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Protection of The Marine Environment Under International Law and Kuwaiti Criminal Law

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PACE LAW SCHOOL
P A C E U N I V E R S I T Y

PROTECTION OF THE MARINE ENVIRONMENT UNDER INTERNATIONAL LAW AND KUWAITI CRIMINAL LAW

**A dissertation submitted to the Faculty at the Pace University in partial fulfillment
of the requirements for the degree of Doctorate in Judicial Studies (S.J.D) in
Environmental Law at Pace Law School .**

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**Pace Law School
2016**

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For my parents who paved the way before me and upon whose shoulders I stand. This is also dedicated to my loving family and my many friends who supported me on this journey. Thank you very much.

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Introduction:

The marine environment has unique characteristics that distinguish it from other elements of nature. Since seas and oceans cover more than two-thirds of the earth, they play a vital role in achieving biological and climatic balance on the planet. The marine environment also plays an important role in human life, since it has plenty of nutritious and industrial resources that directly affect human welfare. It also contains huge amounts of oil and natural gas, which has played a role in the economic prosperity of the world. Moreover, seas are considered a source of freshwater through resorting to desalination of seawater in countries that suffer from a shortage of freshwater resources. In addition, the marine environment is considered an important source of food for human beings and other living organisms

Kuwait's interest in protecting the marine environment started earlier than that of other Gulf States. In 1964, Kuwait enacted a law preventing pollution of navigable waters by oil. This law is deemed the first law to protect the marine environment from the negative effect arising from the activities of exploration, extraction, and exportation of oil, which began to increase in the 1950s.

Moreover, Kuwait's efforts aimed to protect the environment were not limited to the issuance of environmental laws at the national level. In fact, Kuwait played a leading role at the regional level of marine environmental conservation, as well. In the 1960s, Kuwait urged and encouraged the states overlooking the Arabian Gulf to ratify

a regional convention aimed at cooperating in the protection of the marine environment of the Arabian Gulf (later called The Kuwait Convention of 1978). The Kuwait Convention (1978) reflected awareness of the importance of co-operation and co-ordination of action on a regional basis with the aim to protect the marine environment of the region for the benefit of all concerned of its members. This convention was considered the first regional convention on the protection of the marine environment in the Middle East. It contained many important provisions for the protection of the marine environment applicable until now. Kuwait did not only execute the convention, but it continued its efforts to establish a regional organization consisting of the Kuwait convention members. The main duty of the organization is to ensure the valid execution of the provisions of the Kuwait Convention. This organization is located in the State of Kuwait and is named The Regional Organization for the Protection of the Marine Environment (ROPME).

Since 1979, and despite the political problems and wars that occurred among the members of the organization, ROPME succeeded in overcoming these obstacles. This success is attributed to the fact that the ROPME has focused its efforts on urging its members to work on combating environmental pollution, protecting the marine environment of the Arabian Gulf, and avoiding discussion of the political issues.

While international efforts aimed to combat the pollution of the marine environment began in the 1920s, the first conference was held in Washington in 1928. It sought to establish an international convention that prevents pollution of the navigable waters. In 1935, the League of Nations made great efforts to convince some

governments of the necessity of fighting marine pollution through executing international conventions protecting the marine environment from oil pollution. However, these early international efforts were unsuccessful. The efforts of the League of Nations in 1935 did not achieve any progress to execute any convention. As for the Washington Convention (1928), no nation ratified it. Nevertheless, these conferences paved the way later to execute nine distinguished international conventions to protect the marine environment, including the following:.

1. 1954 London Convention
2. 1958 Geneva Convention on the High Seas
3. 1963 Moscow Convention Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water
4. 1971 UN Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof.
5. The 1972 Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft.
6. The 1972 London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
7. The 1973 London International Convention for the Prevention of Pollution from Ships
8. 1974 Paris Convention for the Prevention of Marine Pollution from Land-Based Sources.

9. 1982 United Nations Convention on the Law of the Sea

Humans thought for several decades that seas and oceans are able to absorb the pollutants thrown into them without any changes to their natural components due to their vast area. Recent studies, however, have shown that this belief was wrong because the marine environment suffers a lot due to the pollutants thrown into it over a century-and-a-half. The studies also have shown to what extent this pollution adversely affects humans and other living beings.

Since the 20th Century, the marine environment has suffered many environmental catastrophes that led to a considerable increase in the levels of pollution within it. The causes of such pollution are numerous but the main cause has been oil pollution, such as the second Gulf War environmental catastrophe in 1990 and the British Petroleum catastrophe in the Gulf of Mexico in 2011. Ground pollution is considered the second biggest source of the marine environment pollution problem, since most countries of the world dump their industrial and household waste directly into the sea without any kind of pre-treatment.

In Kuwait, sewage is considered the second biggest source of marine environmental pollution following oil pollution. Additionally, rainwater is discharged from streets directly into the sea without treatment, even though this water contains a lot of chemical waste and oil that has leaked from vehicles. Moreover, Kuwaiti authorities dump sewage directly into the sea without treatment in the case of any breakdown of any sewage treatment plant. This may provide an explanation for the

deaths of thousands of fish that have occurred from time to time in the territorial waters of Kuwait.

On the other hand, despite the scores of international conventions on protection of the marine environment, all these conventions focus only on the necessity of international cooperation in combating pollution and protecting the marine environment, and urge the countries of the world to issue national laws that incriminate any abuse of the environment. Moreover, These conventions lack criminal provisions that combat environmental crimes and protect the marine environment. They do not contain any article that explicitly states that the pollution of the marine environment is deemed a crime. They neither state an international penalty to be applied when an environmental crime is committed nor obligate the States that do not ratify them to comply with their provisions. This has prompted many lawmakers concerned with environmental issues in the countries of the world to enact national criminal laws that incriminate any abuse of the environment, and set penalties such as imprisonment and fines for failure to comply with such laws.

It is surprising that despite all this international concern for the environment and all these international efforts exerted to combat environmental pollution, there is no international criminal law to fight environmental crimes similar to international laws dealing with counterterrorism, organized crime, human trafficking and war crimes. In fact, the threat posed by environmental crimes is no less than the threats posed by these crimes. However, environmental crimes sometimes pose even more threat because they

may not be limited to a certain area or time. They can happen both in time of war and in time of peace, and directly affect human health.

For the State of Kuwait, although it paid attention to environmental matters earlier than other states of the Middle East (as it started to establish laws protecting the environment in the early 1960s), its marine environment in particular is still suffering from increased levels of pollution compared with other GCC states. The main reason for the increased levels and cases of pollution in Kuwait is that the Environmental Public Authority does not apply the Law of Environment Protection in the correct way. Moreover, poor governmental administrative procedures are considered one of the biggest obstacles that hinder the enforcement of environmental law in Kuwait. This is due to the lack of defined environmental administrative responsibilities of each authority, which leads to the administrative authorities' failure to fulfill their legal duties. The lack of environmental competence of the majority of governmental authorities responsible for protecting the environment and combating pollution leads to their failure to do so. As an example of this lack of clarity of environmental responsibilities and competences, the Law of Environment Protection states that the Environmental Public Authority is competent with all issues relating to environmental protection and combating pollution; but in reality, the Ministry of Transportation is the authority most competent in the protection of the marine environment and combating pollution of the environment.

In addition, many governmental authorities responsible for monitoring the levels and sources of pollution do not have tools that would enable them to do their job.

This leads to their failure to assume their duties because of the poor performance of the environmental authorities that are supposed to combat the sources of pollution. An example of this obstacle is the Kuwaiti government's failure to deal with the issue of the death of thousands of fish. The authorities currently do not know the real cause of the death of fish due to the lack of advanced systems that would help identify the causes and sources of pollution in the Kuwaiti marine environment.

Kuwait is considered the ninth biggest producer of oil and gas in the world. The country exports three million barrels of oil every day. This amount of oil is increased to four million from time to time in order to control oil prices or to compensate for the shortage of global production of oil. All these millions of oil barrels are exported only via the sea through a single means of transportation — massive oil tankers, most of which are controlled by the state-owned Kuwait Oil Tanker Company. In order to facilitate the process of oil exportation, the State of Kuwait established oil tanks and refineries onshore. However, this process causes a lot of environmental pollution to the Kuwait marine environment, in addition to the pollution arising out of the operations of discharging the balance water carried out by the oil tankers into the seawater during the process of filling their tanks with oil.

These operations, which cause pollution to the Kuwaiti marine environment, are carried out deliberately, and necessitate legal accountability from the Environmental Authority, since it is the primary, competent public authority enforcing laws that protect the environment. Nevertheless, the law in Kuwait does not allow any entity to litigate the government or any of the state-owned companies because they have

criminal judicial immunity. Although individuals and societies concerned with environmental protection are not able to litigate against governmental administrations if any environmental pollution occurs, such societies always draw the government's attention to the environmental violations committed by the governmental administrations or companies in order to entreat them to end such violations. As an example of this, the Green Line Environmental Group asked the government to investigate the Kuwait Oil Company's leakage of hazardous chemical substances into the Kuwaiti sea. Although there was evidence that the company was involved in the act, the company did not accept this claim and suit the Green Line Environmental Group. The company alleged that the claim caused moral damage to the reputation of the company. In such, the judge acquitted the Green Line Environmental Group. The Kuwait Oil Company went unpunished, as it enjoyed judicial immunity.

Moreover, the ambiguity of the provisions of the Environment Protection Law increases the difficulty of correct enforcement of such law. Because of the large number of articles contained in this law, a contradiction between its articles may be found, especially when the law is put into effect. The ambiguity of some of its phrases leads to the inability to enforce the law in the way the legislature intends. This may be attributed to the hasty issuance of the law, in addition to the fact that the legal phrases of the law were formed by people who are not specialists in environmental matter. In the majority of the articles of the law, an authority is referred to that is responsible for complying with certain obligations, but such authority is not determined or defined, which leads to either failure to comply with such obligations or to enforcement that is different from what was originally intended by the legislature.

Chapter One: Historical Development of the Protection of the Marine Environment in Kuwaiti Law.

I. In Kuwaiti Law

The economic and urban development that occurred in Kuwait after its independence in 1961¹ created the need to issue laws that protect the environment and regulate dealing with it. First, Law no. 12 of 1964 was issued.² Under this law, oil pollution of navigational waters was prohibited. This law defines the marine areas that must be protected from pollution as the internal and territorial waters of Kuwait. The law states that the perpetrator of an environmental crime shall receive a penalty of no less than 1500 Kuwaiti dinars and no more than 40000 Kuwaiti dinars.³ This law is one of the most effective environmental laws at the present time.⁴

In 1972, Law no. 15 was issued to regulate environmental management. The law states that the Municipality of Kuwait is responsible for taking care of, cleaning, and beautifying islands and beaches. This was one of the first laws that gave the Municipality of Kuwait direct jurisdiction to protect the marine environment.⁵ In 1973, Law no. 19, preventing pollution of the marine environment, was issued during the exploration and extraction of oil resources.⁶

¹ https://en.wikipedia.org/wiki/History_of_Kuwait

² Samira Ahmed Kuwait's experience in environmental departments, the most important legislation related EPA, Our Environment Magazin, 30 issue, Feb. 2001, P.37.

³Dr. Nabila Abdel Halim Kamel, Toward a unified law to protect the environment, Dar Renaissance Arabic, Cairo, 1993, p. 12

⁴ The Maritime Laws of the Arabian Gulf Cooperations Council States, Volume 1, 1986, P. 176.

⁵http://www.beatona.net/CMS/index.php?option=com_content&view=article&id=597&Itemid=84&menuid=&lang=ar (last visited Jan. 26, 2016)

⁶http://www.beatona.net/CMS/index.php?option=com_content&view=article&id=1418&lang=ar&Itemid=84 (last visited Jan. 25, 2016)

In 1976, the Kuwaiti Council of Ministers decided to form a higher committee to protect the environment. This committee is charged with the duties and responsibilities necessary to protect the environment and must coordinate with relevant authorities in this field.⁷ In 1980, Law no. 62 was passed regarding protecting the environment, consisting of 13 articles, which set the basic principles of the general policy of environmental protection and management in the State of Kuwait.⁸ Pursuant to Article 2 of the stated law, a council for the protection of the environment was established and headed by the Minister of Public Health. Among the members of this council were representatives of ten ministries that are related to environmental activities, educational organizations competent in environmental matters and the Kuwaiti Environment Protection Society, a nongovernment organization established in 1974 and which raises environmental awareness among the people.⁹

The general policy of protecting natural resources includes oil resources (oil and gas), solar energy, nuclear energy and water. This policy is aimed at conserving the ecological properties of sea water and groundwater and at expanding studies focused on the potential use of polluted and sewage water after being treated for irrigation and other purposes.¹⁰ Regarding fish resources, legislation that prohibits shrimping is still effective. Similar legislation protects some kinds of fish and other marine creatures.

