter 18 [31] evaluated liability for environmental damage. He has distinguished the liability of states and other international persons under the operation of international law state responsibility on the one hand, and civil liability of any legal or natural person under rules of national law adopted pursuant to national treaty obligations, on the other hand. The book is relevant in so far as it will be guide on the rationale to be followed in determining culpability. Philippe Sands posits that this distinction is becoming increasingly difficult to draw as treaties and other international acts have established an obligation for the state to provide public funds where an operator cannot meet all the costs of environmental damage. Philippe Sands further recognizes that there is reluctance by nation states to develop rates of international law that impose expose excessive costs and financial burdens on other less developed states. Chapter 18 also sets out the issues that emerge in harmonizing international rules and obligations governing liability and compensation.

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30 INSURANCE ANNUAL REPORT Commissioner of Insurance 2004.(Printed: May, 2006) at page ix

31 Phillipe Sands, Supra note 25 at page 928

This study will follow Philippe Sands framework, emphasis will be on civil liability for environmental damage, since oil transportation trade is mainly in the domain of private (read civil) actors.

Professor C. Okidi Odidi in his earlier publication titled "Regional Control of Ocean Pollution: Legal and Institutional Problems and Prospects" [32] was a breakthrough in propagating the need to combat oil pollution incidents at sea from a regional approach. This study will adopt his arguments, but simultaneously point out that success of regional co-operation in oil spill disaster, prevention and management is founded on the presumption that contracting states have equal financial and technical capabilities to enable them to participate effectively. The book addressed this critical issue in its final chapter as the problem of recalcitrant states who refuse to co-operate in all regional initiatives to prevent pollution occurring on the high seas.[33] A nation state actor may sincerely embrace principles of preservation of the marine environment, but be unable to participate at par with other states in global or regional initiatives due to budgetary constraints.

Bridget M. Hutter, in "A Reader in Environmental Law" [34] has expounded on how social economic interest in environmental law has moved from social regulation and enforcement at a local level, to consideration of alternative and broader methods of preserving and conserving the environment through legislation and changing academic trends. The book illustrates that environmental law incorporates regulatory regimes for

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32 Prof C.O Okidi, REGIONAL CONTROL OF OCEAN POLLUTION: LEGAL AND INSTITUTIONAL PROBLEMS AND PROSPECTS, Sijthoff & Noordhoff (1978) at page 13

33 *Id.*, Professor C. O. Okidi at page 248.

34 Bridget M. Hutter, A READER IN ENVIRONMENTAL LAW (1999) Oxford University Press

effective enforcement. Focus is directed to state intervention through law and typically this involves regulation through public agencies charged with implementation of the law referred to as " command and control," sometimes leading to criminal sanctions. This approach flies in the face of freedom for capital markets that can be negatively affected by oppressive legal regulations. The author has not considered that implementation of liability and compensation laws would lead to minimum government intervention when a damage to the environment occurs and thus minimize its interference in economic activities. In her examples of methods of protecting the environment through law, liability and compensation for environmental damage are thus not included.

UNEP through its Division of Environment Policy Implementation (DEPI) has issued a publication titled "Environmental Liability and Compensation Regimes: A Review." [35] It is an overview of various global liability and compensation legal regimes. Being a fairly recent document, the recommendations set out therein are undoubtedly the way forward for the liability and compensation discourse. The publication does not however dwell much on insurance, particularly in relation to oil pollution damage. Further, there is no mention of emergency response mechanisms which can not only mitigate the extent of damage but also minimize the amount of compensation ultimately payable in a claim for damages.

The aspect of finance introduced by this publication and the suggestion that a fund should be established that is similar with the United States "Super Fund" will be adopted in this dissertation. Such a fund is suitable as a remedy for environmental disasters whose scope of damage can be limitless.

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35 UNEP "ENVIRONMENTAL LIABILITY AND COMPENSATION REGIMES: A REVIEW," Supra note 11 at page 58

Another useful publication from UNEP is the Environmental Law Training Manual (DEPI) (2006). The article "Liability and Compensation Regime Related to Environmental Damage" [36] relates to damage caused by general transboundary hazardous waste, including nuclear waste. The gist of the subject is that many countries have recently enacted legislation dealing with some form of liability and compensation for environment harm or "natural resource damage." It is important to note, however, that a number of countries have chosen not to introduce separate *ad hoc* liability regimes for environmental harm, instead relying on traditional liability standards or principles found in civil law codes and common law traditions applied in the environmental context.

Wu Chao has written the book "Pollution from the Carriage of Oil by Sea: Liability and Compensation." [37] The study is an exhaustive presentation of shipborne oil pollution in the United States. The highlights on compensation and liability are firstly operation of the IOPC Fund and its contributors. Secondly Wu Chao has demonstrated how the USA Oil Pollution Act of 1990 has radically redefined civil liability. This dissertation will argue that the success in USA is attributable to it's effective regulatory and enforcements institutions, which are yet to operate effectively in Kenya.

Werner Pfenningstorf edition titled "Pollution Insurance, International Survey of Coverages and Exclusions" [38] is a digest of the role of insurance against environmental pollution. The book examines the handicaps encountered by insurance actors in the open market when dealing with environmental damage. The book also suggests that various

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36 Un published copy with the author at page 16
37 Wu chao, Supra note 9
38 Werner Pferningstorf, Supra note 26

actors in the oil industry should take out various policies each covering a different risk of pollution of the environment. This study will depart from this approach and recommend that insurers can draw up an "all inclusive' insurance policy to cover environmental risks anticipated in the transportation of oil by sea.

Professor Albert Mumma in his thesis "Environmental Law: Meeting UK and E C Requirements' [39] has in chapter 11 laid a foundation for the importance of criminal law proceedings against polluters of the environment. This dissertation will concur with Professor Albert Mumma, with a rejoinder that criminalizing environmental pollution will deter potential offenders. In Kenya, prosecutors trained in environmental offences should be materially empowered, both outside and inside the courts, to enable them conduct successful prosecutions . Moreover, the negative effect of failure of to charge and secure a conviction against the polluter ultimately weakens any subsequent claim for compensation by the victim.

Newspapers reports, internet materials such as the UN Treaty Database, the International Law Commission (ILC), the International Maritime Organization (IMO) the United Nations Economic Commission for Europe (UNECE) reports from ministries and interviews will be referred to in tracing the roadmap to a comprehensive liability and compensation regime in Kenya. In particular the IMO office at Gigiri has facilitated several workshops in for the oil industry in Kenya with the stakeholders with the aim of assisting them formulate a national contingency plan for combating oil pollution damage at the coast.

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39 Professor Albert Mumma, ENVIRONMENTAL LAW: MEETING UK AND EC REQUIREMENTS; Mcgraw – Hill Book Company (1995) London.

Chapter Breakdown

Chapter one will present an overview of the liability and compensation for oil pollution damage from an international perspective. For completeness of thesis, the genesis of oil pollution damage control will be traced, culminating in the evolution of the Civil Liability and Oil Pollution Fund conventions. The United Nations Convention on Law of the Sea (1982 LOSC) and the MARPOL 1973/78 conventions will be highlighted for their impact in redefining international marine environmental law. Port state jurisdictions and coastal state regulation and enforcement powers will be examined to demonstrate the prevailing international legal obligations to nation states to safeguard the marine environment.

The role of insurance and the reluctance of the insurance industry to cover environmental damage to the coastal waters will also be included in this chapter. The delicate interplay between oil pollution by ships and the manner in which liability accrues thereto will also be laid out. Chapter one will also give a guildline as to the amount of compensation ultimately payable not only to victims of oil pollution damage by ships, but also to the environment in its own right.

Chapter two will contain the status quo of the oil pollution by ships in Kenya. It will give a detailed report on the *M V Ratna Shalini* oil spill incident and the manner in which various private and state institutions responded to the emergency. There will be a critique of Kenya's oil spill emergency response contingency plans, human resources and equipments available, as defence and damage control mechanisms. Kenyan laws relating to oil pollution will be examined. Their inadequacy will be shown, particularly in the area of regulation and enforcement. The question as to whether Kenyan laws exhaustively address the issues of liability and compensation will be answered both from an anthropocentric and pure

environmental law approaches. The economic losses that the Kenyan coast communities stand to suffer if a major oil spill occurs will be evaluated, with emphasis on the all important segments of fishing, tourism and the port of Mombasa. Kenya is a third world country with financial constraints, options outside the international conventions will be suggested. Significant milestones set to be achieved by the enactment of the Marine Pollution Bill and the proposals for the overhaul of the Marine Insurance Act will be discussed.

Chapter Three shall contain an evaluation and recommendations. The enactment of an exclusive liability and compensation law will be suggested. For comparative purposes, a few examples will be given in this chapter of countries which have specific laws that cover liability and compensation for environmental damage, with a recommendation that Kenya should follow suit.

The conclusion will be a final word to the affect that although a liability and compensation law will assist various oil industry actors to expeditiously interpret their rights and obligations when an accidental oil spill occurs, there is a further need to facilitate access to justice through the establishment of environmental courts with international jurisdictions and capacity to entertain cross boarder claims to their logical conclusions.

A final rejoinder will be that the ultimate cure for damage caused by chronic and/or accidental oil spills may not lie in liability and compensation enforcement, per se, but in prevention of the spill in the first instance. The doctrine of salvage and wreck removal will be recommended as an option in mitigating the damaging effects of the oil pollution.

CHAPTER ONE

LIABILITY AND COMPENSATION : INTERNATIONAL APPROACHES

Introduction

The pertinent issue that requires to be addressed at this early stage of this dissertation is: from where would compensation have been obtained for the total damage caused, had the *M V Ratna Shalini* spilled its entire load of 78,000 tonnes of oil into the port of Mombasa? The magnitude of the disaster would have called for an international intervention. The Indian Ocean upon which the Kenyan coast is situated is a transboundary natural resource. A major oil spill occurring would have resulted in cross border emergency response, in conformity with international conventions and treaties. Further compensation would have been channeled through the civil liability and oil pollution fund conventions which Kenya has ratified. [40] It is a cause for concern that although Kenya may have ratified the said international conventions, it is yet domesticate them, thus Kenya is denied the benefit of the reciprocating advantages. [41]

The first part of this chapter will examine international customary and treaty law relating to the marine environment which is relevant and binding to the Kenyan situation, and to which Kenya is expected to conform through the doctrine international customary law and state practice. This will be followed by a demonstration of how the concept of

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40 Kenya has ratified the 1969 International Convention on Civil Liability for Oil Pollution Damage, (Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, IOPC(Fund Convention) and their 1992 Protocols) and Marpol 73/78 Convention (Annex I, II, III, IV and V) http://www/imo.org/Conventions/Mainsframe.asp

41 UNEP, THE MAKING OF A FRAMEWORK ENVIRONMENTAL LAW IN KENYA, (2001) Page 131

liability and compensation has branched out of the main pollution discourse and the international treaty law pursuant thereunto. The third and fourth parts will examine the role of insurance and the manner in which contribution of negligence affects oil pollution damage compensation awards. Lastly, there will be a section on pure environmental damage. Where necessary, definations of legal concepts applied in this study will be drawn from the treaties under study hereunder due to their clarity. Internationally recognized principles of oil pollution will be discussed.

1. Obligations to Safeguard the Marine Environment Against Oil Pollution Under International Environmental Law: Evolution Of International Customary and Treaty Law On Marine Oil Pollution.

The development of international environment law as it relates to marine pollution caused by ships can be traced through the evolution of international customary law and the progression of treaty law.

The high seas being the world's greatest shared natural resource are freely used for extraction of minerals, disposal of industrial domestic wastes and most importantly, they provide a medium for navigation. Problems of overexploitation of resources and the escalation of negative effects of pollution from land and seaborne sources have called for international intervention. Anti pollution measures must be internationally agreed, co-ordinated and enforced in order to have effect. Marine pollution regulation has been slow to develop. States have responded with limited interests, mainly due to lack of scientific understanding of ocean processes. [42]

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42 Patricia W. Bernie and Alan E. Boyle *INTERNATIONAL LAW AND THE ENVIRONMENT* 2nd Edn (2002) Oxford University Press at page 353.
Scientific Studies conducted in the 1970s and 80s by GESAMP (Group of Experts on the Scientific Aspects of Marine Pollution) showed significant pollution of the sea by oil, persistent organic compounds, chemicals nuclear waste, and the effluent of urban and industrial societies.

The first binding treaty on oil pollution was the International Convention for the Prevention of Pollution of the Sea by Oil (Oilpol), which was adopted in London in 1954.[43] Oilpol was exclusively designed to deal with the oil pollution problem caused by bilge pumping, deballasting and tank flushing. The convention prohibited the intentional operational discharge of oil and oily mixtures by ships in specified areas of the oceans. The basic rule of this treaty was that discharges containing more than one hundred parts per million of "persistent oils" must occur outside the prohibited zones, that is the area lying within fifty miles of the nearest coast. Oil-water separating devices were also required on all ships and all loading and discharging operations were to be recorded in an "oil record book" which was subject to inspection at regular intervals. [44]

There were a number of amendments to Oilpol. In 1962, the convention was amended to extend the original fifty-mile wide no discharge zones to 100 miles in width.