⁷ <http://www.e.gov.kw/sites/kgoArabic/portal/Pages/InformationPages/OurEnvironment.aspx> (last visited Jan. 25, 2016)

⁸ <http://www.gcc-legal.com/DisplayLegislations.aspx?country=0&LawTreeSectionID=9447> (last visited Jan. 22, 2016)

⁹ Article(2) of the Environmental Protection Law, 1980. Dr.MajidRagebAlhelou, A historicalreviewof the laws ofenvironmental protection inArab countriesDarRenaissanceArabic,Cairo0.2004, p. 30

¹⁰ Article(3), Id.

The Kuwaiti government also established natural reserves for conserving plants and wild animals.¹¹

The Environmental Protection Council is competent to set bills, regulations and requirements for the marine environment and to follow up their implementation. Articles 7, 8, 9, and 10 of the law entitle the Environmental Protection Council to suspend the activities of any establishment or facility or to prohibit the use of certain equipment whether wholly or partially if such activity or equipment presents a threat to the environment.¹² Article 11 of the law states the penalties applied when the provisions of the law are violated.¹³ These penalties range from a financial penalty of no more than 10 thousand Kuwaiti dinars and imprisonment of no more than three years or either of these two penalties for anyone who violates such regulations and requirements stipulated under the law.¹⁴

In 1995, a law establishing a public authority for environmental protection was issued. The Kuwaiti Law of the Environment is focused mainly on regulating environmental management by establishing a Environment Public Authority. Pursuant to Article 3 of the law, the Environment Public Authority is charged with all duties and activities that protect the environment. Paragraphs 1 to 16 determine the activities that the Environment Public Authority is charged with as follows:¹⁵

- 1) Determine and implement the general policy of environmental protection; setting strategies and a work plan to achieve sustainable development.

¹¹ Id, P. 68.

¹² Articles(7),(8),(9) and (10) of the Environmental Protection Law, 1980

¹³ Articles(11) of the Environmental Protection Law, 1980

¹⁴ Dr. Nabila Abdel Halim Kamel, Id, P. 54.

¹⁵ Articles(3) of the 1995 Environmental Protection Law.

2) Prepare and supervise the implementation of an integrated work plan that is focused on protecting the environment in the long term and the short term through coordination with relevant state authorities in view of environmental policies.

3) Supervise, follow-up and assess activities, procedures and practices relevant to environmental protection.

4) The right to request data deemed necessary by the Environment Public Authority from any authority that practices certain activities that may lead to environmental pollution.

5) Monitor the application of Article 13 of the law, which relates to criminal penalties for anyone who breaches or violates the regulations and requirements stipulated in the 1995 Environmental Protection Law. The penalty ranges between an imprisonment sentence of no more than three years and a fine of no more than ten thousand Kuwaiti dinars or both penalties.¹⁶ The court has the right to confiscate the objects that have caused pollution or harm to the environment. The court shall also obligate the entity that caused the pollution to pay all expenses necessary to repair the damage. The perpetrator shall also be obligated to remove the pollution at its own expense or shut down the place where work is a source of pollution for a period of no more than three months. If the violation is committed again, the court may nullify the license.¹⁷

¹⁶Articles(13) and (8) of the 1995 Environmental Protection Law.

¹⁷Dr.MukhaimarAbdulazizAbdulHadi: the Role of International Organizationsin Protecting the Environment, Volume, 2, DarNahdaArabic,Cairo, 2001, p. 20

In 1996, Article 10 of the law was amended regarding the Environmental Council's right to cease activity or work at any facility or to prevent environmental pollution for a period not exceeding one week. The amended law states that this period may be extended to two weeks.¹⁸ Pursuant to the fourth paragraph of the amended article, the Council authorized the general manager of the Environment Public Authority to cease activity or work at any facility if necessary for seven days, after which the case is brought to the Higher Council.

Article 8 of the law was amended to provide that "the board of directors shall have the right to request compensation for the environmental damage that has happened due to any activity causing such damage. Other relevant authorities which are affected by such environmental damage will be also entitled to receive compensation".¹⁹ The explanatory memorandum failed to provide the reasons for such an amendment or a definition of environmental damage.²⁰

The penalties stipulated under the Kuwaiti Law of the Environment are no longer sufficient to keep up with the urban and industrial development in the State of Kuwait and the increasing violations in Kuwait. Moreover, Kuwait lacks suppressive environmental laws. The judiciary system in Kuwait should be more assertive regarding

¹⁸ Article(10) of the 1995 Environmental Protection Law.

¹⁹ Article (8) of the 1995 Environmental Protection Law.

²⁰ It is worth mentioning here that the Security Council's resolutions, especially nos. 687 and 705 of 1991 and the criteria decided by the United Nations Compensation Commission established an integrated effective legal system regarding the compensation for environmental damage that affected Kuwait and other countries because of the Iraqi invasion of State of Kuwait in 1990.²⁰ Paragraph 35 of Resolution no. 7 of the UN Compensation Commission defines the phrase "direct environmental damage and exhaustion of natural resources as including the losses and expenses arising from what follows: 1) Mitigating and preventing the environmental damage including expenses directly related to fighting oil fires and ceasing oil flows into coastal and international waters. 2) Reasonable measures which have been already taken to clean and repair environment, or the future measures which can be documented as reasonably necessary for cleaning and repairing environment. 3) Reasonable monitoring and assessment of environmental damage for the purposes of assessment and mitigation of the severity of such damage and repairing environment. 4) Reasonable monitoring of public health and performing medical tests for the purposes of investigating into increasing health risks arising from environmental damage and combating thereof. 5) Exhausting or damaging natural resources.

these kinds of crimes that affect both the environment and public health. The executive authority should be more effective in enforcing environmental legislation through the several environment departments in the country.²¹

II. 1978 Kuwait Convention

A. Background:

The State of Kuwait's interest in environmental issues began after the country participated in the Stockholm Conference in 1972.²² Thanks to the results of this conference, which included urging the member states to establish centers and programs to take care of the marine environment, the Kuwaiti government started seriously to consider establishing a specialized organization to be responsible to preserve and protect the marine environment from oil pollution, taking into consideration the fact that the Arabian Gulf states export two thirds of the world's oil needs and also due to increased maritime activity and the increased number of petrochemical factories and plants on the shores of the countries overlooking the Arabian Gulf.²³

At that time, the Kuwaiti Government called on the countries overlooking the Arabian Gulf, including Bahrain, Saudi Arabia, Iran, Qatar, the UAE, and Oman, to execute a convention under which those states would pledge to preserve and protect the marine environment in the Arabian Gulf region and would establish a center to take

²¹ Therefore, In December 2014, a new law was issued to protect environment. This law includes 181 articles. Of these articles, 29 articles are allocated for the criminal penalties, which ranged from the capital punishment to fine penalty to warning the violating facility. Part 7 of this law focuses on the criminal penalties.

<http://news.kuwaittimes.net/new-laws-protect-kuwait-environment/>

²² <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503>

²³ Neuman, Lawrence D. "THE PROTECTION AND DEVELOPMENT OF THE MARINE ENVIRONMENT AND COASTAL AREAS OF THE KUWAIT CONFERENCE REGION: THE PROGRAM OF THE UNITED NATIONS SYSTEM 1," *International Oil Spill Conference*. Vol. 1979. No. 1. American Petroleum Institute, 1979.

care of the marine environment.²⁴ This call was the first of its kind in the Arabian Gulf region. Because of its significance and due to its positive impact regarding the conservation of the marine environment at that time and in the future, the countries overlooking the Arabian Gulf responded to the Kuwaiti government's call.²⁵ This response reflected these states' common interest in protecting the marine environment from pollution. After meetings, technical discussions, and the exchange of visits among the competent people in the abovementioned states over five years, the Convention on Regional Cooperation in Combating Pollution of the Marine Environment was executed on April 24, 1978.²⁶ The convening states also agreed upon a comprehensive work plan for the protection of the marine environment and the follow-up of the member states' activity in this regard. The states also signed the Protocol Concerning Regional Cooperation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency.²⁷

On 1 July 1979, Marine Emergency Mutual Aid Centre (MEMAC) was established pursuant to Article III of the Protocol Concerning Regional Cooperation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency. Thereafter, a comprehensive work plan was put in place and operation to protect the marine environment in the Arabian Gulf region under the supervision of the temporary secretariat of the United Nations Environment Programme (UNEP) until 1982.²⁸ On

²⁴ <http://ropme.org/ROPME%20Member%20States.clx> (last visited Oct. 25, 2015)

²⁵ Al-Janahi, Abdul Munem Mohamed. "Oil pollution preparedness in the ROPME Sea Area." *Protecting the Gulf's Marine Ecosystems from Pollution*. Birkhäuser Basel, 2008. 107-130.

²⁶ http://ropme.org/about_ropme.clx

²⁷ Ijlstra, Ton. "Pollution from offshore installations: The Kuwait Protocol." *Marine Pollution Bulletin* 21.1 (1990): 8-10.

²⁸ <http://www.unep.org/about/About/Mission/tabid/129645/Default.aspx#Mandate>. (last visited Sep. 4, 2015)

January 1, 1982, the establishment of the Regional Organization for the Protection of the Marine Environment (ROPME) was announced pursuant to Article 16 of Kuwait Convention on Regional Cooperation in Combating Pollution of the Marine Environment in 1978. Kuwait was chosen as the main and permanent rapporteur of ROPME.²⁹

The geographical coverage of the 1978 Kuwait convention on Regional Cooperation in Combating Pollution of the Marine Environment is as follows: "Sea area bounded in the south by the following rhumb lines: from Ras Dharbat Ali in (16 deg 39 min N, 35 deg 3 min 30 sec E) then to a position in (16 deg 00 min N, 53 deg 25 min E) then to a position in (17 deg 00 min N, 56 deg 30 min E) then to a position in (20 deg 30 min N, 60 deg 00 min E) then to Ras Al-Fasteh in (25 deg 04 min N, 61 deg 25 min E) excluding the internal waters of the contracting parties."³⁰

B. Objectives of ROPME³¹

ROPME is aimed to coordinate efforts of the member States to conserve the safety and quality of seas in the marine region that is covered by the organization; to maintain the ecological systems and marine creatures living in them; to reduce the

Bliss-Guest, Patricia A., and Stjepan Keckes. "The regional seas programme of UNEP." *Environmental Conservation* 9.01 (1982): 43-49.

²⁹Article 16 of 1978 Kuwait Convention states that "Regional Organization for the Protection of the Marine Environment

(a) The Contracting States hereby establish a Regional Organization for the Protection of the Marine Environment, the permanent headquarters of which shall be located in Kuwait. (b) The Organization shall consist of the following organs: (i) a Council which shall be comprised of the Contracting States and shall perform the functions set forth in paragraph (d) of Article XVII; (ii) a secretariat which shall perform the functions set forth in paragraph (a) of Article XVIII; and (iii) a Judicial Commission for the Settlement of Disputes whose composition, terms of reference and rules of procedure shall be established at the first meeting of the Council"

³⁰Article 2, Paragraph (a) of 1978 Kuwait Convention. Moreover, Paragraph (b) states that "the Sea Area shall not include internal waters of the Contracting States unless it is otherwise stated in the present Convention or in any of its protocols".

³¹<http://ropme.org/ROPME%20Objectives.clx> (last visited Oct. 4, 2015)

pollution arising from different development activities in the countries surrounding the region; to demand member States to do their best to protect the marine environment and to prevent whatever causes this pollution.³²

ROPME plays an essential role in consolidating efforts made by these regional States to protect the marine environment and to follow up the procedures carried out by each State in this regard.³³

C. Organizational Structure of ROPME

ROPME consists of a Ministerial Council, an Executive Committee, a General Secretariat, a Committee of Senior Officers in Charge of Environmental Affairs and a Judicial Commission.³⁴

1. Ministerial Council

A. Form:

The Ministerial Council consists of the Contracting States' Representatives at the ministerial level, who are the ministers in charge of environmental affairs in the eight member States. These include the President of the Public Commission for the Protection of Marine Resources, Environment and Wildlife in the Kingdom of Bahrain; the Assistant to President of the Republic and Director of Environment Management in Iran; the Minister of Health in Iraq; the Minister of Planning in the State of Kuwait; the Minister of Regional Municipalities, Environment and Water Resources in Oman; the

³² Churchill, R.R., and A. V. Lowe, *The Law of the Sea*, 2nd Edition, 1988, P. 280.

³³ Id., Article 2, Paragraphs (c), (d) and (e).

³⁴ <http://ropme.org/Org%20Structure.clx> (last visited Oct. 4, 2015)

President of the Supreme Council for the Environment & Natural Reserves in Qatar; the President of the Presidency of Meteorology and Environment (PME) of the Kingdom of Saudi Arabia; and the President of the UAE Federal Environment Agency.³⁵

B. Council Chairmanship:

The Chairmanship of the Council³⁶ shall be given to each Contracting State in turn in the alphabetical order of the names of the States in the English language. In addition, by decisions of the First and Second Meetings of the Council (April 1981/November 1982), the Council established an Executive Committee consisting of the Council Members of Bahrain, I.R. Iran, Iraq and Saudi Arabia as Members and the Executive Secretary of ROPME, as the Chairman, with the objective of carrying out the functions of the Council during the period between the Council Meetings.³⁷

C. Duties of the Council

The Council is obliged to follow up the execution of the convention and its protocols and the Kuwait work plan, which was approved in the Kuwait Regional Conference held April 15-23, 1978, for the protection of the marine environment and the coastal areas. The Council must also review and assess the condition of the marine

³⁵ Id., Article 17 Paragraph (a) states that “ The meetings of the Council shall be convened in accordance with paragraph (a) of Article XVIII and paragraph (b) of Article XXX. The Council shall hold ordinary meetings once a year. Extraordinary meetings of the Council shall be held upon the request of at least one Contracting States endorsed by at least one other Contracting State, or upon the request of the Executive Secretary endorsed by at least two Contracting States. Meetings of the Council shall be convened at the headquarters of the Organization or at any other place agreed upon by consultation amongst the Contracting States. Three-fourths of the Contracting States shall constitute a quorum”.

³⁶ <http://ropme.org/Org%20Structure.clx> (last visited Oct. 4, 2015)

³⁷ Id., Paragraph (b) states that “ The Chairmanship of the Council shall be given to each Contracting State in turn in alphabetical order of the names of the States in the English language. The Chairman shall serve for a period of one year and cannot during the period of chairmanship serve as a representative of his State. Should the chairmanship fall vacant, the Contracting State chairing the Council shall designate a successor to remain in office until the term of chairmanship of that Contracting State expires”.

pollution in the region in view of the reports submitted by the member States and relevant international and regional organizations; approve, review and amend the appendices of each of the conventions and its protocols; follow up the duties of the General Secretariat of ROPME; receive and study the reports presented by the Contracting States; study the reports prepared by the Secretariat regarding the issues relevant to the convention and the affairs related to ROPME's management; make recommendations regarding the approval of any additional protocols or any amendments to the convention or any of its protocols; appoint the Executive Secretary for the organization and take whatever actions are necessary to enable the Executive Secretary to recruit other individuals as necessary; periodically follow up the duties of the Secretariat; and study and execute any additional duties that may be required to meet the objectives of the convention and its protocols.³⁸

2. Executive Committee

The Executive Committee of ROPME was established in 1981 under the 8th resolution of the first Ministerial Council held April 21-23, 1981, to supervise the

³⁸ Id., Paragraph (d) states that “ The functions of the Council shall be: (i) to keep under review the implementation of the Convention and its protocols, and the Action Plan referred to in paragraph (e) of Article I; (ii) to review and evaluate the state of marine pollution and its effects on the Sea Area on the basis of reports provided by the Contracting States and the competent international or regional organizations; (iii) to adopt, review and amend as required in accordance with procedures established in Article XXI, the annexes to the Convention and to its protocols; (iv) to receive and to consider reports submitted by the Contracting States under Articles IX and XXIII; (v) to consider reports prepared by the secretariat on questions relating to the Convention and to matters relevant to the administration of the Organization; (vi) to make recommendations regarding the adoption of any additional protocols or any amendments to the Convention or to its protocols in accordance with Articles XIX and XX; (vii) to establish subsidiary bodies and ad hoc working groups as required to consider any matters related to the Convention and its protocols and annexes to the Convention and its protocols; (viii) to appoint an Executive Secretary and to make provision for the appointment by the Executive Secretary of such other personnel as may be necessary; (ix) to review periodically the functions of the secretariat; (x) to consider and to undertake any additional action that may be required for the achievement of the purposes of the Convention and its protocols”.

implementation of the organization's programs. The committee consists of the following:³⁹

1. Head of the organization's Ministerial Council.
2. President of the Public Commission for the Protection of Marine Resources, Environment and Wildlife in the Kingdom of Bahrain.
3. Minister of Health in Iraq.
4. Assistant to President of the Republic and Director of Environment Management in Iran.
5. President of the Presidency of Meteorology and Environment (PME) of the Kingdom of Saudi Arabia.
6. Executive Secretary of the organization.

In the second meeting of the Ministerial Council of ROPME, which was held November 6-7, 1982, the committee's competencies were determined to be the following:

- * Supervision the execution of ROPME's programs and approve the budget required to execute such programs.
- * The committee's follow-up of its activities within the framework of the supervision over the administrative activities of ROPME and the convention upon the recruitment of senior employees in the organization.

³⁹ <http://www.ropme.org/Org%20Structure.clx> (last visited Oct. 4, 2015)

* The committee must hold at least one meeting during the interval between each Ministerial Council's meeting and the one that follows, and the committee's report will be distributed to the members of the Ministerial Council.

* The committee must work on promulgating regulations and making amendments thereof and supervise the administrative and financial systems of the organization.⁴⁰

3. The Secretariat General

The Secretariat General of ROPME consists of the Executive Secretary in his capacity as the senior official before the Ministerial Council, who is responsible for the progress of activities of the organization, and the employees working in the Secretariat, who help the Executive Secretary implement the programs and activities approved by the Council to achieve its objectives.⁴¹ These activities are as follows:

⁴⁰The 8th resolution of the first Ministerial Council April, 1981

⁴¹ Id., Article 18 Paragraph (a) states that "The secretariat shall be comprised of an Executive Secretary and the personnel necessary to perform the following functions: (i) to convene and to prepare the meetings of the Council and its subsidiary bodies and ad hoc working groups as referred to in Article XVII, and conferences as referred to in Articles XIX and XX; (ii) to transmit to the Contracting States notifications, reports and other information received in accordance with Articles IX and XXIII; (iii) to consider enquiries by, and information from, the Contracting States and to consult with them on questions relating to the Convention and its protocols and annexes thereto; (iv) to prepare reports on matters relating to the Convention and to the administration of the Organization; (v) to establish, maintain and disseminate an up-to-date collection of national laws of all States concerned relevant to the protection of the marine environment; (vi) to arrange, upon request, for the provision of technical assistance and advice for the drafting of appropriate national legislation for the effective implementation of the Convention and its protocols; (vii) to arrange for training programmes in areas related to the implementation of the Convention and its protocols; (viii) to carry out its assignments under the protocols to the Convention; (ix) to perform such other functions as may be assigned to it by the Council for the implementation of the Convention and its protocols. The functions of the Council shall be: (i) to keep under review the implementation of the Convention and its protocols, and the Action Plan referred to in paragraph (e) of Article I; (ii) to review and evaluate the state of marine pollution and its effects on the Sea Area on the basis of reports provided by the Contracting States and the competent international or regional organizations; (iii) to adopt, review and amend as required in accordance with procedures established in Article XXI, the annexes to the Convention and to its protocols; (iv) to receive and to consider reports submitted by the Contracting States under Articles IX and XXIII".

1. Making invitations and preparations necessary for attendance at the meetings of the Council and its subsidiary systems.
2. Following up the execution of decisions taken by the Ministerial Council to run the activities of the organization.
3. Serving the member States with notices, reports and the environment-related information received by the Secretariat.
4. Reviewing the queries and information submitted by the Contracting States and preparing reports and making discussions thereof with regard to the issues relating to the convention, its protocols and appendices.
5. Providing the technical assistance when required to formulate the national legislation appropriate to implement the convention and its protocols.
6. Organizing training programs in the fields related to the implementation of the convention and its protocols.
7. Performing the duties assigned to the Secretariat as per the convention protocols and also the tasks assigned to it by the organization's council.
8. The Executive Secretary will be the senior administrative official in the organization and will perform the duties necessary to manage the organization's affairs.⁴²

⁴² Id., Article 18 Paragraph (b).

The Marine Emergency Mutual Aid Center (MEMAC)⁴³ is a subsidiary of the organization. It was established on August 4, 1982 at Manama, Bahrain, within the framework of the Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution together with the Protocol concerning Co-operation in Combating Pollution by Oil & other Harmful Substances in Cases of Emergency, which were signed on April 24, 1978 in Kuwait. MEMAC was established to strengthen the capacities of the Contracting States and to facilitate co-operation among them to combat pollution by oil and other harmful substances in cases of marine emergencies and to assist Contracting States, which request such assistance in the development of their own national capabilities to combat pollution by oil and other harmful substances, and to co-ordinate and facilitate information exchange, technological co-operation and training.⁴⁴

4. Committee of Senior Officials in Charge of the Environmental Affairs

The Committee of Senior Officials in Charge of Environment Affairs consists of those responsible for the national liaison points in the member States of the organization. The purpose of the Committee is to review and evaluate the status of the implementation of the decisions taken by the Ministerial Council and to recommend arrangements for the implementation of the programs and activities according to their priorities. The Committee has the power to make recommendations and give advice regarding following the best methods and proper means to enable the organization to

⁴³ <http://www.ropme.org/MEMAC.clx> (last visited Oct. 5, 2015)

⁴⁴ The third Protocol concerning Cooperation in Combating Pollution by Oil & other Harmful Substances in Cases of Emergency, August, 1982. Brown, D. J. S., and J. D. James. "Major Oil Spill Response Coordination in the Combat of Spills in Bahrain Waters." *Journal of petroleum technology* 37.01 (1985): 131-136.

implement its programs and activities to achieve its objectives in the field of conserving the marine environment. After these programs are reviewed, they are presented at the meeting of the Executive Committee for approval.⁴⁵

The organization's Secretariat may also invite experts from regional and international organizations concerned with the environment to participate in the special session that precedes the holding of the ministerial council of the organization to discuss different fields of cooperation regarding the protection of the environment, such as the United Nations Environment Program⁴⁶ (UNEP), the International Atomic Energy Agency⁴⁷ (IAEA), the World Health Organization⁴⁸ (WHO), the Food and Agriculture Organization⁴⁹ (FAO), and the Gulf Cooperation Council⁵⁰ (GCC). The participation of such organizations is aimed at coordination among them and achieving an organized implementation of the joint programs.⁵¹

5. Judicial Commission

As per the March 1989 decision of the Executive Committee, the Judicial Commission was established composed of six nationals from the ROPME Member States (Iran, Iraq, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates)⁵², who are highly qualified and experienced in international law and juridical matters. The Members are appointed on an ad hoc basis for a period of five years. The Statutes of the Judicial Commission state clearly the functions of the Judicial Commission as follows:

⁴⁵Id., Article 18 Paragraph (a).

⁴⁶http://en.wikipedia.org/wiki/United_Nations_Environment_Programme (last visited Oct. 5, 2015)

⁴⁷<https://www.iaea.org/> (last visited Oct. 5, 2015)

⁴⁸<http://www.who.int/about/en/> (last visited Oct. 5, 2015)

⁴⁹<http://www.fao.org/about/en/> (last visited Oct. 5, 2015)

⁵⁰http://en.wikipedia.org/wiki/Cooperation_Council_for_the_Arab_States_of_the_Gulf (last visited Oct. 5, 2015)

⁵¹Id., Article 18 Paragraph (a).

⁵²<http://www.ropme.org/Org%20Structure.clx> (last visited Oct. 5, 2015)

1. Jurisdiction to settle disputes between the Contracting States, inter alia, concerning:

- the interpretation or application of the Convention or any of its Protocols;
- the general obligations provided for under Article III of the Convention;
- the fulfillment of the obligations provided for under the Action Plan;
- the measures provided to protect the marine environment and to combat pollution in the Convention and its Protocols.⁵³

2. Jurisdiction in disputes relating to the determination of civil liability and compensation for damage resulting from pollution of the marine environment.

3. Jurisdiction to give an advisory opinion in all legal questions at the request of the Council concerning:

- the interpretation of a treaty on the protection of the marine environment from pollution;
- application of rules of international law relating to prevention, abatement and combating of marine pollution;
- the existence and extent of any fact which, if established, would constitute a breach of an international obligation concerning the protection of the marine environment;
- the interpretation of rules and procedures of the organization;
- and any other matter referred to it by the Council.⁵⁴

⁵³ Id., Article 3.

D. Mechanisms of Communication with Member States

The Secretariat General of ROPME assumes the responsibility for implementing the means that enable the organization to achieve its objectives through proper management and organizing the communication between the organization and the member States therein.⁵⁵ This is performed by determining a certain entity in each State called the national liaison point of the organization in this State. This point is responsible for the environmental affairs in this country and is also responsible for organizing the international and regional relations between this State and the regional organization in addition to other international and regional organizations concerned with the protection of the environment in all issues relating to the marine environment.⁵⁶

E. Limitation of liability for pollution and compensation for damages.

When reviewing the 1978 Kuwait convention, we find that there is a similarity between it and the majority of conventions formulated in cooperation with the United Nations Environment Program (UNEP)⁵⁷, which categorized the world seas into regional marine areas.⁵⁸

⁵⁴Id., Article 15.

⁵⁵Id., Article 18, Paragraph (b) states that "The Executive Secretary shall be the chief administrative official of the Organization and shall perform the functions that are necessary for the administration of the present Convention, the work of the secretariat and other tasks entrusted to the Executive Secretary by the Council and as provided for in its rules of procedure and financial rules".

⁵⁶ Id., Article 18, Paragraph (a).