By the late 1960s, however, the negative impact of pollution on coastal environments, on fisheries, and on human populations continued to spread. The *Torrey Canyon* disaster in 1967 (which may be treated as an icon in the development of international customary law of oil pollution) [45] involving the contamination of large areas of coastline by oil, exposed the risk posed by the daily transport of large quantities of oil at sea. The Torrey Canyon disaster exposed the inadequancy of Oilpol and its failure to address other sources of pollution for example mercury emissions from a factory at *Minimata* in the

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43 Supra note 42, at page 362

44 Prof C. O. Okidi REGIONAL CONTROL OF OCEAN POLLUTION: LEGAL AND INSTITUTIONAL PROBLEMS AND PROSPECTS, Sijthoff & Noordhoff (1978) at page 13

45 David Hughes *et al* ENVIRONMENTAL LAW 4th Edn, Butter Worths Lexis Nexis, at page 628

1950's in Japan [46] which had poisoned fish and endangered the lives and health of coastal communities showed that the problem was not confined to the operation of ships, but required comprehensive control of all potential pollution sources. These sources of pollution have been categorized as:- pollution from land-based sources – including industrial, agricultural and municipal wastes which may reach marine environment through rivers, wash-ups, fumes and dumping; Pollution from ships through accidental and deliberate discharge of substances carried as cargo and as source of power; pollution resulting from exploration and exploitation of marine mineral resources. Others to include disposal of effluents from nuclear power plants and military uses of the sea leading to amendments in 1969 to the effect that discharge standards be applied to vessels even when outside the narrow prohibited zones. In 1971, further amendments to the treaty imposed certain standards on tank subdivision and stability. The International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution casualties (Intervention Convention) [47] is one of the conventions pursuant to the Torrey Canyon disaster. It was concluded in 1969 and came into effect in 1975. The convention gives coastal states limited rights to take preventive measures on the high seas against vessels, which are considered to present grave and imminent danger to coastlines and other coastal interests from oil pollution as a result of a maritime casualty. The fact that coastal states are given the right to take action in areas beyond their national and maritime jurisdiction is indicative of the seriousness with which the threat of large-scale ship borne

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46 EDWARD GOLDBERG et al "Marine Pollution Action and Reaction Times" Oceanus 1974 Volume 18, Number 1 at page 5

47 1969 INTERNATIONAL CONVENTION RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF OIL POLLUTION CASUALTIES http://www/IMO.Org/infoResource/mainframe.asp

marine pollution was taken after the Torrey Canyon incident. This convention was also the genesis of a Precautionary Principle [48] approach. Another convention that was as a direct result of the Torrey Canyon disaster was the International Convention on Civil Liability for Oil Pollution Damage (The Civil Liability) adopted at a conference in Brussels in 1969. [49] The conference had noted that resolving the difficulties confronting coastal states in securing adequate compensation was not simply a matter of removing jurisdictional obstacles, harmonizing liability and ensuring that the polluter would pay, but in the case of oil, to distribute the burden with cargo owners. The traditional damage liability shifted from one of proven fault or negligence to one of strict liability. The convention also made pollution damage insurance compulsory while giving a right of direct action against the insurer if the ship owner did not pay. Under the convention, flag states have an obligation to ensure their vessels carry insurance as provided under the convention and port states have the right to verify the validity or currency of such insurance in respect of vessels entering their ports. By virtue of the 1992 protocol to the convention, compensation is now available to state parties for pollution damage caused within the Exclusive Economic Zone. This convention is a private law convention and channels liability to the ship owner who is strictly liable for the damage caused. Actions under this convention must be brought before the courts of the Contracting Parties within 3 years from the date of the incident but not later than 6 years.

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48 See Section on Precautionary Principle later in this chapter

49 1969 INTERNATIONAL CONVENTION ON CIVIL LIABILITY FOR OIL POLLUTION DAMAGE (1969 Civil Liability Convention) http://www/IMO.Org/infoResource/mainframe.asp

The Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention), which was adopted in 1971, [50] was a supplementary convention to the Civil Liability Convention. This convention was concluded when insurance underwriters realized that for very large scale pollution incidents the Civil Liability Convention limits might be inadequate and required enhancement.

The International Oil Pollution Compensation Fund (IOPC Fund) operates within the framework of the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention). This old regime was amended in 1992 by two Protocols and the amended convention known as the 1992 Civil Liability Convention and the 1992 Fund Convention, entered into force on May 30, 1996. These conventions lay down the principles of strict liability for shipowners and create a system of compulsory liability insurance. IOPC Fund provide supplementary compensation to the victims of oil pollution damage in member states who cannot obtain full compensation for the damage under the applicable 1992 Civil Liability Convention.

The above mentioned initial attempts to develop regulations against oil pollution at sea were also given a boost by the 1972 Stockholm Conference on the Human Environment [51] and the 1992 Rio Conference on Environment and Development. [52] Recommendations of

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50 1971 INTERNATIONAL CONVENTION ON THE ESTABLISHMENT OF AN INTERNATIONAL FUND FOR COMPENSATION FOR OIL POLLUTION DAMAGE(1971 Fund Convention) http://www/IMO.Org/infoResource/mainframe.asp

51 1972 DECLARATION OF THE UNITED NATIONS CONFERENCE ON HUMAN ENVIRONMENT (STOCKHOLM) UN Doc A/CONF/48/14/ http://www//unep.org/Documents/multilungial/Default.asp

52 1992 DECLARATION OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (RIO) UN Doc. A/CONF.151/26 http://www//ear/ham.edu/npols/117 all.96/inneske/effects.HT

the Stockholm Conference led directly to the adoption of the 1972 London [53] and Oslo Dumping Conventions'[54] and the 1973 (Marpol) Convention for the Prevention of Pollution from Ships, [55] The Earth Summit held in Rio de Janeiro in Brazil in June 1992 heralded a new approach to local national and international planning for sustainable development. By adopting the principles of the Rio Declaration and Agenda 21, the world's leaders recognized the centrality of human beings and the importance of investing in improvements in people's health and environment as a pre-requisite for sustainable development for present and future generations. They further ushered in a new vision of the world, in which environment, development and poverty are no longer regarded as separate and unrelated issues.

Since the Rio Summit, commitment to securing human health and a healthy environment has become widespread as evidenced by the development of National Environment Action Plans (NEAPs) and incorporation of environmental considerations into national economic development policies and programmes. For instance, in Kenya, NEAP was adopted by the Government in 1994 and the Environmental Management and Coordination Act was enacted in 1999.

In 1973, the third U.N. Conference on the Law on the Sea was convened. Many meetings were held to develop the United Nation Convention of the Law of the Sea (1982 LOSC). [56] The final meetings were held in Montego Bay, Jamaica on 6th - 10th December 1982. The convention was opened for signature in Jamaica on 10th December 1982. On that

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53 1972 CONVENTION ON PREVENTION OF MARINE POLLUTION BY DUMPING OF WASTES AND OTHER MATTER (LONDON); II ICM 1972 http://www//IMO.Org/infoResourceMaritime

54 1972 CONVENTION FOR THE PREVENTION OF MARINE POLLUTION BY DUMPING FROM SHIPS AND AIRCRAFT (OSLO); II ILM 265 (1972) came into force 7th April 1974 http://www/IMO.Org/infoResourceMaritime

55 See Section on MARPOL later in this Chapter

56 1982 CONVENTION ON LAW OF THE SEA (1982 LOSC) 21 ILM http://www//un.Org/Depts/Los/Convention

same day signatures from 119 delegations comprising 117 states Kenya being one of them, were appended to the convention. The 1982 LOSC was intended to be a comprehensive restatement of almost all aspects of the Law of the Sea. Its foundational objective is to establish,

> "a legal order for the seas and oceans which will facilitate international communication, and will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources and the study, protection and preservation of the marine environment." [57]

The consensus expressed by states in negotiating the environmental provisions of the 1982 LOSC suggest that its articles on the marine environment are supported by a strong measure of *opinio juris* and represent an agreed codification of existing principles which have become part of customary law. Part XII of 1982 LOSC is of interest since its 46 articles are concerned with marine environmental protection and preservation. The treaty declares the general obligation of states to protect the marine environment (Article 192), though it does not abrogate sovereign rights to exploit natural resources (Article 193). More specific measures follow on pollution control, while particular provision is made with regard to scientific and technical co-operation and assistance between states, and for monitoring pollution and publishing information. Special rules apply to deal with land based marine pollution (Article 207), or that which arises from states' seabed activities (Article 208), or from dumping (Article 210). Particular provision is made for enforcement of treaty obligations (Articles 213 – 222), and for the responsibility of states to fulfill the same, for example by affording remedies under their laws against persons under their

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57 Supra note 56, 1982 LOSC , Preamble

jurisdiction who damage the marine environment by pollution. Provision is also made to preserve state obligations under other conventions. (Article 237).

So far as pollution from ships is concerned, states are to establish international rules and standards and, at the national level, laws and regulations covering vessels flying their own flag that have at least the same effect as those international rules and standards. Each state may establish its own laws and regulations for vessels in its territorial sea, but these are not to hamper innocent passage of foreign ships. In their exclusive economic zones (EEZ) states may adopt legislation for the enforcement of generally accepted international pollution rules and standards. Where such rules and standards are inadequate to meet the special circumstances of a particularly vulnerable area in its economic zone, a coastal state may apply to the competent international organization to have the area declared a special area.

By the 1990s there was evidence that some of marine oil pollution was diminishing under the impact of increased international regulation and economic change. Compared to international customary law, treaty law has had a higher impact in regulation of marine pollution on the high seas due to its exactitude and uniformity of application by nation states. Collectively, it is the assembly of treaties that have positively contributed to the containment of oil pollution on the high seas.

2. Liability & Compensation

When a polluter is in breach of any of the obligations to safeguard the marine environment as set out hereinabove, the consequences are that he is liable to compensate the victim. However, from the onset, it is important to distinguish what is the damaged asset that requires compensation. If it is environmental damage by marine pollution, then what

constitutes environmental damage and what level of environmental damage might give rise to liability?

2. 1 Defining Environmental Damage

One of the major breakthroughs of the 1982 LOSC was the manner it redefined environmental damage. Treaties and state practice reflect various approaches. The following five categories have crystallized; [58]

1. Damage to natural resources alone (air, water, soil, fauna and flora, and their interaction);
2. Damage to natural resources and property which forms part of the cultural heritage;
3. Damage to anthropocentric benefit derived from environmental amenity.
4. Damage resulting in physical injury to human persons
5. Damage to personal property,

Nos. (4) and (5) above may be classified as damage consequential to environmental damage.

Loss of environmental amenity, which is included under the provisions of the 1993 International Convention of Civil Liability Resulting from Activities Dangerous to the Environment (1993 Lugano Convention) [59] referring to the 'characteristic aspects of the landscape,' could be treated as environmental damage or damage to property.

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58 Philippe Sands: PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW, 2nd Edn Cambridge University Press (1994) at page 876

59 1993 INTERNATIONAL CONVENTION OF CIVIL LIABILITY RESULTING FROM ACTIVITIES DANGEROUS TO THE ENVIRONMENT (LUGANO CONVENTION), 32 ILM (1993). http://www//unesco.org/mab/home.htm

The distinction between environmental damage (and compensable environmental damage) and pollution is illustrated by the 1993 Lugano Convention which provides that an operator of a dangerous activity will not be liable for damage (impairment of the environment) caused by pollution at 'tolerable' levels under local relevant circumstances. The 1985 International Convention for Protection of the Ozone Layer (1985 Vienna Convention) defines ' adverse effects' in relation to ozone depletion as, inter alia,

> 'changes in the physical environment or biota, including changes in climate, which have significant deleterious effects on human health or on the composition, resilience and productivity of natural and managed ecosystems, or on materials useful to mankind. [60]

The 1992 United Nations Framework Convention on Climate Change (1992 FCCC) introduces a similar definition, and extends the definition to include effects on socio-economic systems and human welfare. [61] Thus, 'pollution' and 'adverse effects' help in determining the threshold beyond which environmental damage might trigger liability, but they do not actually define it.

2.2 Liability for Marine Pollution: When does it Accrue?

Not all damage caused by oil pollution from ships results in liability. There are no agreed international standards which establish a threshold for the ensuing environmental damage which may trigger liability and allow claims to be brought. State practice, decisions of international tribunals and the writings of jurists suggest that environmental damage must be 'significant' or 'substantial' (or possibly 'appreciable,') for liability to result.

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60 Article 1 (2) INTERNATIONAL CONVENTION FOR PROTECTION OF THE OZONE LAYER (1985 Vienna Convention) 22nd March 985 in force 22nd September 1988 26 ILM 1959 (1985) http://www/unep/ozone/vienna.htm

61 The 1992 THE CLIMATE CHANGE CONVENTION defined ' adverse effects of climate change and under Article 4(4) requires developed country parties listed in Annex 11 and the EC to assist the developing countries parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects. While this novel provision is not a formal expression of liability under the principles of state responsibility, it reflects an admission of responsibility with financial consequences http://www/unfcc.Int/resource/does convkp/conveng.pdf

The parameter of 'critical loads,' [62] describe the point at which an environment element is so saturated by pollution that it is no longer biodegradable. International instruments which set environmental quality standards, or product, emission or process standards, may also provide some guidance as to the level of pollution considered to be tolerable or acceptable by the international community. The *de minimis* rule allows for the discarding of tolerated, minor or transitory damage, and only includes the damage above the defined threshold or significance. The justification for excluding minor impacts from the definition of damage and hence from liability is based on the fact that the cost of evaluating small impacts might exceed its benefits. A different approach altogether is to allow for an exemption from liability for damage that is "insignificant" or "negligible." Instruments that deal with environmental damage by allowing clean-up and restoration costs, on the other hand, have been able to avoid the threshold issue altogether by evaluating each response project on its technical merits. This approach facilitates the implementation of technically reasonable measures without the need for first proving some level of ecological significance.

2.3 Polluter Pays Principle

The Polluter Pays Principle has proved to be an effective and popular method of recovery of compensation for environmental injury caused by oil from ships.
Primarily, it underscores the emerging necessity that private actors should individually or collectively, meet the costs of combating and compensating damage caused by oil pollution and that such costs should not be directed at a state or a public authority.

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62 Article 2 1982 LOSC (green house gas concentrations.)

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The preamble to the 1990 International Convention on Oil Pollution Preparedness, Response and Co-operation (1990 OPRC) [63] states that polluter pays principle is a "general principle of international environmental law." The principle integrates environmental protection and economic activities by ensuring that the full environmental and social costs (including costs associated with pollution, resource degradation, and environmental harm) are reflected in the ultimate market price for goods or services. The assumption is that environmentally harmful or unsustainable goods will tend to cost more, and consumers will switch to less polluting substitutes. This will result in a more efficient and sustainable allocation of resources. [64] The principle is still highly controversial particularly in developing countries where the burden of internalizing environmental costs is perceived as being too high. Partly because of its role in harmonizing standards, the principle provides important guidance for formulating domestic environmental laws and policies. For example, under Principle 16 of the Rio Declaration: [65]

> "National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."

The polluter pays principle was and still is seen as a critical principle for harmonizing environmental standards across all countries, thereby reducing the potential for countries to complete for investors by lowering their environmental standards, or by subsidizing the costs of installing environmental technologies.

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63 1990 INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND CO-OPERATION *(1990 OPRC)* http://www//imo.org/infoResource/mainframe.asp

64 Recommendation of the OECD Council on Grading Principles Concerning International Economic Aspects of Environmental Policies, Annex 1, adopted at the Council's 239th meeting (May 26 1972)

65 Supra note 19 Agenda 21, Annex 11

Despite this general endorsement of the 'polluter pays principle, there is little evidence that it has influenced state practice or resulted in more comprehensive schemes of liability for damage to the marine environment at global or regional level. The only significant extension of maritime liability which might be linked to the 'polluter pays' principle are the 1992 Oil Pollution Fund Convention, the 1992 Civil Liability Convention and 1996 Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea. (1996 HNS Convention) [66] The combined effect of the 1992 Oil Pollution Liability and Fund Convention is thus that, in the more serious cases, the owners of the ship and the owners of the cargo are jointly treated as 'the polluter' and share equitably the cost of accident pollution damage arising during transport.

2.4 Limitations of Polluter Pays Principle

Certain fundamental questions have emerged in the application of the polluter pays principle to oil pollution by ships. These are examined herebelow:-

2.5 When Does Pollution Occur?

The definitions of pollution discussed earlier in this chapter clearly demonstrate that the threshold upon which pollution is deemed to have manifested is itself unqualified. The 1982 LOSC calls upon contracting states to engage in their own studies, research and collection of data through recognized scientific methods. [67] However, data collected is itself to be used by states, either directly or through international organizations, to establish appropriate scientific criteria for determining the standards within which pollution is deemed to have occurred.

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66 Carriage of oil by ships at sea has been defined as a hazardous activity by the 1996 INTERNATIONAL CONVENTION ON LIABILITY AND COMPENSATION FOR DAMAGE IN CONNECTION WITH THE CARRIAGE OF HAZARDOUS AND NOXIOUS SUBSTANCES BY SEA (1996 HNS CONVENTION) http://www//imo.org/conventions/mainframe.asp

67 Wu Chao, POLLUTION FROM THE CARRIAGE OF OIL BY SEA: LIABILITY AND COMPENSATION, (1996) Kluwer Law International – London, 52

2.6 Who is the Polluter?

If for example a ship carrying oil sinks, is it the ship owner or the owner of the oil (read cargo) who is the polluter? The ship owner is ultimately held responsible for the sea worthiness of his vessel, and for this reason he has sufficient interest to insure his ship. But sometimes, damage may be caused by a third party, such as the, the ship manufacturer, a harbour pilot, a navigation authority, or a structural default of a dock construction or equipment.

The 1992 Civil Liability Convention channels liability not to the ship's operator, nor to the cargo owner, but to the shipowner, who may be sued only in accordance with the Convention, and who is required to carry insurance for this purpose. Under Article (2)

> "no claim for compensation may be made against the ship's manager, operator, charterer, crew, pilot, salvor, or their servants or agents, unless the damage resulted from their personal act or omission 'committed with intent to cause such damage, or recklessly and with knowledge that such damage would probably result."

While this provision will preclude strict liability or negligence claims for pollution damage against any of third parties, they may remain liable to compensate the owners in accordance with national law. The owner's liability under Article (3) is strict, rather than absolute, in the sense that although no fault or negligence need be shown, no liability will arise where the owner can prove that the loss resulted from:-

> "war, hostilities, insurrection, civil war, or natural phenomena, such as hurricanes, of an 'exceptional, inevitable and irresistible character', or was wholly caused intentionally by a third party or by the negligence of those responsible for navigation aids."

Sensibly, the present international agreed scheme of liability and compensation for pollution form ships treats both the ship's owner and the cargo owner as sharing responsibility, while excluding the liability of any other potential defendant in order to facilitate easy recovery by plaintiffs.

2.7 Scope of Application

Article 235 (1) of the 1982 LOSC propounds that:-

> "States are responsible for the fulfillment of their international obligations concerning the protection and preservation of marine environment... they shall be liable in accordance with international law."

According to international practice, two main types of civil liability emerge that could be the subject of environmental liability and compensation regimes. They are firstly state liability for oil pollution damage, secondly private international liability for oil pollution damage.

In general, the current network of conventions and protocols are limited to addressing transboundary effects, industrial and transportation accidents, or hazardous or dangerous activities. There are no global or regional agreements that deal with damage caused during normal operations. This represents a major gap in liability in the current network of agreements. Furthermore, currently only Article 3 of the 1993 Lugano Convention refers to impacts both within and outside of the jurisdiction of the Contracting Party (transboundary and non-transboundary effects) and this Convention is not in force. This requirement extends to flag states in respect of their vessels and to coastal states in respect of activities which they permit within their jurisdictions. There has been a two pronged interpretation of the above responsibility:-On the one hand, in the regime of operation of risky (read hazardous) activities at sea, such as the oil tankers, the liability of flag state is strict. On the other hand, Article 39 of the 1982 LOSC provides that in respect of damage resulting form deep sea bed operations, states are liable only for failure to carry out their responsibilities, and not for damage caused by their nationals *per se*. Such responsibility is to ensure that all necessary measures have been affected to ensure compliance by various actors under their respective flag jurisdictions. In other words the litmus test is "due diligence" which has been examined in detail in the next section.

2.8 Due Diligence

One of the most outstanding feature is the way the 1982 LOSC handles the concept of due diligence. As with other treaties it makes reference to the need to take ' all measures necessary' to prevent and control pollution damage to other states, but it moderates this requirement by allowing use of the ' best practicable means at their disposal and in accordance with their capabilities' where the risk is to the marine environment in general, rather than to other states. This wording implies a somewhat greater flexibility and discretion, particularly for developing countries, whose interests received particular attention in the drafting of this part of the Convention. [68]

Further, the 1982 LOSC binds states to give effect to or apply rules and standards to less onerous than 'generally recognized international rules and standards'. [69] States which have ratified the 1982 LOSC are compelled to adopt the basic standards set, inter alia, by the 1972 London Dumping and Marpol Conventions, [70] even if they are not parties to them. International law jurists have propounded that non-parties may as a matter of customary law be bound by the basic principles of the two conventions due to their wide-spread ratification, and the general compliance on non-parties in enforcement measures, as well as their indirect incorporation into the codification brought about by the 1982 LOSC.

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68 Articles 207 and 212 1982 LOSC
69 Articles 208, 210,211 1982 LOSC
70 1972 CONVENTION FOR THE PREVENTION OF MARINE POLLUTION BY DUMPING FROM SHIPS AND AIRCRAFT (OSLO); II ILM 265 (1972) came into force 7th April 1974 http://www/IMO.Org/infoResourceMaritime

It is no longer essentially a matter of high seas freedom moderated by reasonable use, but one of legal obligation to protect the environment. Whereas previously states were to a large degree free to determine for themselves whether, when and how to control and regulate marine pollution, they are now in most cases be bound to do so on terms laid down by the 1982 LOSC and other international instruments. Because of the widespread acceptance of the basic treaties on pollution from ships and possibly also on dumping, this proposition held good even before the entry into force of 1982 LOSC in 1994. The impact of the 1982 LOSC's articles on the marine environment is latent in their expression of principles of customary law, whether those reflected in prior state practice, or subsequently developed. [71]

2.9 Breach of duty of care

If not all environmental damage results in liability, what then is the threshold upon which the standard of care (as set in Article 235 (1) of the 1982 LOSC) is deemed to have been breached and therefore actionable?

The breach of duty of care may be determined through three different avenues:-
Strict liability, (where certain defences may be raised, for example adverse wheather), absolute liability, (where no defences are available) and proof of negligence (fault based – where proof of negligence is required). [72]

International law has engaged the three above categories differently and interchangeably. The guiding principle has proved to be the nature of the activity leading to the pollution. Strict liability with limited defences is the most common form and means

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71 Lee A. Kimball et al, LAW OF THE SEA: PRIORITIES AND RESPONSIBILITIES IN IMPLEMENTING THE CONVENTION, (IUCN) Marine Conservation and Development Report (1995), at page 27

72 Phillipe Sands, Supra note 25 at page 881

that liability is imposed irrespective of fault or negligence. It is not a matter of whether the perpetrator behaved correctly or incorrectly, but that the damage occurred that is the decisive factor. In this way, strict liability lessens the burden of proof on potential plaintiffs, in that they do not need to prove intent or negligence only damage to establish liability. However, strict liability does allow some defences so that a person may be exonerated from liability if the damage was caused, for instance, by an act of God (or natural disaster), an act of war, or by interference of a third party. [73]

Absolute liability does not necessarily mean that no defences are available. A number of circumstances can exonerate the wrongdoer in international law. Examples are; lawful counter measures, consent, force majeure, distress, self defence. This type of liability is often imposed for what are deemed ultra-hazardous activities, such as nuclear installations.[74] In contrast, fault liability means that the Plaintiff must prove that the perpetrator acted with intent or that he/she acted negligently or without due care. For this reason, fault liability is rarely imposed since it places a difficult burden of proof on potential plaintiffs rather than on alleged perpetrators.

It is noteworthy however, that few flag states have paid compensation for pollution damage from oil tankers. The prevailing position is that state liability for pollution by ships has not been subject to interstate claims. An example is the case of Amoco Cadiz which was handled under national (civil) law [75].

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73 Cosmos 954 Accident in Canada 181 ILM 907 (1992) http://he-sc.gc.ca/edplan/cosmos.954 e.htm

74 Supra note 66

75 The Amoco Cadiz Case: On 16th March 1978 M V Amoco Cadiz ran around on Portsall Bocks, three miles from Brittany due to failure of steering mechanism http://greennature.com/article219.htmc

3 Enforcement Under International Legal Instruments

The 1982 LOSC in conjunction with the 1973 MARPOL Convention redefined the enforcement powers of coastal and port states, and strengthened the latter's obligations towards the protection of the marine environment. Authority over maritime activities is now carried out with a view to exerting effective enforcement of environmental regulations whilst observing and respecting other maritime states freedom of navigation.

3.1 Flag State Jurisdiction

The primary basis for the regulation of ships is the jurisdiction enjoyed by the state in which the vessel is registered or whose flag it is entitled to fly ('the flag state'). These conditions determine the nationality of the ship. Although Article 5 of the 1958 Convention on the High Seas [76] refers to the need for a 'genuine link' between the state of nationality and the ship, this ambiguous provision has not prevented the emergence 'flags of convenience', where registration, rather than ownership, management, nationality of the crew, or the ship's operational base, is the only substantial connection. Once a state has conferred the rights to fly its flag, international law requires it to exercise effective jurisdiction and control over the ship in administrative, technical and social matters. Thus it is the flag state which is responsible for regulating safety at sea and the prevention of collisions, the manning of ships and the competence of their crews, and for setting standards of construction, design, equipment, and seaworthiness. [77] Most importantly it is the duty of the flag state to take measures to prevent pollution.

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76 1958 CONVENTION ON THE HIGH SEAS (GENEVA) In force 30th September 1962 http://www//un.Org/law/ik/texts/hseas.htm

77 Articles 91and 94 1982 LOSC

3.2 Port State Jurisdiction

Ratification of the 1974 Safety of Life at Sea Convention (SOLAS) [78] lends credibility to the port states in their commitment to prevent oil pollution.

In ports or terminals within the jurisdiction of contracting parties, the competent authorities may proceed to an examination of the certificates which the ship flying the flag of the other state is required to possess. If it appears that the ship being inspected does not have a valid certificate on board or that the vessel does not come up to the specification stated on the document, the coastal state may prohibit the ship from sailing. The competent authorities of the port state may also inspect the ship to discover whether a violation has occurred. They may also examine all relevant documents where discharges are recorded and, in particular, all mechanisms for the checking and control of oil discharges. They will also be permitted to ascertain whether the ship is carrying waste or other matter which it intends to discharge at sea, or whether such an operation has been performed prior to its arrival. If a state thus discovers that a violation has been committed, it must collect all existing evidence and information, possibly with the co-operation of other contracting states, and forward it to the competent authority of the flag state, so that proceedings may be taken against the guilty party. The flag state is to investigate the matter and, if satisfied that sufficient evidence is available, must cause legal proceedings to be taken against the violator as soon as possible. At this point the 1982 LOSC convention limits itself to stating that sanctions imposed must be sufficiently severe to discourage any other offenders, and must be equally severe irrespective of where the violations occurs. [79]

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78 1974 INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA (SOLAS) in force 25th May 1980 http://www//IMO.Org/infoResourceMaritime

79 Article 211(2) 1982 LOSC

Port state jurisdiction is generally defined as jurisdiction based solely on the presence of the vessel in port. If a pollution incident occurs in or affects a state's coastal waters, the state may exercise jurisdiction as a coastal state. It acts as a port state if its sole connection with the incident is the offending vessel's presence.

Port states are more inclined than flag states to enforce pollution regulations since port state are themselves coastal. Port state jurisdiction essentially serves as a useful backup to inadequate flag state enforcement. Port state enforcement is preferable to coastal state enforcement since it interferes much less with freedom of navigation and can generally be performed more safely. Stopping and boarding a vessel in transit at sea for inspection purposes directly interferes with the vessel's movement and can be hazardous, depending on the weather and location. On the other hand inspecting a vessel while in port does not hinder navigation and can be performed safety. Even bringing a proceeding against a vessel does not detain the vessel since it is allowed to go free upon posting a bond. Moreover, port states have a direct economic interest in shipping and receiving goods, and therefore they are more likely than coastal states to balance environmental measures against maritime commerce.

It should be noted however, that when a port state takes an enforcement measure such as inspecting a vessel that has committed a discharge violation on the high seas, the port state is investigating a violation of another state's law, not its own, which it lacks jurisdiction to prescribe. [80]

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80 David Hunter, James Salzman, Durwood Zaelke: INTERNATIONAL ENVIRONMENTAL LAW & POLICY, Newyork Foundation Press 1998, 744

3.3 Coastal State Jurisdiction

Coastal States are also bestowed with enforcement powers. Where the offending vessel is not voluntarily within one of its ports, the criteria will depend on where the violation took place. If the alleged offence took place within its territorial sea, the coastal state may undertake physical inspection and, if warranted, arrest and prosecute the master or owner of offending ship. If the offence took place in its exclusive economic zone (EEZ) [81] against international rules and standards or national legislation, the coastal state may require the offending vessel to provide certain information regarding itself and the violation. Where the violation has resulted in substantial discharge and significant pollution, and if the information has been refused or is at variance with the evident facts, the coastal state may undertake physical inspection of the vessel. Where, on the other hand, a flagrant or gross violation has occurred in the EEZ resulting in major damage or the threat thereof, the coastal state may prosecute directly, provided that any bonding or other financial security arrangements in force are respected. Where investigations of foreign vessels are undertaken, the vessels must not be delayed longer than essential, and bonding arrangements are to be allowed. In any proceedings for violations outside internal waters only monetary penalties are to be imposed.