⁵⁷ http://www.unep.org/regionalseas/programmes/nonunep/ropme/instruments/r_profile_ropme.pdf (last visited Oct. 5, 2015)

⁵⁸ Neuman, Lawrence D. "THE PROTECTION AND DEVELOPMENT OF THE MARINE ENVIRONMENT AND COASTAL AREAS OF THE KUWAIT CONFERENCE REGION: THE PROGRAM OF THE UNITED NATIONS SYSTEM 1." *International Oil Spill Conference*. Vol. 1979. No. 1. American Petroleum Institute, 1979.

Although most of these conventions involved a general commitment regarding the liability, such as the Mediterranean Agreement, the 1978 Kuwait convention states in Article 13 that the Contracting States undertake to cooperate with each other in formulating and adopting the appropriate regulations and procedures for determining:

- a) civil liability and compensation for the damage arising out of the pollution of the marine environment, taking into consideration the international regulations and procedures applicable in this regard.
- b) liability and compensation for the damage arising out of the violation of obligations stated under this convention and its protocols.⁵⁹

Therefore the general regulations of the civil and international liability applicable under international law will continue to be the rules that govern the liability in tort for the pollution from which the marine environment in the marine region may suffer in the future.⁶⁰

In addition, the commitments of the member States under the 1978 regional Kuwait convention to conserve the marine environment include:

1. The Contracting States undertake whether solely or collectively to take all necessary measures as per the provisions of the present convention and its applicable protocols, to which they are a party. They undertake not to cause any pollution of the marine environment and always to seek the prevention,

⁵⁹ Id., Article 13 states that “The Contracting States undertake to co-operate in the formulation and adoption of appropriate rules and procedures for the determination of: (a) civil liability and compensation for damage resulting from pollution of the marine environment, bearing in mind applicable international rules and procedures relating to those matters; and (b) liability and compensation for damage resulting from violation of obligations under the present Convention and its protocols”.

⁶⁰ Dr.. MustafaAlauajja,criminal responsibility forpolluting the environment,Beirut1980p.83

reduction and combating of pollution of the marine environment in the marine region.

2. In addition to the Protocol Concerning Regional Co-Operation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency, the Contracting States cooperate in formulating and adopting such other protocols that state the measures, procedures and standards agreed upon to put this convention into effect.

3. Contracting States set legislation, laws and national bylaws as necessary for the effective fulfillment of the obligation stated in Paragraph (1) of this article. These Contracting States will coordinate their national policies in this regard and appoint a national authority for this purpose.⁶¹

4. Contracting States cooperate with competent international, regional and sub-regional organizations to prepare and adopt environmental standards, applications and procedures recommended for the prevention, reduction and control of pollution from all sources in alignment with the objectives of the convention and to help each other fulfill their obligations under the convention.⁶²

⁶¹ Id., Paragraph (a).

⁶² Id., Paragraph (b).

5. Contracting States will do their best to ensure that the execution of this convention will not lead to the conversion of one type of pollution into another type that may be more harmful to the environment.⁶³

F. Programs and Activities Performed by ROPME

According to its earlier objectives, the activities of the organization are as follows:

1. Environmental Monitoring Programs

- a. Reviewing and evaluating the current situation of the marine environment in the marine region covered by the organization.
- b. Conducting surveys of the colonies of the living organisms in the marine region.
- c. Project aimed at measuring pollutants in the affected and unaffected areas in cooperation with the International Atomic Energy Agency by taking samples from different locations of the marine region.
- d. Forming a regional working team of experts on the phenomenon of the death of marine organisms in the marine region in coordination with the relevant local authorities and in cooperation with relevant regional and international authorities.
- e. Organizing survey voyages in the marine region to monitor the effects of oil pollution in the region and the consequences for the living organisms in the region.⁶⁴

2. Environmental Management Programs

⁶³ Id.

⁶⁴ <http://ropme.org/CScreening.clx> (last visited Oct. 5, 2015)

- Protection of the marine environment from pollution sources arising out of the human activities from the land through:

* Conducting surveys on human activities on land.

* Conducting a study on resisting levels of long-term organic pollutants.

* Preparing a manual on the execution of the protocol relating to pollution arising from land sources.

* Conducting a survey on ships and sinking bodies in the marine region covered by the organization.

* Following up the execution of the study on establishing the receiving facilities in the region. A report on this important issue was already prepared.

* Taking part in developing the procedures of examining the toxicity of the substances used to disperse oil spilled in the marine region.⁶⁵

⁶⁵ <http://www.unep.org/regionalseas/programmes/nonunep/ropme/> (last visited Oct. 5, 2015)

Chapter Two: Historical Evolution of Legal Protection of the Marine

Environment from Pollution In International Convention

From the beginning of the last century, the world has tried to develop many conventions, treaties, and protocols in an effort to mobilize international efforts to handle issues related to the environment and its resources. The number of conventions reached about 152 during the period from 1921 – 2000.⁶⁶ Among the most important international conventions concluded in the field of environmental protection are those which are relevant to conservation of plants and animals in their natural state signed in London in 1923; the international convention banning contaminating the sea with oil, approved in London in 1954; and the treaty forbidding the merchandise of nuclear weapons, signed in Moscow in 1963. Convention concerning the wetlands of international importance prepared as a home for water birds, which is called Ramsar was approved in 1971. In addition to the convention to protect the Mediterranean from contamination, approved in Barcelona in 1979, the convention for conservation of migratory species of wild fauna was approved in Bonn in 1979. In 1982, the United Nations Convention on the Law of the Sea was signed. In 1985, the Vienna Convention for the Protection of the Ozone Layer was signed. In 1973, the convention of CITES, which is related to the international trade in endangered species of wild fauna, was adopted.⁶⁷

⁶⁶ Human depletion of the marine environment over two centuries led to its pollution. This drew the attention of the International Community in the early 1950s to the increased levels of pollution in seas because of their misuse. The International Community intervened by executing a number of conventions to protect the marine environment from pollution. The conventions somehow succeeded in reducing the pollution in the seas. Morell, James B. *The law of the sea: an historical analysis of the 1982 treaty and its rejection by the United States*. McFarland, 2001.

⁶⁷ Paul R. Ehrlich, Anne H. Ehrlich, and John P. Holden, *Human Ecology: Problems and Solutions* 3 (1973).

In the late 1990s, the most important conventions regarding the field of environment were developed. These include the Convention on Biological Diversity, adopted in Rio de Janeiro in 1992, and the International Convention on Combating Desertification, approved in 1994.

The main target of such conventions, treaties, and protocols, whether on protecting the environment at mutual, regional, or international levels is represented in preserving it as clean and suitable for human life. It is not sufficient to approve or accede to these conventions: there must be adherence to take the legislative, organizing, and administrative measures which include implementation, effectiveness and compliance with the terms of these conventions on the national level.⁶⁸ In this chapter, I will shed light on the historical evolution of the International Community's efforts to protect the marine environment from pollution and the resulting conventions that obligate the countries of the world to protect the environment and draft internal laws that criminalize individuals or organizations that pollute the seas.

I. 1954 London Convention

The Preliminary conference on oil pollution of navigable waters, held in Washington 1926⁶⁹ drew attention to the threats posed by the marine environment due to its pollution. The conference paved the way for the 1954 London Convention, which was called for by the British government. Delegations of 42 states attended the events that culminated in signing this convention. However, only 20 states ratified the

⁶⁸ Simmons, Beth A. "The Impact of International Agreements on International Obligations." Annual Review of Political Science 1.1 (1998): P. 75

⁶⁹ Philippe Sands, Jacqueline Peel Principles of International Environmental Law, Third Edition 2012, P. 348

convention on 12 May 1954, and it was not put into effect until 26 June 1958.⁷⁰ The convention was thereafter amended in 1962, 1969, and 1971.⁷¹ This is the first multilateral convention dedicated to the protection of the marine environment.⁷² The Convention contains important provisions for protecting the marine environment from oil pollution, beginning with the ban in Article 1 of the deliberate discharge of oil from the coast to a depth of 50 nautical miles.⁷³

Article 8 bans the discharge of oil to a depth of 100 nautical miles from the territorial sea. However, Article (69) absolutely bans the intentional discharge of oil and its derivatives in any part of the marine environment.⁷⁴

Article (6) of this Convention states that any intentional discharge of oil into the sea is an unlawful act and is deemed a crime, the perpetrators of which are subject to penalties under the provisions of the state where the discharge takes place. The discharge is also deemed a crime under the law of the state which removes the ship that causes the discharge, if the discharge takes place in high seas.⁷⁵

Article (6), Paragraph (3), states that each Contracting Government shall report to the International Maritime Organization the penalties actually imposed for each

⁷⁰ <http://www.admiraltylawguide.com/conven/oilpoll1954.html> (last visited Dec. 11, 2015)

⁷¹ The 1954 Convention became law in 1958, the 1962 Amendments in 1967, the 1969 Amendments in 1978, the 1969 Intervention and Civil Liability Conventions in 1975, and the 1971 Found Convention in 1978.

⁷² The entry in to force provisions for the respective convention can be found as follows: 1945-article 11, 1969 Intervention-article 11, 1969 Liability-article 15, 1971 Fund-article 40, 1973-article 15.

⁷³ R. Michael M'Gonigle & Mark W. Zacher, Pollution, Politics, and International Law 315 (1979). Article (1) of the 1954 London Convention.

⁷⁴ Id., Article 8.

⁷⁵ Id., Article 6, Paragraph 1.

infringement to enable the Organization to monitor the effectiveness and application of the internal laws of the member states of the Convention.⁷⁶

Article 9 states that, with regard to the ships to which the present Convention applies, every ship that uses oil fuel and every tanker shall be provided with an oil record book, whether as part of the ship's official log book or otherwise. Oil record books must be readily available for inspection at all reasonable times, and, except in the case of unmanned ships under tow, shall be kept onboard the ship.⁷⁷

However, one of the deficiencies of this Convention is its failure to include provisions for urgent intervention and for surveying the effects of oil pollution if it occurs. For example, the Torrey Canyon⁷⁸ oil spill on the southwest coast of the UK in the spring of 1967 is one of the world's most serious oil spills, which left an international legal and environmental legacy that lasted for decades. This incident highlighted the failure of the Convention to address pollution that takes place in high seas.⁷⁹ Therefore, member states hurriedly executed internal conventions that enable them to intervene to deal with pollution on the high seas pollution before it reaches shore.⁸⁰

II. 1958 Geneva Convention on the High Seas

Having felt the threat posed by the nuclear tests conducted by some countries in the mid-1990s and the disposal of nuclear waste in the high seas that are not under any

⁷⁶ Id., Article 6, Paragraph 3.

⁷⁷ Id., Article 9.

⁷⁸ For more details, see <http://incidentnews.noaa.gov/incident/6201>. (last visited Dec. 11, 2015)

⁷⁹ Utton, Albert E. "Protective Measures and the Torrey Canyon." *BC Indus. & Com. L. Rev.* 9 (1967): 613.

⁸⁰ Dr. Salah Hashim, *International Liability for Jeopardizing the Environment*, p. 205, 1986, Dar Al Nahda, Dr. Jaber Ibrahim Al-Rawi *International Liability for Harms Arising from Environmental Pollution*, p. 120, 1983, 1st Edition.

state's sovereignty, many countries called for an international conference to ban nuclear tests on the high seas in Geneva in 1956.⁸¹ Conferees concluded the 1958 Geneva Convention on the High Seas, which obligates signatory states to protect the marine environment from nuclear pollution. This Convention contained important provisions for the protection of the marine environment, since Article 24, paragraph 1, conferred the Coastal State with authority over the area of the high sea adjacent to its territorial sea in order to protect it from law breaches.⁸²

Article 24, Paragraph 2, of this Convention permitted the individual Coastal State to take any measures necessary to protect any kind of fish or other marine materials against any threats of pollution in the area of the high seas adjacent to its territorial sea.⁸³

Article 25, Paragraph 1, states that every State shall take measures to prevent pollution of the seas from the dumping of radioactive waste, taking into account any standards and regulations which may be formulated by the competent international organizations. Article 25, Paragraph 2, states that all States shall cooperate with the competent international organizations in taking measures for the prevention of pollution

⁸¹ From 1633 to 1958 Hugo Grotius' freedom of the seas governed; the only restraint was the concept of "abuse of rights," which ensures that states use the seas reasonably with due consideration to the rights of other users. In 1958, when the Geneva Conference codified the law of the sea ocean pollution and its concomitant economic consequences were not recognized as costs that nations must eventually assume. Instead, the 1958 Convention of the High Seas simply acknowledged the right of each state to extend its nationality to ships flying its flag. In so doing, it gave the "flag state" sole jurisdiction to institute legal processes against its vessels if they were involved in an incident on the high seas. Coastal states were allowed to protect the living resources of the sea but only because those resources were subject to exploitation by all states. The convention ensured that the coastal state would not "abuse its rights." David M. Dzidzornu & B. Martin Tsamenyi, Enhancing International Control of Vessel-Source Oil Pollution Under the Law of the Sea Convention, 1982: A Reassessment, 10 U. Tasmania L.Rev., P. 273 (1991).; John W. Kindt, Prolegomenon to Marine Pollution and the Law of the Sea: An Overview of the Pollution Problem, 11 Env'tl. L. 67, 90-92 (1980-81).

⁸² 1958 Geneva Convention on the High Seas Article 24, Paragraph 1.

⁸³ Id., Paragraph 2.

of the seas or air space above resulting from any activities with radioactive materials or other harmful agents.⁸⁴

The Convention also involves international liabilities that may be applied to Contracting Countries in case of their failure to fulfill these commitments.⁸⁵

Despite the ambiguity of some provisions of the Convention, it constituted a significant comprehensive legal leap in the field of environmental protection from pollution, and most of its content was incorporated into the national laws of a number of the member countries that signed it. Relevant international organizations also applied it.⁸⁶

III. 1963 Moscow Convention Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water

This convention was signed in August 1963. It is one of the most important treaties in the field of the protection of the marine environment from nuclear pollution. 120 states signed this Convention and 93 states ratified it by 1967.⁸⁷ The preamble to the Convention affirmed that member states seek to achieve the discontinuance of all test explosions of nuclear weapons for all time, are determined to continue negotiations

84 Id. Article 25. Hamilton, T. F., et al. "Radiometric investigations of Kara Sea sediments and preliminary radiological assessment related to dumping of radioactive wastes in the Arctic Seas." *Journal of Environmental Radioactivity* 25.1 (1994): 113-134.

85 Dr. Jaber Ibrahim Al-Rawi International Liability for Harms Arising from Environmental Pollution, p. 152, 1983.

86 Dr. Adel Ahmed Al Ta'ei, Legal System of the Military Use of Sea, p. 150, Wassit Publishing Co., Baghdad, 1984.

87 Lepper, Mary Milling. *Foreign policy formulation: a case study of the Nuclear test ban treaty of 1963*. Merrill Publishing Company, 1971.

to this end, and desire to put an end to the contamination of man's environment by radioactive substances.⁸⁸

The then UK Secretary of State Lord Hume described it as a wonderful work, because it reduced the threat of nuclear pollution of the environment on one hand, and it was the first convention with the former Soviet Union on the other hand.⁸⁹

Article 1 states that each of the parties to this Convention undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control in the atmosphere; beyond its limits, including outer space; under water, including territorial waters or high seas; or in any other environment, if such an explosion would cause radioactive debris to be present outside of the territorial limits of the State under whose jurisdiction or control such explosion is conducted.⁹⁰

However, this Convention failed to ban conducting underground nuclear tests, which is a point of criticism, because nuclear radiation may leak to underground water, including the sea.⁹¹ The Convention dealt only with a nuclear explosion during peaceful times, failing to ban nuclear explosions and nuclear tests during war, which may lead to the destruction of the environment.⁹²

88 Schwelb, Egon. "Nuclear Test Ban Treaty and International Law, The." *Am. J. Int'l L.* 58 (1964): 642. Dr. Jaber Ibrahim Al-Rawi, p. 155.

89 Mastny, Vojtech. "The 1963 Nuclear Test Ban Treaty: A Missed Opportunity for Détente?." *Journal of Cold War Studies* 10.1 (2008): 3-25. Dr. Mohamed Hairi Banouna, *International Law and Use of Nuclear Energy*, p. 117, Dar Al Shaab, Cairo, 1971.

90 Moscow Treaty, 1963, Article 1.

91 Dr. Mahmoud Maher Mohamed Maher, *System of International Guarantees for Peaceful Use of Nuclear Energy*, p. 2, Dar Al Nahda, 1980.

92 Gittings, John. *Survey of the Sino-Soviet Dispute: A Commentary and Extracts from the Recent Polemics 1963-1967*. issued under the auspices of the Royal Institute of International Affairs [by] Oxford UP, 1968., Dr. Jaber Al-Rawi, p. 156.

Another disadvantage of the Convention is contained in Article 4, which states that each party shall, in exercising its national sovereignty, have the right to withdraw from the Convention, if the party decides that extraordinary events, related to the subject matter of this treaty, have jeopardized the supreme interests of its country.⁹³

IV. 1971 UN Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof.

This treaty was signed under UN General Assembly Resolution no. 10/1971 and came into effect on 18 May 1972. It recognized the common interest of mankind in the progress of the exploration and use of the sea-bed and the ocean floor for peaceful purposes.⁹⁴ As its preamble revealed, this treaty aims to prevent a nuclear arms race on the sea-bed and the ocean floor, which serves the interests of maintaining world peace, reduces international tensions and strengthens friendly relations among States. The member states of this treaty are convinced that this treaty constitutes a step toward the exclusion of the sea-bed, the ocean floor and the subsoil thereof from the arms race.⁹⁵

The treaty directly and expressly obligates the member states in Article 1 not to place or plant any nuclear arm or any mass destruction weapon at the seabed, bottom of the oceans, or the subsoil thereof. The same applies to the construction of any relevant facility.⁹⁶

⁹³ Id., Article 4, Moscow Treaty, 1963. Schwelb, Egon. "Nuclear Test Ban Treaty and International Law, The." *Am. J. Int'l L.* 58 (1964): 642.

⁹⁴ Krieger Jr, Walter W. "United Nations Treaty Banning Nuclear Weapons and Other Weapons of Mass Destruction on the Ocean Floor, The." *J. Mar. L. & Com.* 3 (1971): 107.

⁹⁵ Preamble of the Moscow Treaty, 1963.

⁹⁶ Article 1 of the 1971 UN Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor.

One of the disadvantages of Article 1 is its definite and loose terms, since the words, “plant”, “place”, “facility” and “installations” are used ambiguously.⁹⁷

Consequently, the treaty does not apply to submarines carrying nuclear weapons and surfing seas and oceans. The scope of the treaty is the high seas, which means that the treaty does not apply to the territorial sea of the member states as Article 2 reveals.⁹⁸

V. The 1972 Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft.

This Convention was executed on 15 February 1972 by the states which participated in the Marine Pollution Conference held in Oslo, Norway from 9-12 October 1971. The Convention was put into effect on 7 April 1974. The Convention aims to protect the marine environment from pollution arising from dumping harmful materials from ships and aircrafts. The Convention expressly called for taking necessary measures adopted in such a way as to prevent the diversion of dumping of harmful substances from ships and aircrafts into seas outside the area to which this Convention applies.⁹⁹

Article 5 prohibits the dumping of the substances listed in Annex 1 of this Convention into the marine environment.¹⁰⁰ While, article 6 states that no waste containing such quantities of the substances and materials listed in Annex II to this

⁹⁷ Dr. Salim Haddad, *The Legal Regulation of Seas and the Arab National Security*, p. 74, Al Mo'asasa Al-Jami'aya for Studies and Publishing, Beirut, 1994, Dr. Mahmoud Taher Maher, *System of the International Guarantees for Peaceful Use of Nuclear Power*, p. 28 Dar Al Nahda.

⁹⁸ Id., Article 2.

⁹⁹ The Convention was put into effect on 7 April 1974. The Convention aims to protect the marine environment from pollution arising from dumping harmful materials from ships and aircrafts.

¹⁰⁰ Id., Article 5.

Convention, as the Commission established under the provisions of Article 16, referred to as "the Commission", shall define as significant, shall be dumped without a specific permit in each case from the appropriate national authority or authorities.¹⁰¹ However, article 7 states that no substance or material shall be dumped without the approval of the appropriate national authority or authorities. When such approval is granted, the provision of Annex III to this Convention shall be applied.¹⁰²

The Convention obligates each Contracting Party to ensure compliance with the provisions of this Convention by ships and aircrafts registered in its territory; by ships and aircraft loading in its territory the substances and materials which are to be dumped; or by ships and aircraft believed to be engaged in dumping within its territorial sea.¹⁰³ However, Article 15, Paragraph 6, states that nothing in this Convention shall abridge sovereign immunity to which certain vessels are entitled under international law. By this exception, the Convention gives priority to the aspects of each country's immunity over the aspects relevant to the protection of the marine environment, the latter of which the Convention was mainly intended to accomplish. Unfortunately, this exception renders the Convention meaningless.¹⁰⁴ The Convention permits the dumping from ships and aircrafts in case of force majeure. However, the term "force majeure" is loose and indefinite and may have different definitions in

¹⁰¹ Id., Article 7, Paragraph 6.

¹⁰² BRITAIN-PARLIAMENT, G. R. E. A. T. "Convention for the prevention of Marine Pollution by Dumping from ships and aircraft, Oslo, 15 February 1972." *Her Majesty's stationary Office, London* 12 (1972). Leitzell, Terry L. "Ocean Dumping Convention-A Hopeful Beginning, The." *San Diego L. Rev.* 10 (1972): 502.

¹⁰³ Id., Article 15.

¹⁰⁴ Id., Article 15, Paragraph 6.

different countries. A member country may take this exception to its advantage to justify its own dumping activities that pollute the marine environment.¹⁰⁵

The Convention obligates the Contracting Parties to harmonize their policies and to introduce, individually and in common, measures to prevent the pollution of the sea by dumping by or from ships and aircrafts.¹⁰⁶ The Convention urges every Contracting Party to implement complementary programs for scientific and technical research including seeking alternative methods to get rid of the harmful substances and the exchange of information.¹⁰⁷

The Convention obligates the member countries to sign certain penalties if ships and aircrafts dump harmful substances in the marine environment.¹⁰⁸ It also urges them to cooperate with other countries through the exchange of information about incidents that take place and are considered a type of dumping in the sea, even if the dumping happens in the high seas.¹⁰⁹

However, the Convention disregarded the controlling role played by the committee formed. It should have granted to this committee the authority to apply penalties that would be more effective in enforcing its provisions.¹¹⁰

VI. The 1972 London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter¹¹¹

¹⁰⁵Id. Timagenis, Gregorios J. *International control of marine pollution*. Vol. 2. Oceana Publications, 1980.

¹⁰⁶ Id., Article 8, Paragraph 1.

¹⁰⁷ Id., Article 4. Boehmer-Christiansen, Sonia. "Marine pollution control in Europe: Regional approaches, 1972–80." *Marine Policy* 8.1 (1984): 44-55.

¹⁰⁸ Id., Article 15, Paragraph 4.

¹⁰⁹ Id., Article 15, Paragraph 5.

¹¹⁰ Hey, Ellen. "The Precautionary Approach: implications of the revision of the Oslo and Paris conventions." *Marine Policy* 15.4 (1991): 244-254.

¹¹¹ Kuwait has ratified the Convention on 03/01/1973.

The Governments Conference was held in London from 30 October until 13 November 1972 pursuant to the recommendations by the United Nations Conference on the Human Environment, which was held in Stockholm in 1972. Eighty-two states participated in this conference, and delegations of 21 observer states also attended the event. Nine international organizations attended the conference, including the International Atomic Energy Agency. The conferees concluded this Convention at this conference. This Convention is aimed at the protection of the marine environment in general and the prevention of its pollution through the disposal of wastes.¹¹²

The Convention defines “dumping” as any deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea.¹¹³ Under this Convention, disposal means the deliberate disposal of wastes and other substances from ships, aircrafts, platforms or any other artificial components.¹¹⁴ On another hand, The Convention states that "Dumping" does not include the disposal at sea of wastes or other matter incidental to, or derived from, the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or structures. It also does not include placement of matter for a purpose other

¹¹² Duncan, Rodney N. "1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes at Sea, The." *J. Mar. L. & Com.* 5 (1973): 299.

¹¹³ The 1972 London Convention Article 3, Paragraph 1.

¹¹⁴ *Id.*, Article 3, Paragraph 1.

than the mere disposal thereof, provided that such placement is not contrary to the aims of this Convention.¹¹⁵

The Convention states that, in accordance with the Charter of the United Nations and the principles of international law, States have the sovereign right to exploit their own resources pursuant to their own environmental policies and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of their national jurisdiction.¹¹⁶

The Convention states that contracting parties shall individually and collectively promote the effective control of all sources of pollution of the marine environment and pledge themselves especially to take all practicable steps to prevent the pollution of the sea by the dumping of waste and other matter that is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.¹¹⁷ The Convention states that the contracting parties pledge themselves to promote, within the competent specialized agencies and other international bodies, measures to protect the marine environment against pollution caused by hydrocarbons, including oil and their wastes; other noxious or hazardous matter transported by vessels for purposes other than dumping; wastes generated in the course of the operation of vessels, aircraft, platforms and other man-made structures at sea; radio-active pollutants from all sources, including vessels; agents of chemical and

¹¹⁵ Id., Leitzell, Terry L. "Ocean Dumping Convention-A Hopeful Beginning, The." *San Diego L. Rev.* 10 (1972): 502.

¹¹⁶ Id., Article 10. Lowe, Alan Vaughan. "Enforcement of Marine Pollution Regulations, The." *San Diego L. Rev.* 12 (1974): 624.