3.4 International Convention for the Prevention of Pollution from Ships (MARPOL 1973/78)

Marpol is a Convention drawn up by the International Maritime Organization (IMO), a United Nations agency responsible for the safety of shipping and the prevention of marine

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81 Exclusive Economic Zone, Article 56, 1982 LOSC. The EEZ extends 200 nautical miles from the territorial sea baseline and confers on coastal states sovereign rights over living and mineral resources, and jurisdiction over the protection and preservation of the marine environment

pollution. The Convention is a direct result of the recognition that oil pollution of the sea had become something of a problem during the course of the latter half of the 20th century. Several incidents had raised questions about the adequacy of measures then in place to prevent oil pollution from ships and about the mechanisms for compensating those affected by the resultant environmental damage. Accordingly, in 1978, an international conference adopted the International Convention for the Prevention of Pollution from Ships. This conference adopted, *inter alia*, a protocol to the 1973 Convention which was still not in force at the time. The resultant Marpol Convention is therefore a combination of the 1973 Convention and the 1978 protocol. [82]

The Convention's articles mainly deal with jurisdiction, powers of enforcement, and inspection; the more detailed anti-pollution regulations are contained in annexes which can be adopted and amended by the Marine Environment Protection Committee of IMO (MEPC), subject to acceptance by at least two-thirds of parties constituting not less than 50 per cent gross tonnage of the world merchant fleet. Annexes I and II, which regulate oil and chemical pollution respectively, have been amended frequently in response to new technology and growing environmental awareness. The convention also embraces the precautionary approach.[83]

All parties are bound by Annexes I and II. Other annexes are optional and participation varies widely. The parties to Marpol in 2000 comprised over 94 percent of merchant tonnage, which puts at least Annexes I and II in the category of 'generally

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82 1973/78 INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (MARPOL) http://www//IMO.Org/info Resource/ mainframe.asp

83 MARPOL 73/78, IMO Consolidated Edn. (2002) 4 Albert Embarkment, London SEI 7SR

accepted international rules and standards' prescribed by Article 211 of the 1982 LOSC as the minimum content of the flag state's duty to exercise *diligent control of its* vessels in the prevention of marine pollution. As explained hereinabove, there are grounds for treating Marpol regulations as customary standards enforceable against vessels of all states, whether or not they have ratified the Marpol Convention. Further, the Marpol Convention sets new construction standards, [84] which are more stringent for new vessels, and which were amended in 1992 to require double hulls following the 1989 Exxon Valdez disaster in Alaska. [85]

An important 1974 SOLAS Convention amendment which came into force in 1998 makes compliance with IMO's Code on International Safety Management (ISM Code) mandatory, for all oil and chemical tankers. Ships can only be certified by the flag state if the operating company (this may be the owner, chaterer, or manager) has in place safety and environmental policies, instructions, and procedures in accordance with the Code. The underlying assumption is that operating companies are best able to ensure that ships meet adequate operational standards. Like airlines, shipping companies whose vessels do not do so will be unable to operate. Some 78 percent of ships were expected to comply at the time of entry into force. [86]

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84 MARPOL CONVENTION, Supra note 82, Appendix 7

85 EXXON VALDEZ DISASTER On 24th March midnight, the oil tanker Exxon Valdez struck Bligh Reef in Prince William Sound, Alaska spilling more than 11 million gallons of crude oil. The Exxon Valdez is synonymous with oil pollution environmental disasters http://www//epa.gov/oil spill/exxon.htm

86 "IMO concentrates on keeping legislation up to date and ensuring that it is ratified by as many countries as possible. This has been so successful that many Conventions now apply to more than 98% of world merchant shipping tonnage. Currently the emphasis is on trying to ensure that these conventions and other treaties are properly implemented by the countries that have accepted them." (Comment by Mr J. P. Muindi, IMO Regional Cordinator, United Nations Campus, Gauger, on 11th August 2005)

Many international agreements are very widely ratified and adopted by maritime states, and most can be readily amended and updated by IMO. To that extent they constitute a form of international regulation of the environmental risks of transporting oil and other substances by sea, with IMO acting as the main regulatory and supervisory institution. Annex 1 appended to the end of this dissertation illustrates the extent to which states have ratified IMO International Conventions.

3.5 UNEP Regional Seas Programmes[87]

When an accident occurs at sea, the oil spill more often than not transcends political boundaries. For this reason, a number of treaties concerned with protection of marine environment are regional. They represent "*problem sheds*" or areas within which the levels of pollution are relatively or completely independent of discharges else where, and, as seen earlier in this study, they require regional co-ordination if control measures are to be effective. A region does not have to be for ecological reasons only. Political considerations, common interest and geographical proximity influence regional treaties.

Over the years the International Maritime Organization (IMO) and the United Nations Environmental Programme (UNEP) have been active in promoting regional agreements negotiated in the framework of the Regional Seas Framework Programme. Thus empowered, regions are able to collectively negotiate and enhance their ability to deal with a major marine pollution emergency in compliance with the International Convention on Oil

87 Status of Regional Agreements Negotiated in the Framework of the Regional Seas Programme, United Nations Environment Programme. Nairobi, 1994
www.unep.org/Sitelocator/#RegionalSeasProgrammes

Pollution Preparedness, Response and Co-operation (OPRC Convention).This convention requires governments and industry to work together to promote active regional agreements aimed at the developing countries ability to deal with a major marine pollution emergency, through development of their own national contingency plan (NCP).[88]

Kenya has also ratified the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the East African Region (Nairobi Convention) and it's Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern Africa Region and the Protocol concerning Cooperation in Combating Marine Pollution in cases of Emergency in the Eastern African Region. The Nairobi Convention provides a framework for regional co-operation in the protection, management and development of the Western Indian Ocean region's marine and coastal environment, for sustainable socioeconomic growth and prosperity. [89]

4 The Role of Insurance

The insurance market plays a significant role in determining the limit of the owner's liability, and the share of the total loss to be borne by the ship owner. The 1992 Oil Pollution Liability and Fund Conventions clarified that ship owners will now have to bear the costs of any oil spill up to the full limit of their liability, and only for additional losses thereafter will the IOPC Fund's resources be called on.

To be able to cover the risk of liability, most civil liability regimes require the operator to establish financial security, and this is most commonly done by purchasing insurance.

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88 IMO supported a National Contingency Planning Workshop organized by the Ministry of Transport at Nyali Beach Hotel in Mombasa. On 4th - 8th April 2005.

89 CONVENTION FOR THE PROTECTION, MANAGEMENT AND DEVELOPMENT OF THE MARINE AND COASTAL ENVIRONMENT OF THE EAST AFRICAN REGION (NAIROBI CONVENTION) http://www.unep.org//estafrica

The chief advantage of a compulsory insurance regime is the assurance that victims of pollution will receive compensation, even if the operator is undercapitalized or becomes bankrupt. An objection to having a regime based on compulsory insurance is that this could reduce the incentive for potential perpetrators to avoid causing damage, a situation known as 'moral hazard.' The consequence is that insurers will shy away from general or compulsory insurances for every potential type of environmental damage. To counteract this negative effect, insurance companies may demand higher limit premiums in order to restrict their own financial risk. [90]

Worthy of mention at this juncture is the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage. [91] This Convention was adopted to ensure that adequate, prompt, and effective compensation is paid to persons who suffer damage caused by oil spills when carried as fuel in ships' bunkers. It applies to damage caused in the territory of the contracting party, including the territorial sea and EEZs. Pollution damage includes loss or damage caused outside the ship by contamination resulting form the escape or discharge of bunker oil from the ship, and the costs of preventive measures. The Convention requires ships over 1,000 gross tonnage to maintain insurance or other financial security to cover the liability of the registered owner for pollution damage in an amount equal to the limits of liability under the applicable national or international limitation regime, but not exceeding the amounts under the 1976 International Convention on

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90 Wu Chao Supra, note 9 at page 66

91 2001 INTERNATIONAL CONVENTION ON CIVIL LIABILITY FOR BUNKER OIL POLLUTION DAMAGE: (2001 Bunker Oil Pollution) adopted 23 March 2001, (not yet in force) http://www//IMO.Org/Conventions/Mainframe.asp

Limitation of Liability on Maritime Claims: London (LLMC,).[92] as amended. In addition, this Convention also allows for direct action against the insurer.

4.1 What if the Ship Owner is Uninsured?

Article 4 (1) (a) and (b) the IOPC Fund Convention contains an additional, wider purpose of providing compensation even where no liability for damage arises under the 1992 Civil Liability Convention, or where the shipowner's liability is not met by the compulsory insurance he is required to carry, leaving him financially incapable of meeting his obligations. However, in Article 4 (2) the IOPC Fund Convention the polluter is exonerated from liability where the pollution damage results from:- (i) an act of war, hostilities, civil war, or insurrection, (ii) oil is discharged from a warship or government-owned ship entitled to immunity, or (iii) where the claimant cannot prove that the damage resulted from 'an incident involving one or more ships.'

The importance of the last provision is that where the source of the oil unidentified, no compensation is payable. Thus there remain certain situations in which the innocent victim will be without any remedy. It should also be observed that parties to the 1992 Civil Liability Convention are not obliged to become parties to the 1992 Oil Pollution Fund Convention, but virtually all have done so. [93]

Interestingly, when a spill cannot be cleaned-up, and no harm has been occasioned to other states, the role, if any, of damages in this context cannot be compensatory, as there is

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92 1976 INTERNATIONAL CONVENTION ON LIMITATION OF LIABILITY FOR MARITIME CLAIMS LONDON (1976 LLMC) adopted on 19 November 1976 in force 1st December 1986 http://www/IMO.Org/Conventions/Mainframe.asp

93 Status of Conventions as at July 2007 http://www/IMO.Org/Conventions/Mainframe.asp (Annex 1 of this study)

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93 Status of Conventions as at July 2007 http://www/IMO.Org/Conventions/Mainframe.asp (Annex 1 of this study)

The maximum amount of compensation payable by the 1992 Fund for any one incident is Kshs.23,625,000,000 in respect of incidents occurring on or after November 1, 2003.Kenya is among the 86 member states of the 1992 Fund Convention. On November 1, 2003, the 50 percent increase in the limits of liability and compensation entered into force and May 2003 saw the adoption of the Protocol establishing a Supplementary Fund to create a third tier of compensation. [95] Article 3 of the 1992 Oil Pollution Fund Convention, is expressly confined to pollution damage in the territory, territorial sea, EEZ ,or within 200 miles of the state concerned, and to 'preventive measures, wherever taken, to prevent or minimize such damage. Unlike the nuclear conventions, contributions to the IOPC Fund come not from states, but from a levy on oil importers, who are mainly the oil companies whose cargoes the vessels are likely to be carrying.

4.3 Disharmony in Cross Boarder Claims

Whenever a maritime accident occurs protracted and unsatisfactory litigation often results between ship owners and pollution victims. The obstacles observed in such litigation are:- jurisdiction, identification of the actual defendant, choice of law, standard of liability, enforcement of transboundary judgements and limitation of liability.

The 1992 Civil Liability and Oil Pollution Fund Conventions enable claims for 'pollution damage' to be brought in the courts of the state party where the damage occurs, regardless of where the ship causing the damage is registered. For example, as it has been shown under port state enforcement of the Marpol Convention, for liability to entail, a vessel does not have to be from a state party to the 1992 Civil Liability Convention. Further, the coastal state has jurisdiction if where the damage occurs is within its EEZ.

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95 IOPC Fund Convention http://www/unep.Org/depi/implematationlaw:asp as at 10-01-07

no measurable loss to anyone. Rather, it becomes punitive. Punishment in these circumstances is better left to criminal prosecution under the Marpol Convention. [94]

4.2 Can the Polluter Pay All?

In the shipping industry, the owner of a ship is entitled to limit his liability in accordance with a formula related to the tonnage of the ship. Shipowners rely on their maritime insurance policies to meet any claims that may arise in case of an oil spill. Maritime liability treaties limit compensation payable in such claims by excluding certain kind of losses. As stated in the introduction of this study, heads of damages that may arise in case of an accident are:- death, injury, property loss, economic loss and environmental damage. As is often the case, environmental damage is the least considered and is often not covered.

The International Oil Pollution Compensation Fund (IOPC Fund) operates within the framework of the 1969 International Convention on Civil Liability for Oil Pollution Damage (1969 Civil Liability Convention) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1971 Fund Convention). This old regime was amended in 1992 by two Protocols and the amended conventions known as the 1992 Civil Liability Convention and the 1992 Fund Convention, entered into force on May 30, 1996. These conventions lay down the principle of strict liability for shipowners and create a system of compulsory liability insurance. IOPC Fund provide supplementary compensation to the victims of oil pollution damage in member states who cannot obtain full compensation for the damage under the applicable 1992 Civil Liability Convention.

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94 MARPOL 73/78 CONVENTION, Supra note 82 http://www//imo.org/infoResource/mainframe.asp

It will be urged in the final chapter of this dissertation that resolving difficulties confronting coastal states in recovering adequate compensation goes beyond removing international obstacles, standardizing liability thresholds and executing judgments against the polluter. Rather what it entails is a standard policy on how to distribute the loss among shipowners who enjoy limited liability and how to co-opt cargo owners for equitable apportionment of liability.

5 Contribution of Negligence

Contribution of negligence is a principle that is often considered by courts whenever one party lays claim for compensation of damage caused by the negligence of another party. The courts are persuaded to consider to whether the party claiming had taken any steps to protect itself against damage, and whether it actually contributed to its own misfortune. Contribution of negligence is therefore a powerful defence raised by polluters. It greatly influences the courts' discretion in determining liability. Contribution of negligence was deliberated on in the Trail Smelter Case where it was decided that the United States was only liable to pay for trees that had been destroyed by sulphur dioxide fumes only and not fires. [96] This *ratio decidendi* behooves actors in the oil industry to put in place mitigation measures to minimize negligence that can cause pollution.

The following section will demonstrate how to factor in the concept of contribution of negligence into liability and compensation for oil pollution damage by ships, but at the same time remaining within the confines of international environmental law. It is hereby argued

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96 Reported in COMPENDIUM OF JUDICIAL DECISIONS ON MATTERS RELATED TO ENVIRONMENT: NATIONAL DECISION, Vol. 1 (UNEP/UNDP/DUTCH Government Joint Project on Environmental Law & Institutions in Africa (1998), p.13

that emergency preparedness and responses, the doctrine of self defence, the law of salvage and wreck removal, are emerging concepts aimed at mitigating environmental damage by oil from ships at sea. Each of these concepts is explained herebelow:-

5.1 Emergency Preparedness and Responses

As stated elsewhere in the introduction, oil pollution by ships may occur either deliberately or accidentally. The latter occurs when there is an emergency oil spill. Both customary international law and Article 198 of the 1982 LOSC commits contracting states the need to corporate. An oil spill may occur at sea due to collisions or structural defects of oil tankers. There are certain requirements that call for immediate action, for example, notification to others likely to be affected, elimination of the negative effects of pollution by preventing and minimizing damage, development of a contingency plan. [97] Article 7 of the 1990 Convention on Oil Pollution Preparedness Response, and Co-operation (OPRC), [98] a global instrument adopted by IMO following the Exxon Valdez disaster in Alaska, also commits parties to respond to requests for assistance from states likely to be affected by oil pollution. IMO must be informed of major incidents, and under Article 12, it is given responsibility for coordinating and facilitating co-operation on various matters, including availing of technical assistance and advice for states faced with major oil pollution incidents. Parties may also seek IMO's assistance in arranging financial support for response costs.

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97 Patricia W. Bernie and Alan E. Boyle, Supra note 42, at page 377

98 INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND CO-OPERATION (LONDON) 30 ICM 1991 in force 13 May 1995 http://www//imo.org/infoResource/mainframe.asp

Responsibilities of states when an emergency spill occurs are two pronged:- Firstly, on a more individual basis, states are called upon to respond to pollution emergencies if the accident falls within their jurisdiction or control, otherwise they will stand accused of renegading their obligations under customary international law of ensuring that such pollution does not spread or is not transferred beyond the limits of their boundaries and jurisdiction. [99]

Secondly, states must take all appropriate measures to prepare for emergency response. They are expected to.

(i) Establish and operate a prompt and effective national system and an authority with a requisite capacity for emergency response.

(ii) Operate a national back up contingency plan

(iii) Inform other states of the existence and capacity of the (i) above.

(iv) Ensure oil operations and port handling facilities are conducted in accordance with emergency procedures approved by competent national authority (read IMO)

5.2 Precautionary Principle

The Precautionary Principle allows for appropriate measures to be taken to prevent, mitigate or eliminate grave and imminent danger to coastlines from threat of oil pollution, taking into account the extent and probability of imminent damage if those measures are not taken. The core of the principle which is still evolving, is reflected in Principle 15 of the Rio Declaration, which provides that:-

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99 Article 194 92), 195 1982 LOSC. See also 1990 OPRC CONVENTION and the 1996 INTERNATIONAL CONVENTION ON LIABILITY AND COMPENSATION FOR DAMAGE IN CONNECTION WITH THE CARRIAGE OF HARZADOUS AND NOXIOUS SUBSTANCES BY SEA (1996 HNS CONVENTION) not yet in force). The two instruments apply the principles of co-operation and containment of pollution with regard to emergency incidents involving ships, sphere installations and port handling facilities.

"Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Principle 15 also provides that the precautionary approach shall be widely applied by states according to their capabilities.

Before an award can be determined, a claimant in any legal action will justifiably be called upon to demonstrate to what extent they applied the precautionary principle in defending themselves against eminent oil pollution damage.

Kenya has domesticated the Precautionary Principle as defined in Principle 15 above and incorporated it in the preliminary section of Environmental Management and Co-ordination Act No. 8 of 1999.

5.3 The Doctrine of Self Defence

Coastal states have the right to intervene beyond their territorial sea in cases of accident on the high seas involving foreign ships that are likely to cause pollution. In principle, vessels exercising high seas freedoms are subject only to the jurisdiction of the flag state. However, taking into account the considerable nautical miles that may occur between a flag state and its oil tankers, it would be unrealistic to expect a flag state to react on time wherever an emergency occurs. In a nutshell, the duties of coastal states have been set out in Article 1 (i) of the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution. Coastal states are permitted to take,

> "such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty which may reasonably be expected to result in major harmful consequences.[100]

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100 1969 INTERNATIONAL CONVENTION RELATING TO INTERVENTION ON THE HIGH SEAS IN CASES OF OIL POLLUTION CASUALTIES http://www/IMO.Org/infoResource/mainframe.asp

An opened ended question arises as to what level of self defence should be applied to counter a particular threat? When is the self defence reasonable or excessive? The discretion of measures to be taken lies with the offended state, but such discretion and force of measures taken are ultimately subject to international law. Self defence in this context finds its justification in the doctrine of sovereignty. When a state is under external threat, it is permitted to engage all powers at its disposal to defend it's territory. A state's primary duty is to safeguard it's citizens' well being. International obligations are thus secondary. A threat to marine environment damage by oil pollution by foreign ships qualifies as a national threat warranting measures of self defence. [101]

In the case of 'The I'm Alone,' A Canadian vessel was subjected to hot pursuit on suspicion that its crew members were engaged in illegal smuggling of liquor into the United States. "The I'm Alone" refused to heave to, in compliance with the United States Traffic Act of 1922. It was forcefully sunk and one member of its crew was lost. While deliberating on the provision of the 1924 Convention of United States and Great Britain for the prevention of smuggling of Intoxicating Liquor, the commissioners' joint report stated inter alia:

> "On the assumption stated in the question, the United States might, consistently with the Convention, use necessary and reasonable force for the purpose of effecting the objects of boarding, searching, seizing and bringing into port the suspected vessels; and if sinking should occur incidentally, as a result of the exercise of necessary and reasonable force for such purpose, the pursuing vessels might be entirely blameless. But the Commissioners think that, in the circumstances stated in... the Answer, the admittedly intentional sinking of the suspected vessel was not justified by anything in the Convention.." [102]

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101 Prof C. O. Odidi REGIONAL CONTROL OF OCEAN POLLUTION: LEGAL AND INSTITUTIONAL PROBLEMS AND PROSPECTS, Sijthoff & Noordhoff (1978) at page 13

102 "The I'm Alone' 1933 – 1935 Canada – United States: Special Joint Commission: I. C. Green INTERNATIONAL LAW THROUGH THE CASES, 4th Edn. 1978 Ocean Publications, Inc, Dobbs Ferry New York, U.S.A. 472

5.4 The Law of Salvage and Wreck Removal

The establishment of liability and compensation regime may not be a marine environmental degradation 'cure all'. A system of reward to prevent pollution occurring in the first instance, has been found to be effective, leading to developments in the law of salvage whose origins extend back very many centuries and whose principles are to be found throughout the marine world. If a ship or her cargo were in peril at sea, other ships within the vicinity had an obligation to rapidly respond to the call for rescue.

If it was apparent that the ship could not be saved, the salvors engaged in a scramble to save as much cargo as possible. The salvage remuneration due to the salvors was pegged to the value of the property saved. [103] In article 14 of the London Convention [104], The salvor could still (the fund permitting) recover a traditional salvage award; but the shipowner would be liable for the "Special Compensation" which was based upon the salvor's expenses.

Similarly, the concept of reward is contained in Section 309 (3) of the Kenya Merchant Shipping Act which stipulates that any person laying or giving evidence leading to the conviction of any master or owner of a ship for marine pollution offence may, at the discretion of the court, be awarded a portion, not exceeding one half of the fine imposed. Provisions relating prevention really help in avoiding environmental damage but continuous and dedicated attention both from the industry and from governments is required. Imposing liabilities which cannot be reasonably insured may eventually prove to be counter-

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103 States have been permitted to intervene in marine casualties involving oil pollution by the BRUSSELS PREVENTION CONVENTION. http://www//imo.org/Conventions/Mainframe:asp

104 After 10 years' work and debate a new Convention, the LONDON CONVENTION ON SALVAGE, 1989, was concluded at a Diplomatic Conference attended by 66 states in April 1989.

productive. In such cases risks tend to be thrown back on other ways and means than on proper insurance cover. When better prevention leads to fewer oils spills, the insurance option may become more attractive to insurers and the capacity of the insurance market may extend.[105]

The Kenya government hosted the International Maritime Organization (IMO) conference on removal of wrecks in May 2007 which culminated with adoption of the draft ""Shipwreck Removal Convention" – the legal basis for IMO member countries to remove shipwrecks that may have the potential to adversely affect the safety of lives, goods and property at sea, as well as the marine environment.

The five-day conference was held at the United Nations (UN) headquarters in Nairobi was attended by representatives from 64 states.[106]

The Convention covered reporting and locating ships and wrecks, determination of hazard, rights and obligations to remove hazardous ships and wrecks, financial security and settlement of disputes. The Convention also upheld that, the registered ship owner shall be liable for the costs of locating, marking and removing the wreck unless he proves that the maritime casualty that caused the wreck resulted from an act of war, hostilities, civil war, insurrection or a natural phenomenon of an exceptional, inevitable and irresistible character. Reasons for exemption from such liability to the owner includes a casualty wholly caused by an act or omission done with intent to cause damage by a third party or wholly caused by the negligence or other wrongful act of any government or other authority responsible for the maintenance of lights or other navigational aids in the exercise of that function.

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105 The Standard Newspaper Thursday 24th May 2007 - at page 10

106 UNEP Division of Environmental Policy Implementation (DEPI) ENVIRONMENTAL LIABILITY & COMPENSATION REGIMES: A REVIEW< (2003).54. http://www/unep.Org/depi/implemataionlaw.asp

Other issues agreed on were when a wreck has been determined to constitute a hazard, the registered owner or other interested party shall provide the competent authority of the affected state with evidence of insurance or other financial security as required. Before a wreck removal, the affected states may lay down conditions for the removal only to the extent necessary to ensure that the removal proceed in line with safety and protection of the marine environment. The affected state shall set a reasonable deadline within which the registered owner must remove the wreck taking into account the nature of the hazard.

The affected state shall also inform the registered ship owner in writing that it intends to intervene immediately in circumstances where the hazard becomes particularly severe.

The Convention, which shall enter into force 12 months later, may be denounced by a state party at any time after the expiry of a one year period after the date on which it was adopted by that state.

6 Compensating the Environment

When oil pollution by ships damages the environment, the affected party will be seeking to:- arrest the pollution, obtain restitution or recover financial compensation to cover the costs associated with material damage to the environment. In the latter category, the victim will be required to in the first instance to:- determine if the nature of the damage can be classified as pure environmental damage or if there is consequential damage to people and property .

Compensation raises the problem of assessing the measure of environmental damage. Should it be by reference to the costs of measures of reinstatement, or on the basis of an abstract quantification calculated in accordance with an established method? There is justified concern because environmental damage by oil pollution does not fit easily with the traditional approaches of civil and state liability which are designed to compensate an

injured person by requiring the polluter to pay the economic costs of resulting damage, which is frequently calculated by reference to a depreciation of the economic value of the damaged item, or the cost of repairing the damage. Pure damage to the environment may be incapable of calculation in economic terms, although it may have a non-economic value requiring restoration to the state prior to the damage occurring. [107]

The IOPC Fund Convention has interpreted the phrase 'pollution damage' to cover:- costs incurred in clean-up operations at sea and on the beach, preventive measures and additional costs. It also covers the proportion of the fixed costs incurred by public authorities in maintaining a pollution response capacity and the economic loss suffered by persons who depend directly on earnings from coastal or sea-related activities, including fishermen and hoteliers, and damage to property. [108]

However, interpretations have been left largely to national legal systems. A claim was initially allowed by a US court in the case of the Zoe Colocotroni, where a value was put on the estimated loss of marine organisms and the cost of replanting a mangrove swamp. Compensation was later reduced on appeal to 'reasonable' measures of restoration. [109] A more precise definition is needed both to give uniformity to interpretations, to ensure that some recovery of environmental costs would be available in the courts of all parties to the IOPC Fund Convention, and also ensure that excessive environmental claims are censored.

Article 1 (6) of the 1992 Civil Liability Convention makes it clear that compensation for impairment of the environment is recoverable, but compensation is limited to 'the costs

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107 UNEP Division of Environmental Policy Implementation (DEPI) ENVIRONMENTAL LIABILITY & COMPENSATION REGIMES: A REVIEW< (2003).54. http://www/unep.Org/depi/implemataionlaw.asp

108 Patricia W Bernie & Alan E. Boyle, Supra note 42 at page 388

109 Commonwealth of Puerto v. S. S. Zoe Colocotroni http://www//legal500.Com/dersSpain/fr/estr/006htm30k

of reasonable measures of reinstatement actually undertaken or to be undertaken. It is the view of the IOPC Fund Convention that pollution damage assessment *"is not to be made on* the basis of an abstract quantification of damage calculated in accordance with theoretical models." [110]

This new definitive parameter allows for recovery for loss of profit arising out of impairment of the environment, for example in the case of losses suffered by fishermen or hotel owners. It also includes pollution damage in the coastal state's EEZ, or in an area up to 200 miles from its territorial sea baselines. The interpretation is clearly preferable, but it still stops short of using liability to prescribe penalties on the polluter in the following circumstances occur:- harm to the environment that cannot be reinstated, harm to the environment that cannot be quantified in terms of property loss or loss of profits, governments concerned do not wish to reinstate or when harm to the environment occurs on the high seas and is not attributed to anybody. To this extent the true environment costs of oil transportation by sea continue to be borne by the community as a whole, and not by the polluter.[111]

A more significant development is the adoption by IMO in 1996 of a Convention on Liability and Compensation for the Carriage of Hazardous and Noxious Substances by Sea.(1996 HNS Convention) Once it comes into force the key risks in international maritime transport will all have been covered. The strict liability of the shipowner is channeled and limited, and contributions to the HNS Fund come from the receivers of HNS cargoes, or

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110 IOPC Fund, Annual Report 1990 http://www/unep.Org/depi/implemataionlaw.asp
111 Patricia W. Bernie & Alan E Boyle, Supra note 42 at page 388

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110 IOPC Fund, Annual Report 1990 http://www/unep.Org/depi/implemataionlaw.asp
111 Patricia W. Bernie & Alan E Boyle, Supra note 42 at page 388

from governments of their behalf. The HNS Convention applies to a range of noxious, dangerous, or hazardous liquids, gases, substances, and bulk chemicals as defined in Annex II of the Marpol Convention and in other international codes. It does not apply to oil pollution damage per se as defined in the 1992 Civil Liability Convention, but oils listed in Annex 1 of Marpol are nevertheless included.