¹¹⁷ Id., Articles 1, 2, 12.

biological warfare; and wastes or other matter directly arising from, or related to, the exploration, exploitation and associated off-shore processing of sea-bed mineral resources.¹¹⁸

The Convention states that prohibition of dumping does not apply to substances that are rapidly rendered harmless by physical, chemical or biological processes in the sea, provided that they do not make edible marine organisms unpalatable or endanger human health or that of domestic animals.¹¹⁹ The Convention states that the prohibition of dumping does not apply to wastes or other materials (e.g. sewage sludge and dredged material).¹²⁰

The Convention states that each Contracting Party shall designate an appropriate authority or authorities to issue special permits that must be required prior to and for the dumping of matter listed in Annex II¹²¹; and issue general permits that must be required prior to and for the dumping of all other matter; and monitor individually, or in collaboration with other Parties and competent international organizations, the condition of the seas for the purposes of this Convention.¹²²

The Convention states that it shall not apply when it is necessary to secure the safety of human life or of vessels, aircraft, platforms or other man-made structures at sea in cases of force majeure caused by stress of weather or in any case which constitutes a danger to human life or a real threat to vessels, aircraft, platforms or other man-made structures at sea, if dumping appears to be the only way to avert the threat

¹¹⁸ Appendix 1, Paragraph 7, 5 of the Convention; Id., Article 8.

¹¹⁹ Id., Article 8.

¹²⁰ Id., Article 9.

¹²¹ Id., Article 6.

¹²² Dr. Ahmed Abdel Karim Salama, Law of Environment Protection, Consolidated Study on National Systems, p. 16.

and there is every probability that the damage consequent upon such dumping will be less than would otherwise occur. Such dumping shall be so conducted as to minimize the likelihood of damage to human or marine life and shall be reported forthwith to the Organization.¹²³

However, this exception will adversely affect the protection of the marine environment from pollution by dumping under this Convention, because of the lack of a real standard or criterion to depend on when assessing the exceptional cases.¹²⁴ The Contracting Parties can interpret this exception in the way they desire and may use it to justify their acts in ways that serve their interests and fulfill their wishes. This Convention should have obligated the Contracting Parties to remove the effects of pollution arising out of such exceptional cases to avoid making the marine environment vulnerable to such acts and justifications.¹²⁵

Regarding the international liability arising out of noncompliance with the Convention's articles, the Convention states that, in accordance with the principles of international law regarding State responsibility for damage to the environment of other States or to any other area of the environment caused by dumping of wastes and other matter of all kinds, the Contracting Parties undertake to develop procedures for the assessment of liability and the settlement of disputes regarding dumping.¹²⁶

However, it must be concluded that the Convention failed to avoid the pitfalls of the 1972 Oslo Convention regarding the exception. Regarding international liability,

¹²³ Id., Articles 5 and 14.

¹²⁴ Timagenis, Gregorios J. *International control of marine pollution*. Vol. 2. Oceana Publications, 1980.

¹²⁵ Duncan, Rodney N. "1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes at Sea, The." *J. Mar. L. & Com.* 5 (1973): 299.

¹²⁶ Id Article 10.

the Convention is still waiting for the committee assigned to the standardization of the international liability regulations to complete its duties to make international liability effective.¹²⁷

VII. The 1973 London International Convention for the Prevention of Pollution from Ships

This Convention was an inevitable consequence of the insufficiency of the 1954 London Convention on the prevention of pollution by oil as amended in 1962, 1969, 1971 and 1978 and also as a consequence of the increased severity of incidents¹²⁸ in which ships and tankers carrying petroleum products or other non-petroleum pollutants polluted the marine environment.¹²⁹ Consequently, the International Maritime Organization (IMO)¹³⁰ called for a conference to prevent the pollution of the marine environment from ships and to replace the 1954 Convention, and was called “the MARPOL Convention”.¹³¹

The Convention preamble states that its purpose is to achieve the complete banning of the deliberate pollution of the marine environment by oil and other harmful

¹²⁷ Leitzell, Terry L. "Ocean Dumping Convention-A Hopeful Beginning, The." *San Diego L. Rev.* 10 (1973): 502.

¹²⁸ For example, the incident of Torrey Canyon . See footnote 8."oil spill on the southwest coast of the UK in the spring of 1967 is one of the world's most serious oil spills"

¹²⁹ See footnote 54.

¹³⁰ http://en.wikipedia.org/wiki/International_Maritime_Organization. (last visited Dec. 13, 2015)

¹³¹ MARPOL defines its goals as achieving the complete elimination of international pollution of the marine environment by oil and other harmful substances and minimizing the accidental discharge of such substances. To meet these goals, MARPOL established in its Annex I, twenty-five complex regulations governing the construction, design, and equipment of vessels. One of these regulations requires states of registry to issue certificates of compliance with the requirements of Annex I. The Convention then requires each party to pass domestic laws prohibiting violations of the Convention and providing sanctions for those violations. Whenever a ship required to hold a certificate is in a foreign port, it is subject to inspection by port state officials. That inspection is limited to verifying that there is a valid certificate on board when there are clear grounds to believe the ship does not meet the requirements for the certificate. Parties to the Convention are required to cooperate in the detection of violations and the enforcement of the Convention. A port state that finds a violation is required to report its findings to the vessel's flag state. If the port state unduly delays the ship, it will be liable for any losses or damages suffered. Mark L. Boos, *The Oil Pollution Act of 1990, Striking the Flags of Convenience?* 2 *Colo. J. Int'l Envtl. L & Pol'y* 407 (1991); Dzidzornu & Tsamenyi, *supra* note 73, at 279.

substances and to reduce their accidental disposal by ships.¹³² Pollution from ships occurs as the result of the ships' discharge of harmful substances into the seas, which may cause harm to man's health and sometimes to marine creatures and resources or which may hinder the legal uses of the seas.¹³³

The Convention applies to the ships of the Contracting Countries and the ships operated for and under the authority of the Contracting Countries.¹³⁴ However, Article 3, Paragraph 2, states that the present Convention shall not apply to any warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service.¹³⁵ However, the convention states that, each Party shall ensure, by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent, so far as is reasonable and practicable, with the present Convention.¹³⁶

This Convention defines "discharge" in relation to harmful substances or effluents containing such substances as any release, howsoever caused, from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying.¹³⁷ Therefore, under this Convention, "discharge" does not include dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of

¹³² Boyle, Alan E. "Marine pollution under the Law of the Sea Convention." *American Journal of International Law* (1985): 347-372. And See, Dr. Ahmed Abdel Karim Salama, Law of Islamic Environment Protection, p. 128.

¹³³ Dr. Salah Hashem, International Liability for Jeopardizing the Marine Environment, p. 21.

¹³⁴ Article 3, Paragraph 1 of the 1973 London Convention on Prevention of Pollution from Ships.

¹³⁵ Id., Paragraph 2. Donaldson, John Francis, John Rendle, and A. D. McIntyre. *Safer ships, cleaner seas: report of Lord Donaldson's inquiry into the prevention of pollution from merchant shipping*. HMSO, 1994.

¹³⁶ Id., Paragraph 3. And see Dr. Salah Hashem, Id., p. 22.

¹³⁷ Id., Article 2, Paragraph 2. The oil discharge regulations were discussed in Committee II and are included in Annex 1. Annexes 2 through 5, respectively, cover noxious liquid substances, packaged dangerous substances, sewage, and garbage.

Wastes and Other Matter, or release of harmful substances directly arising from the exploration and exploitation or associated with off-shore processing of sea-bed mineral resources; or the release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.¹³⁸ This contradicts with the specific purpose of the Convention in Paragraph 4 of its preamble, which seeks to achieve complete banning of the discharge of harmful substances into the marine environment.¹³⁹

However, the Convention reduced the adverse impact, as it does not apply to the non-Contracting Countries; rather, it obligates each Party to the Convention to issue rules and regulations necessary to prevent the ships of non-Contracting Companies from any special treatment. This is considered an incentive to non-member countries to join the Convention and to comply with its provisions.¹⁴⁰

This Convention obligates the government of each Party, the coastline of which borders on any given special area, to undertake to ensure that all oil loading terminals and repair ports within the special area are provided with facilities adequate for the reception and treatment of all of the dirty ballast and tank washing water from oil tankers.¹⁴¹ In addition, all ports within the special area shall be provided with adequate reception facilities for other residues and oily mixtures from all ships. Such facilities shall have adequate capacity to meet the needs of the ships using them without causing

¹³⁸ Id., Article 2, Paragraph 3. And See Dr. Mohamed Mustafa Younis, *Marine Environment*, p. 109.

¹³⁹ Id., Paragraph 4. Mitchell, Ronald B. "Regime design matters: intentional oil pollution and treaty compliance." *International Organization* 48.03 (1994): 425-458.

¹⁴⁰ Id., Article 4, Paragraph 5. Dr. Salah Hashem Id, p. 24.

¹⁴¹ Id., Paul R. Ehrlich, Anne H. Ehrlich, and John P. Holden, *Human Ecology*, p. 319.

undue delay.¹⁴² However, the Convention states many exceptions to this ban on discharge, such as the discharge into the sea of oil or oily mixture necessary to secure the safety of a ship or to save life at sea or the discharge into the sea of oil or oily mixture resulting from damage to a ship or its equipment.¹⁴³

Every oil tanker of 150 tons gross tonnage and above and every ship of 400 tons gross tonnage and above other than an oil tanker must be provided with an Oil Record Book in the form specified, whether as part of the ship's official log book or otherwise. The Oil Record Book must be completed on each occasion on a tank-by-tank basis. These ships will not be allowed to operate without such certificates.¹⁴⁴ This idea is a practical criterion that can be executed by these countries, and thus this execution can be monitored by the coastline authorities and the port countries.¹⁴⁵

This Convention has the same disadvantages as the 1954 London Convention, since it has the same exceptions. In addition, the technical procedures contained in this Convention to ensure the safety and readability of the oil tankers are a burden upon developing and poor countries.¹⁴⁶

VIII. 1974 Paris Convention for the Prevention of Marine Pollution from Land-Based Sources.

¹⁴² Id., Article 4, Paragraph 6. Lin, Bin, and Cherng-Yuan Lin. "Compliance with international emission regulations: Reducing the air pollution from merchant vessels." *Marine Policy* 30.3 (2006): 220-225.

¹⁴³ Id., Articles 10, 11. The discharge of oil to combat oil pollution is not subject to the discharge regulations.

¹⁴⁴ Id., Article 5. Lowe, Alan Vaughan. "Enforcement of Marine Pollution Regulations, The." *San Diego L. Rev.* 12 (1974): 624.

¹⁴⁵ Id., Dr. Samir Mohamed Fadel, International Liability for Peaceful Use of Nuclear Energy, p. 231.

¹⁴⁶ See footnote 54.

The 1974 Paris Convention for the Prevention of Marine Pollution from Land-Based Sources¹⁴⁷ defined this kind of pollution as “the pollution of the maritime area through watercourses, from the coast, including introduction through underwater or other pipelines, from man-made structures placed under the jurisdiction of a Contracting Party within the limits of the area to which the present convention applies or by emissions into the atmosphere from land or from man-made structures.”¹⁴⁸ The 1974 Paris Convention applied to the maritime area within the following limits:

(a) those parts of the Atlantic and Arctic Oceans and the dependent seas which lie north of 36 deg. north latitude and between 42 deg. west longitude and 51 deg. east longitude, but excluding:

(i) the Baltic Sea and Belts lying to the south and east of lines drawn from Hasenore Head to Gniben Point, from Korshage to Spodsbjerg and from Gilbjerg Head to Kullen and

(ii) the Mediterranean Sea and its dependent seas as far as the point of intersection of the parallel of 36 deg. north latitude and the meridian of 5 deg. 36' west longitude;

(b) that part of the Atlantic Ocean north of 59 deg. north latitude and between 44 deg. west longitude and 42 deg. west longitude.¹⁴⁹ The Convention stressed that it shall not be effective in the “maritime area which it defines as the high seas, the territorial seas of Contracting Parties and waters on the landward side

¹⁴⁷ <http://sedac.ciesin.columbia.edu/entri/texts/marine.pollution.land.based.sources.1974.html> (last visited Dec. 13, 2015)

¹⁴⁸ Article 3 Paragraph (c) of Paris Convention 1974. Nollkaemper, André. "Marine pollution from land-based sources: towards a global approach." *Marine Pollution Bulletin* 24.1 (1992): 8-12.

¹⁴⁹ Id., Article 2. Kwiatkowska, Barbara. "Marine pollution from land-based sources: Current problems and prospects." (1984): 315-335.

of the base lines from which the breadth of the territorial sea is measured and extending in the case of watercourses, unless otherwise decided under Article 16 Paragraph (c) of the present convention, up to the freshwater limit”.¹⁵⁰

The Paris Convention did not prohibit airborne pollutants that reach the seas, as the 1974 Helsinki Convention did when it defined pollution as “introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, resulting in such deleterious effects as hazard to human health, harm to living resources and marine life, hindrance to legitimate uses of the sea including fishing, impairment of the quality for use of sea water, and reduction of amenities.”¹⁵¹ The phrase “man-made facilities” found in the Convention is inaccurate and not inclusive of pollutants, the source of which may be the land or may arise from other facilities established by man, which are not considered ground sources such, as ships’ docks and ships established on shores, regulated by other treaties and conventions.¹⁵²

With a view to preserving and enhancing the quality of the marine environment, the Paris Convention states that the Contracting Parties shall endeavour to reduce existing pollution from land-based sources and to forestall any new pollution from land-based sources, including that which derives from new substances.¹⁵³

The Contracting Parties agree to set up progressively and to operate within the area covered by the present convention, a permanent monitoring system allowing the

¹⁵⁰ Id., Article 3 Paragraph 1. And see Article 16 Paragraph c. Bliss-Guest, Patricia A. "Protocol against Pollution from Land-Based Sources: A Turning Point in the Rising Tide of Pollution, The." *Stan. J. int'l L.* 17 (1981): 261.