Conclusion

Although the imposition of liability and compensation regimes is by no means an environmental policy cure-all, liability rules do serve a variety of useful purposes. They, for example, serve as an economic instrument providing an incentive to avoid oil pollution damage by ships. In other words, liability rules provide a technique for internalizing environmental and other social costs into production processes and other activities in implementation of the polluter-pays principle. It follows that responsibility and liability for oil pollution damage should not be regarded as a negative sanction, but rather, as a positive inducement to prevention, deterrence, restoration or compensation as the case may be. Alertness, self defence and preservation are the responsibility of all states that seek to preserve their marine environments. Apportionment of liability will always be applied where no measures have been taken to prevent pollution in the first instance. It is with this objective that the state representatives reached a consensus in the Shipwreck Removal Convention.

From an overall perspective, the 1992 Civil Liability and Oil Pollution Fund Conventions are safety nets for international regulation of pollution and an alternative to reliance on state responsibility for environmental damage. The two are also broadly

acceptable to the shipping industry as they ensure that the oil industry cannot offload all of the incidental costs of moving its products by sea.

The justification for this international perspective is the fact that Kenya is now in the process domesticating the 1992 International Liability and Oil Pollution Fund Conventions and treaties through the Marine Pollution Bill. The question of Liability and Compensation, including the aspect of insurance for oil pollution damage have been considered. The next chapter of this study will examine the issue of oil pollution by ships from a local perspective.

CHAPTER TWO

THE CASE FOR LIABILITY AND COMPENSATION FOR OIL POLLUTION BY SHIPS AT THE KENYAN COAST UNDER KENYAN LAW REGIME

1. Introduction:

This chapter will tackle the issue as to whether Kenya is ready to defend itself against accidental oil spills at the coast of Mombasa. To demonstrate the inadequacy of the prevention mechanism in Kenya, the chapter will also contain a detailed critique of laws and institutions currently in force. The *Ratna Shalini* incident will be referred to a case study.

It has already been stated that liability and compensation regimes are fundamental components of economic development and further, the right to development is a basic human right. This chapter will answer the following questions: firstly; what is the extent of oil pollution damage under consideration, secondly; how serious is the risk of an accidental oil spill by ships that dock at the Kenyan coast, thirdly; what economic and environmental interests would be adversely affected by the oil spill and fourthly, what is the capacity of Kenya's existing liability and compensation laws to provide prompt and adequate redress to victims of oil pollution damage.

The port of Mombasa is a hub for oil transport into east and central Africa. The Indian Ocean is often referred to as the oil tanker "super highway." [112] The stronghold for the vibrant coastal economy is port related activities. The bulk of the cargo that the port handles is crude oil offloaded from ships. [113] Again, as it has already be written in the introduction of this study, Kenya is a developing nation with a fragile economy. The

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112 Global Environmental Facility Study: Indian Ocean Marine Highway Development and Coastal Marine Contaminations Prevention Project Report Funded by World Bank May 2003 at page 3

113 Economic Survey (2006) Government Printer at page 209

coastal strip's contribution to the national kitty is derived from tourism, fishing and most important, port of Mombasa.[114] Crude oil is the single most bulky commodity handled by the port. [115]

The volume of crude oil handled per day at the port is under scrutiny by both local and international petroleum dealers and consumers. There is pressure on the port to off load the oil tankers within the minimum time possible to avert any possible fuel shortage in the country. Consequently maximum care not to spill oil into the sea is often overlooked.

Minor oil spills are inevitable in the ordinary day to day port activities. Through the methods of deballastating and tank flushing, ships empty of cargo lie afloat high in the water and may sway violently in strong wind or in rough sea. Sea water is therefore pumped into the fuel tanks, as a ballast, to stabilize them. Unless the tanks are cleaned before this is done, the water mixes with the oil residue. It is this mixture which forms the pollutants when it is discharged into the sea, as the ship prepares for refueling.

Oil pollution inside the harbor, arising from either oil refineries, oil company operations or from other sources such as cargo vessels pumping bilges, has not been severe enough to cause much concern. However, pollution of beaches from land based sources has on several occasions given rise to considerable anxiety, in particular on account of its negative impact on the tourism industry. [116] In the majority of cases the oil on the beaches arrives as solid, black, tar-like lumps. The tar balls (popularly referred to as "the tar balls of Port Reitz") range from golf ball size or smaller up to almost football size on occasions.

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114 Supra note 113 at page 194

115 Supra note 113 at page 209, 4.595 oil transporting vessels docked at the Port of Mombasa against 63 passenger cruisers in 2005

116 Professor C. O. Odidi, CONSERVATION AND DEVELOPMENT IMPERATIVES: Environmental Policy and Laws, 15 (1985) at page 46

Other significant pollution reported is characterized by the presence of some very large flattered lumps of soft tar, weighing up to 5kg. Generally these are found on the high water mark. The pollution is reported as "heavy" during the SE monsoon and as "slight" during the NE monsoon. The oil pollution is evenly distributed to the north and to the south of Mombasa. However, bays such as Malindi, partly sheltered from the south-east, escape the frequent and heavy pollution experienced during this monsoon. [117]

2 A Critique of Institutions Concerned With Oil Pollution From Ships in Kenya

The *M V Ratna Shalini* incident on 7th April 2005 [118] was followed closely by the *M V Gernmar Commander* incident on 13th August 2005 [119] when an oil tanker of single hull construction status was allowed into the port of Mombasa, carrying 82, 795 tones of crude oil. Due to its poor inspection status, the *MV Gernmar Commander* had been labeled a pariah and turned away in the Indian Gulf region. The docking was allowed despite the fact that Kenya in December 1992 ratified the International Convention for Prevention of Pollution from Ships (Marpol 73/78),which is the main international convention covering the prevention of the marine pollution by ships from operational or accidental causes. The key to Marpol 73/78 implementation falls on ensuring that ships are designed according to specified requirements to make them sea-worthy. Measures were adopted in December 2003 as amendments to Annex 1 of the Marpol 73/78

117 UNEP: OIL POLLUTION CONTROL IN THE EAST AFRICA REGION; UNEP Regional Seas Reports and Studies No. 10, (1982) at page 29
118 Saturday Nation, April 9th 2005 at page 4
119 Sunday Standard, August 4th 2005 at page 3

Convention, following the November 2002 sinking of the oil tanker Prestige off the Spanish coast. Tankers of single-hull construction should be phased out or converted into double-hull according to a schedule based on their year of delivery. The double-hull requirements for oil tankers are designed to reduce the risk of oil spills from tankers involved in low impact collisions or grounding. Under the phase-out schedule, "Category 1" single hull oil tankers, will not be allowed to trade after April 5 2005. These are ships delivered on or before April 5, 1982 or earlier or after their anniversary date in 2005. [120]

The following section of this study will examine the different regulatory regimes that combat oil pollution by ships in Kenya.

2.1. Kenya Ports Authority (KPA) [121]

The Kenya Port Authority (KPA) is the body managing all activities at the port of Mombasa. It is entrusted with the responsibility to ensure that the docking oil tankers are thoroughly inspected and issued with requisite clearance certificates. KPA's primary objective is to expand its financial base and to collect maximum revenue through taxation on behalf of the Kenya Revenue Authority.[122] KPA therefore does not overly concern itself with environmental issues. It is hereby argued that this is the main reason Kenya continues to allow in ships which are a threat to the environment and which have violated the IMO single hull regulations.

The powers of the Authority as a statutory body are enumerated under section 12 of the KPA Act. The powers deal mainly with matters of maritime transport, trade and port

120 Marpol 73/78 Consolidated Edition 2002 (IMO) Annex 1, Regulation 13F and G (prevention of oil pollution in the event of collision or stranding) at page 76 – 78.
121 Established by the Kenya Port Authority Act Chapter 391 Laws of Kenya
122 KPA: www.kenya-ports.com

management. It has become apparent that the powers are not adequate to enable the Authority properly discharge its functions with regard to control of oil pollution outside the port. The Authority has in the past dealt with incidents of pollution within the port of Mombasa from ships and installations dealing with storage fuels and has found it difficult to recover the costs incurred. The proposed amendments to the Kenya Ports Authority Act seek to empower the Authority to recover the cost of cleaning the port area from the parties responsible for such pollution. [123] The Authority has been responsible on behalf of the Ministry of Transport for taking operational command of an oil spill regardless of being a Tier 1, 2, or 3 spill [124] or being located outside of a Kenyan port, even to the extent of dealing with remote spills on the northern or central Kenyan coastline.

Whenever a ship becomes damaged by oil pollution within the KPA precincts, the owner is liberty to commence a civil action against the polluter under common law of torts for determination of liability and compensation. The court with appropriate geographical jurisdiction is the High Court of Mombasa. Where necessary, the KPA may be joined to the proceedings as a Plaintiff or Defendant as the case may be.

2.2 Kenya Maritime Authority (KMA) [125]

The constitution and legalization of the Kenya Maritime Authority (KMA) under the auspicious of the Ministry of Transport and Communications is a positive step. The KMA

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123 Report of the Task Force on the Review of Maritime Laws of Kenya Government Printer (May 2003) at page 23

124 Global Environmental Facility Study, Supra note 112 at page 4: Teir 1 refers to chronic or operational small spills at oil handling facilities, teir 2 are spills which up to 500 tonnes of oil and teir 3 involve 50,000 tonnes and above.

125 The KMA was created by a presidential order under section 3 of the State Corporations Act in June 2004. The KMA Bill was published in November 2004 but is yet to become law.

now has the mandate to perform the role of a convener and regulator of all private and government agencies, and to deal exhaustively with all matters concerning marine oil pollution by ships when it occurs.

The KMA is therefore the national authority responsible for the Kenyan National Oil Spill Response Contingency Plan (KNOSRCP) and takes command of any oil spill incident outside of the KPA port limits, whether they are a Tier 1, 2 or 3. The KPA is responsible for Tier 1 and 2 spills within the port limits. For a Tier 3 spill inside a KPA port, the KMA is legally responsible as it is responsible for all Tier 3 spills i.e spills of national significance. In reality the KPA would command the Tier 3 response inside the port and coordinate its efforts with the KMA which would be commanding the response to the spill outside of the port.

The Kenya Port Authority (KPA) is no longer legally required to take charge or respond to spills outside of the KPA port limits; however in practice this may remain the case for some time to come until KMA is fully established, for example, the KMA will provide the position of National On-Scene Commander, but this may initially come from the KPA Harbormasters Department. [126] KMA is yet to become an act of parliament. Lack of legislative authority hampers its operations, for example, the minister is unable to issue any regulations until such time that the KMA Bill will be enacted. Further, the KMA cannot implement Marpol 73/78 regulations because Kenya is yet to nationalize the Marpol 73/78 convention. The KMA is more of an administrative organ of operations at sea. The KMA Bill does not provide for compensation and liability for damage arising from oil pollution by

126 The IMO supported National Contingency Planning Workshop organized by the Ministry of Transport and Communications in Mombasa between 4th – 8th April 2005.

ships. As stated herein above, the KMA is still in its formative stages, and once enacted, the minister will have the discretion to issue regulations providing for liability and compensation.

2.3 Environmental Management And Co-ordination Act No. 8 of 1999 (EMCA)

Kenya's framework environmental law entitled the Environmental Management and Coordination Act came into force January 2000. This was the culmination of a long and active process which was initiated by UNEP at the request of the Kenya Government in 1993. In 1993, Kenya launched the National Environmental Action Plan (NEAP), which called for a government sessional paper on sustainable development in order to set comprehensive guidelines and strategies for government action, building on the NEAP process. The end-product of this process was the 1999 Environmental Management and Co-ordination Act (EMCA).

Kenya's new environmental protection act provides for a legal regime to regulate, manage, protect and conserve biological diversity resources and access to genetic resources, wetlands, forests, marine and freshwater resources and the ozone layer. Although the Act does not include a definition for "environmental damage" it does define "pollution [127] and it also includes thorough definitions of the polluter-pays principle and the precautionary principles.[128]

Under the general principles of the entitlement to a clean and healthy environment, the Act states that any person may apply to the High Court to compel persons responsible for environmental degradation to restore the environment as far as practicable to its immediate

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127 EMCA Part 1 Preliminary Section 2,page 59
128 Id., at page 59

condition prior to the damage. [129] This section also provides compensation for any victim of pollution and the cost of beneficial uses lost as a result of an act of pollution and other losses that are connected with or incidental to pollution. The Act establishes a National Environment Restoration Fund, [130] to function as a supplementary fund for the mitigation of environmental degradation where the perpetrator is not identifiable or where exceptional circumstances require intervention. It also creates a number of offences with penalties such as imprisonment and fines, but does not go as far as to create a civil cause of action for damages. However, under offences relating to pollution, the court may direct the polluter to meet cost of the pollution to any third party through adequate compensation, restoration or restriction. [131]

EMCA establishes two administrative bodies to manage the environment. The National Environment Council (NEC), which formulates policies, sets national goals and promote cooperation among stakeholders, and the National Environment Management Authority (NEMA) [132] which is the principal instrument for implementing of all policies relating to the environment.

The National Environmental Management Authority is empowered by Environmental Management and Coordination Act to regulate and enforce laws prohibiting pollution of the sea through normal operations at the port and also by incoming oil tankers within the EEZ .Based in Nairobi, NEMA has both financial and human resource constraints that renders it incapable of carrying out its policing duties of surveillance, hot pursuit and/or prosecution of polluters.