¹⁵¹ Article 2 Paragraph 2 Helsinki Convention state "Land-based pollution" means pollution of the sea caused by discharges from land reaching the sea waterborne, airborne or directly from the coast, including outfalls from pipelines" http://europa.eu/legislation_summaries/environment/water_protection_management/128089_en.htm (last visited Dec. 13, 2015)

¹⁵² Such as 1972 Oslo Treaty and 1972 London Convention on Pollution by Dumping, Dr. Mohamed Mustafa Younis, *Marine Environment*, page 119

¹⁵³ Id., Article 6. Hassan, D. (2006). *Protecting the marine environment from land-based sources of pollution: towards effective international cooperation*. Ashgate Publishing, Ltd..

earliest possible assessment of the existing level of marine pollution and the assessment of the effectiveness of measures for the reduction of marine pollution from land-based sources taken under the terms of the present conventions.¹⁵⁴

The Convention obligates each Contracting Party to ensure compliance with the provisions of this convention and to take, in its territory, appropriate measures to prevent and punish conduct in contravention of the provisions of the present convention. It also obligates these Parties to inform the Commission of the legislative and administrative measures they have taken.¹⁵⁵ The Convention did not contain any provision regulating the liability arising from the countries' failure to fulfill such commitments. Therefore, the international liability will be subject to the general principles that govern its rules according to the international common law.¹⁵⁶

IX. 1982 United Nations Convention on the Law of the Sea¹⁵⁷

This convention¹⁵⁸ is one of the most important conventions that dealt with the protection of the marine environment and it provides more details about the provisions regulating the protection of the marine environment from pollution by ships or tankers.¹⁵⁹ In its twelfth part, Article 192 stipulates a general commitment which says, "States have the obligation to protect and preserve the marine environment."¹⁶⁰

However article 193 states that States have the sovereign right to exploit their natural

¹⁵⁴ Id., Article 11. Hassan, Daud. "International Conventions Relating to Land-Based Sources of Marine Pollution Control: Applications and Shortcomings." *Geo. Int'l Envtl. L. Rev.* 16 (2003): 657.

¹⁵⁵ Id., Article 12 ,16. Tan, Alan Khee-Jin. *Vessel-source marine pollution: the law and politics of international regulation*. Vol. 45. Cambridge University Press, 2005.

¹⁵⁶ Id., Dr. Salah Hashim, International Liability for Prejudicing the Marine Environment, Page 243

¹⁵⁷ Kuwait has ratified the Convention on 2/10/1982.

¹⁵⁸ https://en.wikipedia.org/wiki/United_Nations_Convention_on_the_Law_of_the_Sea (last visited Dec. 14, 2015)

¹⁵⁹ In his speech to the assembled states during the signing ceremony, then UN secretary General, Javier Perez De Cuellar assert with some justification that "international law is now irrevocable transformed, so far as the seas are concerned" See Dr. Mohamed Mustafa Younis, Marine Environment, page 199

¹⁶⁰ Article 192 of the 1982 United Nations Convention on the Law of the Sea.

resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.¹⁶¹

Because of the threats posed by pollution, Article 194 states that States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.¹⁶² The Convention also obligates states to take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention.¹⁶³ The measures taken pursuant to this Part must deal with all sources of pollution of the marine environment.¹⁶⁴ These measures must include, inter alia, those designed to minimize to the fullest possible extent:

- (1) the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere or by dumping;
- (2) pollution from vessels, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing

¹⁶¹ Id., article 193

¹⁶² Id., article 194

¹⁶³ Id., Dr. Salah Hashem, International Liability for Jeopardizing the Marine Environment, page 25

¹⁶⁴ Stevenson, John R., and Bernard H. Oxman. "The Future of the United Nations Convention on the Law of the Sea." *American Journal of International Law* (1994): 488-499.

intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels;

(3) pollution from installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and

manning of such installations or devices;

(4) pollution from other installations and devices operating in the marine environment, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices.¹⁶⁵

Article 195 of this Convention states that in taking measures to prevent, reduce and control pollution of the marine environment, states shall act so as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another.¹⁶⁶

Article 197 states that States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the

¹⁶⁵ Id., article 194 See Id., Dr. Mohamed Mustafa Younis, page 250.

¹⁶⁶ Id., article 195 Oxman, Bernard H. "Regime of Warships under the United Nations Convention on the Law of the Sea, The." *Va. J. Int'l L.* 24 (1983): 809.

marine environment, taking into account characteristic regional features.¹⁶⁷ Article 198 states that when a State becomes aware of cases in which the marine environment is in imminent danger of being damaged or has been damaged by pollution, it shall immediately notify other States it deems likely to be affected by such damage, as well as the competent international organizations.¹⁶⁸

Article (199) states that in the cases referred to in article 198, States in the area affected, in accordance with their capabilities, and the competent international organizations shall cooperate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. To this end, States shall jointly develop and promote contingency plans for responding to pollution incidents in the marine environment.¹⁶⁹

Article (202) of this Convention states that States shall, directly or through competent international organizations:

(a) Promote programmes of scientific, educational, technical and other assistance to developing States for the protection and preservation of the marine environment and the prevention, reduction and control of marine pollution.

Such assistance shall include, inter alia:

- (i) Training of their scientific and technical personnel;
- (ii) Facilitating their participation in relevant international programmes;
- (iii) Supplying them with necessary equipment and facilities;
- (iv) Enhancing their capacity to manufacture such equipment;

¹⁶⁷ Id., article 197

¹⁶⁸ Id., article 198. Gamble Jr, John King. "1982 United Nations Convention on the Law of the Sea as Soft Law, The." *Hous. J. Int'l L.* 8 (1985): 37.

¹⁶⁹ Id., article 199

(v) Advice on and developing facilities for research, monitoring, educational and other programmers;

(b) Providing appropriate assistance, especially to developing States, for the minimization of the effects of major incidents which may cause serious pollution of the marine environment;

(c) Providing appropriate assistance, especially to developing States, concerning the preparation of environmental assessments.¹⁷⁰

Article 203 of the Convention states that Developing States shall, for the purposes of prevention, reduction and control of pollution of the marine environment or minimization of its effects, be granted preference by international organizations in (a) the allocation of appropriate funds and technical assistance; and (b) the utilization of their specialized services.¹⁷¹

Article 204 paragraph 1 states that States shall, consistent with the rights of other States, endeavor, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyze, by recognized scientific methods, the risks or effects of pollution of the marine environment. In particular, States shall keep under surveillance the effects of any activities which they permit, or in which they engage, in order to determine whether these activities are likely to pollute the marine environment.¹⁷²

Articles 205 of the Convention states that States shall publish reports of the results obtained pursuant to article 204 or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all

¹⁷⁰ Id., article 202

¹⁷¹ Id., article 203

¹⁷² Id., article 204 paragraph 1

States.¹⁷³ Article (206) states that when States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205.¹⁷⁴

Article 207 paragraph 1 of the Convention obligates States to adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures.¹⁷⁵

Article 207 States, acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from land-based sources, taking into account characteristic regional features and the economic capacity of developing States and their need for economic development. Such rules, standards and recommended practices and procedures are to re-examined from time to time as necessary.¹⁷⁶

Having reviewed the international conventions which were formulated to protect the marine environment, we can conclude that although such conventions were executed under different circumstances and for different reasons, they all have

¹⁷³ Id., article 205

¹⁷⁴ Id., article 206

¹⁷⁵ Id., article 207 paragraph 1

¹⁷⁶ Id. Noyes, John E. "Compulsory third-party adjudication and the 1982 United Nations Convention on the Law of the Sea." *Conn. J. Int'l L.* 4 (1988): 675.

something in common. That is, all of these conventions expressly state that the marine environment is very important and that we should conserve it. This reflects the International Community's real keenness on combating pollution and conserving the marine environment.

Chapter Three: The Marine Environment

The marine environment has unique characteristics that distinguish it from other elements of nature. Since seas and oceans cover more than two thirds of the earth, the marine environment, thus, plays a vital role in achieving¹⁷⁷ a sort of biological balance on the planet.¹⁷⁸ It also plays an important role in human life, since it has plenty of nutritious and industrial resources that are important to human life and welfare.¹⁷⁹

For several decades, seas and oceans are thought to be able to absorb the pollutants thrown in them due to their vast area without any changes to their natural components.¹⁸⁰ Recent studies, however, have shown that this belief was wrong, because the marine environment suffers greatly due to pollutants thrown in them during the past century and a half.¹⁸¹ The studies have also shown the extent to which this pollution adversely affects man and other beings.¹⁸²

Moreover, after the Stockholm Conference on the Human Environment,¹⁸³ which raised the concern of all peoples and governments about the degradation of our planet, the Third United Nations Conference on the Law of the Sea faced,¹⁸⁴ among other things, the task of preparing the legal framework for the international cooperation necessary to save the oceans. The preparation of that legal framework required a prior

¹⁷⁷Dr. Salah Elddine Hashem, Economic and Environmental Importance of Seas and Oceans, page 19

¹⁷⁸Dr. Mohamed Younus Moheb Elddine, Environment in Criminal Law, page 20, Anglo Egyptian Bookshop, 1995

¹⁷⁹Salah Elddine Hashem, Protection of Environment during Armed Disputes, Security and Law magazine, Issue 1 January 1995, page 183

¹⁸⁰Jilda Zikhiya, Problem of Pollution in the Mediterranean Sea, Beirut, 1982, page 25

¹⁸¹<http://archive.aawsat.com/details.asp?section=15&article=444712&issueno=10572> (last visited Jan. 25, 2016)

¹⁸²http://ar.wikipedia.org/wiki/%D8%AA%D9%84%D9%88%D8%AB_%D8%A7%D9%84%D9%85%D9%8A%D8%A7%D9%87#cite_ref-4. (last visited Jan. 25, 2016)

Mohamed Mohamed Qasim, Formal Logic, Its Basics and Themes, Dar Elmaarefa Eljami'eiya, Alexandria, 1985, page 91(17/04/2014).

¹⁸³http://en.wikipedia.org/wiki/United_Nations_Conference_on_the_Human_Environment (last visited Jan. 25, 2016)

¹⁸⁴<http://legal.un.org/diplomaticconferences/lawofthesea-1982/lawofthesea-1982.html> (last visited Jan. 25, 2016)

agreement on the question of the new rights and duties of states vis a vis the new environmental situation.¹⁸⁵

Therefore, the definitions of the marine environment, the biological and scientific importance of the marine environment, the importance of the marine environment worldwide and in the State of Kuwait, the method of the international law and the Kuwaiti Law's categorization of the marine regions and how important each marine region is.

I. What Is the Marine Environment?

Since the marine environment is one of the environmental components, the environment must first be defined to reach a comprehensive and clear definition of the marine environment:

A. Definition of the Environment

Providing a definition of a thing enables us to know many facts about it and makes it completely clear. A definition also reveals what this thing is, its nature, characteristics and specific components, so that a researcher can distinguish it from other things.¹⁸⁶

Article (1) of the Kuwaiti Environment Protection Law defines the environment as “the vital surroundings that contain living organisms including humans, animals,

¹⁸⁵In other words, it was necessary to negotiate new territorial and other maritime jurisdictions of states. Such environmental legal activity was extremely complex since the new concepts of environmental maritime jurisdictions were intrinsically linked with new ideas on the field of maritime jurisdiction relating to economic exploitation of the ocean.

¹⁸⁶Dr. Suleiman Azmi Basha, On Sidelines of Medicine, mentioned by Dr. Ahmed Abu Elwafa: Reflections on International Protection of Environment from Pollution, Egyptian Magazine of International Law, 1993, Issue 49, page 87, Dr. Elshahat Ibrahim Mansour: Environment in Islam, Dar Al Nahda El Arabiya, Cairo, page 7, Al Moajam Al Wajeez (1980), Academy of the Arabic Language, First Edition, page 66.

plants, and other things that surround them, such as air, water, soil, and whatever they contain of solid, liquid, or gaseous substances, natural rays, and fixed or movable facilities established by man.”¹⁸⁷

The definition of the environment under Kuwaiti Law shows that the environment consists of two elements:

The first element includes all natural surroundings of man, such as water, air, soil, plants, and animals. The second element includes the industrial environment that man has recently established, such as heavy and nuclear industries, or that man created in the past, such as monuments and human heritage, including inscriptions, statues, and temples.

In international law, the Stockholm 1972 Declaration on the Human Environment defines environment as “a number of natural, social, and cultural systems in which human and other living organisms live and from which they get their resources and carry out their activities.”¹⁸⁸

This definition of environment, pursuant to the international law, shows that environment includes whatever surrounds humans, including their accommodations, streets, food, drinks, and biological and chemical substances.