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129 Supra,note 1, Part II, Section 4, 5
130 Supra,note 1, Section 25
131 Supra, note 1, Part VIII Section 72 (i) & (ii) and Part XIII Section 146 (5)
132 Established by EMCA Part III Section 7

As part of its responsibilities, NEMA may issue and serve any person in respect of any matter relating to the management of the environment a restoration order to require the person to restore the environment as near as possible to its original state. It may also award compensation to be paid to persons whose environment or livelihood has been harmed by the person on whom the order is served.

2.4 Kenya Merchant Shipping Act [133]

The Merchant Shipping Act of 1967 is the principal maritime legislation in Kenya. It makes provision for the registration and licensing of ships and shipowners, safety of navigation, oil pollution, ship inspection and marine casualties including salvage. Part IX deals with pollution. In connection with sanctions relating to pollution contained therein, section 309 [134] imposes a fine of a mere ten thousand shillings on the owner or master of any ship of their respective national registration, who is convicted of discharging oil or oily mixtures within 100 miles of any land. The court is further empowered to order the person convicted to defray the expenses incurred in removing the pollution or making good the damage attributable to the offence.

However, where the offence relates to loading, landing or transshipment of petroleum it shall be a good defence for the ship's owner or master if they can adduce evidence to establish that they took all reasonable measures to prevent the discharge and that the discharge was not caused by their own acts or negligence or those of persons employed by them.

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133 Chapter 389 Laws of Kenya
134 Id.

In compliance with the 1982 LOSC, Kenya has already deliminated its EZZ of 200 nautical miles. [135] The Merchant Shipping Act is yet to be revised to extend its application beyond 100 nautical miles. Further, no provision is made in Kenya's national legislation for hot pursuit (recognized in the 1982 LOSC) for vessels found in violation of the Merchant Shipping Act and other national laws but which may attempt to escape. The Merchant Shipping Act needs to be completely overhauled to incorporate various international conventions outlined in chapter one of this study, for example the 1974 International Convention of Safety of Life at Sea (SOLAS), to which Kenya is a signatory. It is further proposed in this study that part IX can be expanded to create a new regulatory regime to take care of the preservation of the marine environment through diligent prosecution of polluters. The fine of Kshs.10,000 should be increased to a minimum of Kshs.100,000 in order to act as a deterrent to potential polluters. Further, conviction of offenders secured under the Merchant Shipping Act should be treated as conclusive prove of liability in subsequent civil litigation arising from the act of pollution.

2.5 Marine Insurance Act

The statutory facility currently governing marine insurance in Kenya is found wholly in the Marine Insurance Act, [136] which is identical to the Marine Insurance Act of the United Kingdom, 1906, Act. Since the enactment of the Act in 1968 there have been no changes, legislative or otherwise, to its provisions or schedules. The Kenya Marine Insurance Act does not provide for standard forum of the policies to be used in Marine Insurance. (The 1906 Act of UK has a schedule which provides for the form of policy to be used in marine insurance.)

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135 S K 90 Edition – 4, Survey of Kenya (2004), Government Printer (2004)
136 Chapter 390 Laws of Kenya

The development of the law on marine insurance in the United Kingdom has been largely a study of the relationship and interactions between the Marine Insurance Act, 1906, and the common law. Kenya has not benefited from similar development as it neither has similar clauses nor does it have proper litigation and legal procedures that give rise to well decided and reported case law [137] Marine insurance law in the United Kingdom has developed tremendously through case law since the 1906 Act was enacted. For example, the case law in United Kingdom has settled the law with regard to depiction of "insurance interest"; post contractual duty of good faith (which continue in some form after the formation of the contract); remedies for beach of the duty of good faith and disclosure by both the assured and the agent effecting insurance.

2.6 Marine Pollution Bill [138]

In 2002, the Kenya Government appointed a Task Force to review maritime laws in Kenya. The Task Force was mandated to review relevant maritime pollution prevention treaties and conventions (to which Kenya is a party) and existing environmental legislation with a view to establishing a coordinated and comprehensive marine pollution regulatory regime. In May 2003 the Task Force submitted a report containing a draft sessional paper on maritime policy, a draft Marine Pollution Bill, Kenya Maritime Authority Bill and the Kenya Merchant Shipping Bill. The Marine Pollution Bill has in its Part VI commendably dealt with oil pollution from ships whilst incorporating regulations contained in inter alia, the Marpol 73/78 and 1982 LOSC international conventions.

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137 Report on the Task Force on the Review of Maritime Laws, Government Printer(May 2003) at page 31

138 Government Printer May 2003

Part VII deals with liability and compensation. Sections 185 and 186 adopt the strict liability approach subject to certain exemptions and limitations. The concept of compulsory insurance is contained in section 191. Any ship attempting to enter or leave the Kenyan EZZ without an insurance certificate may be detained and/or fined Kshs.5,000,000. [139]

The Marine Pollution Bill is a breakthrough in the domestication of the 1992 Civil Liability and Oil Pollution Fund Conventions. Once the Marine Pollution Bill is enacted, oil industry stakeholders will be required to contribute to the IOPC Fund for as long as they are importing oil exceeding 150,000 tonnes per year. Non compliance will attract a fine of Kshs.500, 000. [140]

In section 201 any person who suffers oil pollution damage shall be eligible to obtain compensation from the IOPC Fund subject to any monies available from the polluters' insurance arrangements. Part VIII Section 219 – 222 covers enforcement, inquiries, legal proceedings and jurisdiction.

Of concern however is the express exclusion of pure environmental damage in the Marine Pollution Bill. Part VII, chapter two sec 98 (1) pollution damage has been limited to mean:-

a) Damage caused outside a ship by contamination resulting from a discharge or escape of oil from the ships.
b) The cost of preventative measures; and
c) Further damage caused by preventive measures but does not include any damage attributable to any impairment of the environment except to the extent that such damage consists of :-

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139 Marine Pollution Bill Sections 191 (5), (7)
140 Id. Sections 199 (5), (9)

(i) any loss of profit: or

(ii) the cost of any reasonable measures of reinstatement actually taken or to be taken.

Conclusion

There are several types of waste present at the Mombasa port, and these include: oily waste and sludge, garbage, chemical waste, sewage, and dirty ballast water. These wastes are causing the depletion of marine life, harm to flora and fauna, sedimentation, and bacteriological outbreaks. [141] If the Mombasa port were to comply with international regulations and standards, the benefits would be the attraction of more ships to the port, enhancement of the port's image on a global scale, and the protection of the economic and social interests, primarily the trading, fishing, tourism and industrial. These benefits can be achieved with the backup of the enforcement of Kenya's Environmental Management Act No 8 of 1999, and the implementation of International Maritime Organization (IMO) guidelines.

To revisit the *MV Ratna Shalini* incident which occurred at Mombasa Port on 7th April 2005,this was a wake up call for the country to prepare for future oil spill environmental disasters. To date the question of any negligence that may have occurred is yet to be addressed. Was it human error on the part of the pilot? Navigation regulations state that ships entering and leaving Kilindini harbor must be under the charge of a local pilot. The competence of such a pilot cannot escape scrutiny and the need for constant retraining is vital. It was also not established whether the mooring gangs had put in place fenders to protect the vessel from possible collusion with the quayside.

141 Interview with Ali Mohamed, Deputy Director of NEMA, Co-ordinator Coastal and Marine Programme, Ministry of Environment and Natural Resources on 14th December 2005 at NEMA Headquarters Kapiti Road, Nairobi

KPA, in concert with government lead agencies to combat emergency oil spill response such as KPA, KMA, NEMA and Oil Spill Mutual Aid Group (OSMAG) were on hand to put into practice the National Marine Oil Spill Contingency Plan. Despite having tug boats skimmers, dispersants and booms at their disposal, the oil spill was not contained at the port, but spread to as far as Port Rietz and Tunza Area along Mwanche Creek, causing alarm to Mombasa residents.

Although no significant immediate damage to the environment was established, mangroves (an area of approximately 40 acres) were covered by oil on the lower leaves. No change was reported on the volume or quality of fish tourism catches. Tourism industry did not report any contamination of Mombasa pristine prime beaches. Non-the-less the European Union sponsored project on crab farming, the Tsunza Conservation, was apprehensive that the spill had put the 11 million project at risk. The crabs thrive on the endangered mangrove species only found at Indonesia and at Tsunza and Mwache creek in Kenya. [142]

NEMA relied heavily on KPA both in human resources and equipment. NEMA was expected to reach out to the local fishing communities and invite them to air their grievances over the incident, and to provide them with technical assistance in determining the level of losses incurred to the mangroves with a view to adequately compensating them. The tourism industry players, beach front property owners, vessels owners anchoring close to the port all fall under the NEMA's environmental degradation prevention caretakers mandate.

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142 Sunday Standard April 10, 2005. at page 3.

CHAPTER THREE:

EVALUATION AND RECOMENDATIONS

1 Introduction:

So far this dissertation has been a demonstration of the confluence between oil pollution prevention and control in Kenya and the existing liability and compensation legal arrangements. It is now possible to draw qualified conclusions and make recommendations within the framework of the development and protection of the coastal marine environment.

This chapter will map out the way forward for Kenya as a developing nation. The threat to the tourism industry by pollution of the beaches by oil spills will be singled out as there are new developments in this area for the recovery of compensation. The doctrine of contribution of negligence and its role in diminishing the compensation ultimately payable in claims for damages will be examined. The use of port reception facilities will be revisited. International co-operation in combating oil pollution is well captured in the UNEP Regional Seas Programme. It will be argued that the 'problem sheds' approach should be expanded to include liability and compensation thereby solving the problems encountered in cross border claims. The future of pollution insurance in Kenya will be evaluated with a proposal that the enactment of an exclusive Pollution Insurance Act as the best way for containing the prevailing oil pollution risks. An overhaul of the 1968 Marine Insurance Act will not suffice.

This study will wrap up by strongly advocating the delinking of the liability and compensation provisions for oil pollution damage from the Marine Pollution Bill, now pending before parliament for debate. Examples from various jurisdictions will be used to illustrate this prevailing paradigm shift.

If Kenya had a comprehensive environmental liability and compensation regime, the *Ratna Shalini* oil spill incident would not have caused so much anxiety among environmentalists. The bond deposited by the insurers P & I Club, Steamship Mutual Group of UK of 78,000,000 was not a compensation award *per se*. It was a holding fund to cover clean up operation expenses and any other incidental expenses. At the time of writing, no claim has been lodged for compensation. Since no time limit within which a claim may be lodged has been established, the depositors of the bond may very well claim it back, less the Kshs.23, 000.000 spent on the clean up expenses by K.P.A.

2 What Options for Kenya

In connection with prevention of pollution by oil at sea, the challenge at hand is to select from the developed world those technologies and laws that are effective, both economically and environmentally and to reject the costly, but often limited value 'hi-tech' white elephants. [143] For example, dispersants, which are solvents and agents for reducing surface tension, are used to remove oil slicks from the water surface. The treated oil enters the water column as fine droplets where it is dispersed by currents and subjected to natural processes, such as biodegradation. If this process is effective, the oil may thus be prevented from moving into sensitive environments or stranding on-shore, thereby eliminating or reducing damage to important coastal habitats, marine life, or coastal facilities. However dispersants have been reported to have low effectiveness. Results may have been due to the use of inadequate application techniques, such as poor targeting and distribution of aerial sprays, as well as the possibility that the oils were not dispersible, some dispersants were poorly formulated, or the results were inconclusive.[144] The priority must lie in having people at the grassroot level trained and experienced in oil spill techniques so that this can be translated to local conditions. Social awareness of rights and obligations cached in Kenya's liability and compensation regimes should be factored into future governments' development plans. This assertion is well captured in the concept of 'due diligence' and the Precautionary approach. The following are selected areas where appropriate legal changes recommended:-

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143 E.C. Wayment and B. Waystaff APPROPRIATE TECHNOLOGY FOR OIL SPILL MANAGEMENT IN DEVELOPING NATIONS, 1999 (Great Britain) http://www.iupac.org/publications/pac/special/0199/ppdfs/wayment.pdf

144 Committee on Effectiveness of Oil Spill Dispersants Marine Board, Commission on Engineering and Technical Systems, National Research Council, 1989 National Academy Press Washington DC at page 2.

2.1 Tourism

Beaches and unique coral reefs attract tourists and tourism is now one of the main source of foreign exchange in Kenya. Thus, there is considerable economic incentive in recreation areas to protect beaches from spills or to clean them up quickly. Cleanup of contaminated boats, seawalls and harbor equipment can be expensive. International environmental law has taken cognizance of this fact and preventative measures are being taken to save the tourist image. Some recent pollution cases have given rise to a new type of claim for compensation which could be called "costs and expenses incurred in saving the touristic image of a polluted region."[145] Kenyan investors in the tourism industry can exploit this avenue, by incorporating it into local liability and compensation laws, and for ease of recovery of claims. It may also be treated as a special head of damages in civil law litigation.

2.2. Port Waste Management Facilities at Mombasa

Intentional pollution may be reduced by providing alternative reception facilities for the oil tankers at ports and harbours. Kenya has no explicit provisions in its laws requiring port facilities for containment of oil and oily wastes. Section 80 of the Kenya Ports Authority Act has a fairly broad requirement that it is the undertaking of the Authority to provide all reasonable facilities for handling and warehousing of cargo and other goods. Currently Kenya has no operational port reception facilities.

The regional approach is hereby recommended because it would maximize potential for success in the future of liability and compensation regimes. Uniformity of restoration costs and preventive measures, efficient linkage with economic instruments, access to

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145 Wu Chao, Supra note 9 at page 287

justice and information, liability defences, time limitations, jurisdiction, as well as liability thresholds and limits, would be achieved, if not guaranteed.

3 Whither Pollution Insurance

Insurers regard the concept of pollution insurance with justifiable caution. The main cause for their apprehension is that there is lack of clarity in the nature of the damage-causing process, notably the delay between its start and the time when the damage is eventually discovered and traced to its cause. The imperceptible way in which the damage is caused, insufficient knowledge about the harmful properties of the substances or processes to which the environment is exposed, and the insured's knowledge, or capacity to know, about the damage-causing process, are also a challenge. This information is the most important for insurers in terms of assessing and managing the risk, and in calculating the cost of adequate premiums.

The most frequent type of pollution clause in general liability policies limits coverage to 'sudden and accidental' events. This phrase combines an occurrence within a short period of time and an element of foreseability. By limiting coverage to sudden events, insurers try to protect themselves against claims resulting from releases or exposures continuing undetected over a long period of time, which they consider an uncontrollable and incalculable risk. [146]

With respect to oil pollution, it is especially difficult to define the dividing line between accidental (including negligent) pollution and that pollution which is the natural and expected in normal port operations.

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146 Werner Pfenningstorf, Supra note 26 at page 55

It is hereby argued that insurance policies should be framed to cover liability for damage resulting from the release of polluting oil directly from the insured site, irrespective of whether this release was sudden and unexpected, as long as there was release or escape of the noxious substance.

Kenya, like many other developing countries has problems associated with the structure of its insurance market. Lack of a suitable marine pollution insurance policy or legislation to guide the Kenyan insurance industry is a major draw back to providing a guideline as to how a potential polluter should go about securing indemnity. The Marine Insurance Act applies laws and practices of the United Kingdom. Interpretation of such laws by our courts may create some difficulty. The low pace of litigation and legal procedures has further hampered development of the marine insurance industry. Claims recoveries have presented problems as carriers avoid or limit liability due to lack of facilities and other favorable port conditions. At times, many insurers in Kenya (as in other developing countries) exclude recovery from carriers in their premium rating calculations, it being their view that in most cases, recoveries are not practicable.[147]

The Kenyan insurance markets suffer from weaknesses affecting all areas of operation:- underwriting, rating, and handling claims and recoveries. Due to the reduced size of its market, it is difficult to set up servicing bodies within the individual domestic companies or even at national level. Unlike most large maritime countries, Kenya neither has organizations which classify ships nor does it benefit from reports on ships regularly published by such organizations. There are no regional facilities and co-operations in the

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147 Report of the Task Force on the Review of Maritime Laws of Kenya Government Printer (May 2003) at page 23

area of marine insurance and this has made its difficult for Kenya to defend its interests at international meetings. Lack of a collective arrangement has meant dependence on foreign international bodies in handling claims.

As a way forward, it is recommended that the laws and practices applicable to marine insurance in the East African Community and COMESA [148] regions be harmonized and encouraged. This would help build up capacity and overcome the peculiar weakness associated with diminished capacity in the market. It would also be in tandem with the regional seas regime. Implementation of the proposed amendments to the Marine Insurance Act will bring our law, procedure and practices in the marine insurance industry at per with international standards thereby bringing with it certainty in the industry and an increase in maritime trade. Implementation of the other proposals touching on the market will increase capacity in the market and bring in the relevant expertise which will in turn increase maritime trade and earn the country the much needed foreign exchange and growth of the national economy.

The overall recommendation is that Kenya should acquire separate and succinct laws covering various aspects of marine pollution liability and compensation. Loopholes in the EMCA, Marine Insurance Act and Kenya Merchant Shipping Act have already been articulated in chapter two of this study. The Marine Pollution Bill, when enacted, will be a triumph in Kenya's marine pollution control discourse. But be it as it may, there is a need to separate Part VII which deals with liability and compensation for the following reasons (i) The Marine Pollution Bill deals with pollution from other sources including dumping of

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148 Common Market for East and Southern Africa (COMESA)

waste and noxious substances, whereas the liability and compensation refers to oil pollution from shipbourne sources only. (ii) The legal parlance employed in the liability and compensation section is highly technical and incapable of comprehension by untrained persons in international environmental law. The provisions therein need to be redrafted and demystified in order to benefit the coastal communities.

It is hereby proposed that Kenyan laws should have (i) Liability and Compensation for Environmental Damage Act, (ii) Oil Pollution Act, (iii) Environmental Liability Act and (iv) Public Liability Insurance Act. In support of the above recommendations, examples from other jurisdictions around the world are set out hereunder:-

United States:-1990 Oil Pollution Act (OPA)

This Act imposes liability for damage caused by discharges of oil into navigable waters, adjoining shorelines or the EEZ of deep ocean waters. Strict liability is imposed on owners, operators or pipelines, and the lessees of offshore facilities or deep water ports. Defenses include an act of God, an act of war, and an act or omission of a third party. Public vessels and permitted discharges are excluded from liability. A public trustee is designed to act on behalf of the public interest to recover for natural resource damages. OPA expressly mandates the measure of damages as the cost of restoration or replacement, the reduction in value pending restoration and assessment costs rather than leaving costs to be determined by the discretion of the trustee. Liability is also limited under OPA, with the amount dependent on the type of facility discharging oil. The time period in which to bring forth an action is limited to 3 years. [149]

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149 Gerd Jan Van Der Ziel etal A MARITIME VIEW. TRANSNATIONAL ENVIRONMENTAL LIABILITY AND INSURANCE (1993) Grahams & Trotman at page 237 www.wscg.mil/hp/npfc/npfc.htm

Italy: Italian Law 349/1986 Gassetta Officiale No.162, 15 July 1986,Suppl.Ord.No.59[150]

Italy is unique in that it is the only European country that currently recognizes the concept of "natural resources damage" in the same way as the U.S.A OPA and the 1993 Lugano Convention do, as a separate head of damage. This law allows the State to pursue damages against any person who has damaged, altered or impaired the environment through willful or negligent behaviour in breach of environmental regulations. It also allows the state to force the polluter to clean–up surface waters. Although this law recognizes the concept of pure economic loss, right of action is limited in that only the state and local authorities have standing to sue for natural resources damages on a fault liability basis.

India: Environmental (Protection) Act of 1986 [151]

India has approximately 41 environmental related laws bordering on issues such as water quality and pollution, air quality and pollution, forest conservation, hazardous substance management, noise pollution, ozone layer depletion and biodiversity, as well as litigation. In 1986 the Indian Government enacted the Environmental (Protection) Act of 1986 for the protection and improvement of its environment. Under Section 9 of the Act a polluter is liable for the actual occurrence of any discharge in excess of the prescribed standard, and is consequently bound to prevent or mitigate the environmental pollution.

The polluter under the Act is also liable for the expenses, if any, incurred by any authority or agency with respect to any remedial measures they have taken in solving the problem. The expenses also include interests (at such reasonable rate as the Government may fix) from the time when a demand for the expenses is made until it is paid.

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150 Liability and Compensation for Environmental Damage: Compilation of Documents, United Nations Environment Programme. Nairobi, 1998.

151 UNEP: Division of Environmental Policy Implementation (DEPI) ENVIRONMENTAL LIABILITY & COMPENSATION REGIMES: A REVIEW, (2003) 32

India: Public Liability Insurance Act, 1991[152]

The Government of India in 1991 further enacted the Public Liability Insurance Act. The Act is limited to providing relief for persons affected by accident occurring while handling hazardous substances. The Act defined 'handling' as the manufacture, processing, treatment, package, storage, transportation by vehicle, use collection, destruction, conversion, offering for sale, transfer or the like of such hazardous substances'.

Canada: 1985 Canada Shipping Act R.S.C. 1985 c. S-9 ss. 673-727

Part XVI of the Act addresses liability for damages caused by oil discharged from ships, including the costs and expenses incurred by a public authority for measures taken to prevent or remedy the oil pollution damage. The Act is in compliance with international conventions. (Specifically, the upper limit on liability are governed by the 1969 International Convention on Civil Liability for Oil Pollution Damage (as amended by the 1992 Protocol.)

Under the Act, the basic principle is that the owner of the ship which causes the oil discharge will be liable. The Act does provide for specific defenses, such as when discharges result from an act of war, a natural phenomenon of exceptional character, or when a discharge is wholly caused by a third party with the intention to cause damage or by a negligent or wrongful act of any government or other authority responsible for the maintenance of lights or other navigational aids. The use of the word wholly would appear to exclude these defences from cases where there have been contributory causes. A claim

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152 Supra note 151 at page 33

may also be defended on the basis that the oil discharge occurred fully or partially from a claimant's act or omission which was negligence, or done with an intention to cause damage.

In addition, the Act permits a direct action against the insurer (defined as the "guarantor") of the ship. The insurer may rely on the same defences as the owner and may also defend on the basis that the discharge resulted from the owner's willful misconduct. Persons who claim to have suffered damage and who are not public authorities may claim against oil pollution funds established under the Act and under the 1971 Fund Convention (as amended by the 1992 Protocol). [153]

Nigeria: The Response, Compensation and Liability for Environmental Damage Bill (RECLED).

Under Section 4 of the proposed Act, any person intended to handle hazardous substances is required to take out one or more insurance policies providing for contracts of insurance whereby he is insured against liability to give relief.

The overall objective of the proposed law is to put in place a legal framework capable of delivering acceptable compensation and provide for response and remediation regimes to cater to the interest of the environment. The law is excepted to set up a fund pool, akin to the Superfund [154] in the United States, which would be used to remedy and respond to environmental damages and disasters, especially in the oil industry.(Such a fund is already in existence in Kenya under NEMA's Restoration Fund [155]) It will also be utilized for the purpose of rehabilitating areas where operations have ceased, pursuing conservation

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153 Dolden, E. "Environmental Law in British Columbia: A Primer for U. S. Insurers." 1997. Insurance Report at www.dwf-inslaw.com/publications/.

154 United State Super Fund www.epa.gov

155 Environmental Management and Co-ordination Act No. 8 of 1999, Section 25

programs and carrying out continuous data collection and studies. The law will closely resemble the U.S.A's OPA in many respects and even adopts the term " potentially responsible parties" (PRPs) to identify polluters. PRPs may include past and current owners, operators, generators and transports who are held responsible for all costs of removal or remedial action, damage to natural resources, and the costs of any injury to health. This approach is in line with the 'precautionary principle' introduced in chapter one if this study. Likewise, transporters and corporations are also be liable for negligent acts committed in the past with present adverse effects. Liability is strict and only subject to limited defenses namely, an act of God, war, or third party interference. The polluter may pay full costs and damages if the damage was the result of willful misconduct, negligence or due to a violation of environmental safety regulations. There is also a time limitation of 3 years after discovery of loss.

RECLED law requires that certain categories of oil industry players take out a specified minimum environmental risk insurance coverage in addition to comprehensive general liability insurance. Beside mandating the use of insurance, the Act also establishes an environmental insurance scheme to indemnify the environment and citizens from the loss arising from environmental pollution. The Environmental Trust Fund (the Envirofund) is formulated to settle expenses incurred in response and remedial actions. Contributions to the Envirofund stem from a variety of sources including, inter alia, chemical and petroleum levies, a general corporate environmental levy and fines.

Conclusion

Although the apportionment of liability and compensation for environmental damage arising from oil pollution by ships is a pivotal element for marine protection and economic development, Kenya is yet to set up clear dimensions. The institutional framework can only

be constituted by redefining the legislative parameters. Further, Kenya lacks a maritime policy to sustain the development of maritime legal regime. The slow pace of ratification and implementation of international maritime conventions and protocols impacts negatively on the oil industry. Kenya like many African countries is notorious for ratifying treaties, which are never domesticated. The treaties are negotiated by officials of the relevant ministries without consultation with other pertinent agencies and without considering how the provisions of such conventions fit in with the national agenda. [156]

In order to comprehensively wrap up this dissertation, it is imperative to revisit the research questions posited in the introduction. It is hereby argued that they have all been unequivocally answered as follows:-

There are various definitions that have evolved of marine oil pollution damage. All of the definitions are unanimous that marine environmental damage constitutes damage to natural resources, property that forms part of cultural heritage, anthropocentric benefit derived from environmental amenity, physical injury to human and personal property.

The threshold upon which oil pollution damage entails is determined by tolerable levels under prevailing local circumstances. The physical parameter is any detrimental alternation to the biota, including changes in climate and human health, or natural or managed ecosystems. In Kenya, the 1999 Environmental Management and Co-ordination (EMCA) provide for the establishment of environmental quality committee [157] which shall in consultation with other lead agencies determine water quality standards.

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156 Paul Musili Wambua, THE CHALLENGES OF CONTROLLING AFRICAN MARITIME ZONES: COMMAND, CONTROL AND CO-OPERATION - HOW DO WE DO IT? "Sea Power for Africa Symposium ; South Africa, August 28 - September 1, 2005.

157 Supra note 155, PART VIII, Section 71 (a) (b) (c).

International liability and damage compensation for oil pollution regimes are well established. Through leading international conventions such as the 1982 LOSC, Marpol 73/78, the 1992 Civil Liability and Fund Conventions issues of when liability accrues and the scope of application, are provided for.

Kenya has capacity to cater for marine environmental damage. The 1999 EMCA captures this facility in its provisions contained in Section 72 (1) and (11) whereby any person guilty of polluting the marine ecosystem shall be liable to pay a fine and/or be imprisoned for up to two years. Further the polluter is liable to pay costs restoration, restitution or compensation as the case may be. The Polluter Pays plus the Precautionary Principle are further captured in Part 1 (preliminary) and Part 11, General Principles of EMCA. What Kenya now requires is an enhancement of the existing liability and compensation laws to bring them at par with international standards. The civil law of tort is incapable of exhaustively addressing situations that arise during litigation such as, ability of the Plaintiff to identify the polluter, cross boarder claims, determination of the extent of damage under consideration, and the form of compensation expected.

Insurance law has made a substantial contribution towards compensating the victims of pollution. However, the compensation of damage caused during a massive oil spill may be beyond the pecuniary ability of a local insurance establishment. In line with the recommendations tabled by the Task Force on the Review of Maritime Laws of Kenya, the Marine Pollution Bill will cater for massive oil spills and when they occur. Further in situations where the polluter is uninsured or under insured, subscription to the 1992 International Civil Liability and Fund Conventions, and for that matter the IOPC Fund is recommended. The ratification and domestication of the above conventions is crucial at this point in time. The omission by Kenya's parliament to cooperate and enact the pending bills

renders the question of compensation open ended. The economy of the coastal strip will be enhanced by the protection of its biodiversity through effective liability and compensation schemes.

Finally the concept of pure environmental damage is captured by clear definitions contained in 1999 EMCA, [158] and by the exclusive provision for protection of a coastal zone, coupled with the facility that any person has *locus standi* to bring an action against any polluter of the environment.[159]

158 Environmental Management and Coordination Act(1999) PART 1, Preliminary and PART V Section 55

159 Ibid., PART II ,Section 4

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