A review of environment protection acts of a number of countries all over the world reveals that some legislatures define “environment”, while others do not. This is

¹⁸⁷ Article (1) of Kuwaiti Environment Protection Law 2014

¹⁸⁸ <http://www.unep.org/Documents/Multilingual/Default.asp?DocumentID=97> (last visited Dec. 29, 2015)

attributed to some lawmakers' belief that the term "environment" does not imply any legal content, because it refers to the surroundings in which the ecosystem exists.¹⁸⁹

In view of the above, the environment from a legal perspective can be defined as "whatever things that surround humans, including conditions, civilizational, geographical, social, or cultural variables". The environment as an object of legal protection is generally defined as "the surroundings that relate to man's life and health in society, whether these surroundings are natural or man-made."¹⁹⁰

In brief, the term "environment", from a legal perspective, refers to the earth on which man lives whether regionally – the state with all of its elements – or internationally – all states.

Therefore, "environment" includes all surroundings, such as the houses in which we live, the places where we work, the air that we breathe, the water that we drink, the land on which we live, and all geographical and human phenomena that affect us. In other words, the environment on the regional or national level is the state itself with all its elements – land, water, and air – and on the global level, environment is the earth, in which all countries share responsibility to protect man through the international law, which is concerned with the common heritage of humanity and the protection of this planet in the scope that comprises the borders of man's state of residence through the internal law with its several branches.

B. Definition of the Marine Environment

¹⁸⁹ Hala Salah Yasin Al Hudaithi, Civil Liability Arising from Pollution of Environment, Zahran Publishing and Distribution Co.

¹⁹⁰ Dr. Ahmed Mahmoud Saad, Reflections on Civil Liability Rules in Disputes of Environment Pollution, Dar Al Nahda, 1994, page 39

The marine environment has become one of the recent concerns in international and national laws. It is part of the international ecosystem and consists of seas, oceans, and their tributaries in addition to what they contain of living organisms, whether plants or animals, and other resources, such as minerals of different kinds.¹⁹¹

Kuwaiti law does not define the marine environment, because the law of the Environment Public Authority has been recently enacted, on one hand, and concern for environment is also recent, on the other hand. Most environment law jurists have criticized this lack of interest, and, therefore, a number of jurists have provided a definition of the marine environment as “the saline water bodies which are naturally connected to each other, including their bottoms and soils with their contents of animals, plants, and natural resources forming in total the elements of marine life, as an ecosystem.”¹⁹²

However, this definition is incomplete, because it does not consider man-made artificial connections, such as the Suez Canal. Therefore, a number of lawmakers define the marine environment as the areas of saline waters which form a connected body, whether this connection is natural or artificial, with its all forms of marine life.¹⁹³

According to this definition, the marine environment includes all saline water areas connected to each other, whether naturally or artificially though man-made channels; the surface of the sea and its bottom; all marine living organisms, such as

¹⁹¹ http://www.marbef.org/wiki/Why_is_Marine_biodiversity_important (last visited Dec. 29, 2015)

¹⁹² Abd Elhadi Mohamed Alashri, Study on International Law in Protection of the Arabian Gulf during Armed Disputes, page 21, Dar Al Nahda, 1997

¹⁹³ Dr. Salah Hashim, Civil Liability for Jeopardizing Marine Environment, Ph.D. Thesis, page 16

fish; coral reefs; crustaceans; salt lakes connected to the sea; the areas of mouths of rivers, and all enclosed and semi-enclosed seas.

II. What is the importance of the marine environment?

The International Community seeks to protect the marine environment from pollution, because this environment is important to human beings and has a direct effect on them. The 1982 UN Convention on the Law of the Sea states that the marine environment is an ecosystem or a number of ecosystems in view of the contemporary scientific concept of the ecosystem, which is focused on the study of a certain point in time and place, with its living organisms under the physical and climatic conditions, and also the relationship among living organisms and their relationship with surrounding physical conditions.¹⁹⁴

Therefore, the marine environment is part of the ecosystem and consists of seas and oceans with their tributaries in addition to their contents of living organisms, whether plants or animals, and other resources, such as metals of different kinds. These living organisms depend on and interact with each other in a balanced relationship.¹⁹⁵ Accordingly, the marine environment is important both economically and biologically.

A. Biological Importance of the Marine Environment:

The marine environment is characterized by a natural free connection that links its parts and allows mutual effect, since the marine environment plays an important role

¹⁹⁴http://en.wikipedia.org/wiki/United_Nations_Convention_on_the_Law_of_the_Sea (last visited Dec. 29, 2015)

¹⁹⁵Ronald Mitchell et al, 'International Vessel-Source Oil Pollution' in Oran R Young (ed), *The Effectiveness of International Environmental Regimes: Casual Connections and Behavioral Mechanisms* (Cambridge, MA, MIT Press, 1999) 33.

in achieving climatic balance through its high specific heat on surface and its coldness at the bottom. This enables the marine environment to absorb a huge amount of sun rays falling on the earth, and thus a part of its waters evaporates into the air by the rising wind and forms clouds that move toward the mainland, producing rain, which is the source of freshwater for other living organisms on land.¹⁹⁶

The marine environment is also characterized by the absorption of carbon dioxide through a process called photosynthesis carried out by phytoplanktons, which exist in seawater in large numbers. Phytoplanktons remove carbon dioxide from sea water and release oxygen as a by-product, which other living organisms in the marine environment breathe. Carbon atoms are freed and become organic material.¹⁹⁷

Given that the rate of carbon dioxide on the earth has grown in a way that risks humans in particular and the environment in general, authorities in most countries realized the importance of the marine environment and its vital role in reducing the level of carbon dioxide in the atmosphere.¹⁹⁸

B. Scientific Importance of the Marine Environment

Information about the earth and the environment has been and continues to be greatly expanded by the exploration of the seas and oceans. The Marine Scientific Research program (MSR)¹⁹⁹ has played an important role in this regard by studying

¹⁹⁶ See e.g. 'Impact of Climate Change on Bangladesh: Sea Level Rise and Coastal Zone Management', *The Independent*, Friday, 28 January 2000.

¹⁹⁷ http://en.wikipedia.org/wiki/Solubility_pump. (last visited Dec. 29, 2015) And See Nathan L. Stephenson *The American Naturalist* Vol. 135, No. 5 (May, 1990), pp. 649-652.

¹⁹⁸ Environmental characteristics and marine pollution in the Gulf region, Dr. Abdu hgnaby Alqadban, 2000, P.50.

¹⁹⁹ MSR' is not a term of art defined in the LOS. During UNCLOS III various possible definitions of MSR were mooted, some of which sought to restrict the term only to pure research, and others which encompassed all scientific studies in the oceans, including research connected with the exploitation of natural resources. No definition was

seas and oceans. The MSR has helped man to understand necessary information about the weather, wind movement, and the effects of the seas and oceans on the earth's climate. The program has helped study the seabed, measure the depth of oceans, and learn more about ecological systems to improve the management of fisheries and spot the locations of hydrocarbon resources. Studying the marine environment also helped to improve the scientific understanding of man's effect on many aspects of his surrounding environment.

In this regard, Chapter 17 of Agenda 21 emphasizes throughout its plan for integrated management and sustainable development of the oceans that scientific capacity should be enhanced, particularly in developing states, and that sound science should be at the centre of assessments of environmental risks and the making of management decisions.

In addition, the marine scientific research processes are often connected with the processes of environmental scientific research, such as the research processes conducted on fisheries. These processes often shed light on environmental outcomes, such as the biological effects of pollutants and their impact on fish. They also shed light on the continental shelf, which is connected with the seismic activity responsible for catastrophes, such as the tsunami that happened in the Pacific Ocean in 2004. The oceans and seas also have great importance for all countries of the world.

ultimately included in the LOSC because it was considered that the provisions in Part XIII adequately gave meaning to the concept. In its ordinary sense, and the one adopted in this chapter, MSR means 'any form of scientific investigation, fundamental or applied, concerned with the marine environment, i.e. that has the marine environment as its object which is carried out in the oceans. So defined, MSR must be distinguished from research conducted at sea that has as its object non-marine environments, such as atmospheric or astronomical observation. Such research is not subject to the LOSC regime for MSR. Also not encompassed by the LOSC is MSR undertaken outside of the surface, water column, subsoil or seabed in the marine environment. Despite the extensive use of ex situ research techniques, such as remote sensing from satellites that are increasingly displacing in situ ship-based methods for obtaining data on the marine environment, these are not addressed by Part XIII

C. Global Importance of the Marine Environment

The marine environment is an important source of the food for humans and other living organisms. It contains huge amounts of different species of sea living organisms with high nutritional value, the most important of which is fish.²⁰⁰ Also, seas contain huge amounts of mineral resources, the quantity of which sometimes exceed the amounts found on land, such as tin, which is found in the Thailand Sea and Malaysia, sponge, and diamond.²⁰¹ Although the fastest and newest means of transport have been invented, the marine environment is still a very useful means of transport in the world. Ships can carry overseas what planes cannot carry. The marine environment contains huge amounts of oil and natural gas, which has played a major role in the economic prosperity of the world. Seas are also a source of freshwater through evaporation and rain. Desalination of seawater is very useful for countries that suffer from shortage of freshwater resources.²⁰²

D. Importance of the Marine Environment to the State of Kuwait

The marine environment in Kuwait is a marine outlet for its population. Urban areas, parks and other tourism and entertainment facilities are concentrated in the marine environment. The marine environment in Kuwait is rich in fish resources, which

²⁰⁰ Snelgrove, Paul VR. "The importance of marine sediment biodiversity in ecosystem processes." *Ambio* (1997): 578-583.

²⁰¹ Botsford, Louis W., Juan Carlos Castilla, and Charles H. Peterson. "The management of fisheries and marine ecosystems." *Science* 277.5325 (1997): 509-515.

²⁰² Ventikos, N. P. "Development of an Evaluation Model for the Importance, the Causes and the Consequences of Oil Marine Pollution: the Case of Maritime Transport in the Greek Seas and in the Gulf of Saronikos." *National Technical University of Athens, Greece* (2002).

is an important nutritional source for the population. It is rich in different kinds of fish that are rarely found in other water bodies.²⁰³

The marine environment is also considered a marine outlet for the population. The urban scale, parks, and other tourist and recreational facilities in the marine environment are among the most important components of modern urban life. The marine environment contains fish that are an important food for the population. Many studies and research were conducted on the Bay of Kuwait as a very important site of fish. Most of these studies and research agreed that the Bay of Kuwait is a very important site of fish, including young fish and shrimp. Needless to say, fish are one of the most important food sources for the population of Kuwait.²⁰⁴

Moreover, Kuwaiti territorial waters are among the best areas in the Arabian Gulf, because the Gulf waters contain many feeds for different living organisms, especially small fish.²⁰⁵ Consequently, these areas are very useful as fisheries. Kuwait also has a desert environment; there are no rivers, and ground water is rare.²⁰⁶ Therefore, the country entirely depends on seawater desalination to supply drinking water to the population through the Doha Plant on the Gulf.²⁰⁷

III. Scope of the Marine Environment

A. In International Law

²⁰³Marine EnvironmentMagazine,Issue88Apr. 2011,P. 12

²⁰⁴http://www.beeaty.tv/new/index.php?option=com_content&task=view&id=4421&Itemid=69 (last visited Dec. 29, 2015)

²⁰⁵Marine EnvironmentMagazine,Issue89Sep. 2011,P. 22.

²⁰⁶<http://en.wikipedia.org/wiki/Kuwait> (last visited Dec. 29, 2015)

²⁰⁷<http://www.energy.gov.kw/data/site1/images/doha/index-en.html> (last visited Dec. 29, 2015)

According to the earlier definition of the marine environment,²⁰⁸ it comprises all areas covered with saline water, and its parts are naturally connected. Therefore, its scope includes internal and territorial waters. It also includes the adjacent zone, the economic or investment area, the continental shelf and high seas. Each of these zones has a limited area according to the 1982 UN Convention on the Law of the Sea,²⁰⁹ by which all countries should abide. The convention put an end to international disputes among countries regarding the delineation of the width of their territorial waters in general.²¹⁰ In addition, the 1982 UN Convention on the Law of the Sea promulgated the key guidelines and rules about the extent of each country's control over each zone of the marine environment and the enactment of laws that guarantee the necessary legal protection.²¹¹

Accordingly, the marine environment can be categorized into five areas as follows:²¹²

1. Coastal Waters

Coastal water is entirely found inside the marine borders of a country, including ports, roadsteads, and shores. The 1982 UN Convention of the Law of the Sea defined internal waters as "waters on the landward side of the baseline of the territorial sea form

²⁰⁸ See Footnote 15,16

²⁰⁹ The 1982 UN Convention of Law of Sea, Article (3), (33), (55), (57),

²¹⁰ Id Article (59)

²¹¹ Boyle, Alan E. "Marine pollution under the Law of the Sea Convention." *American Journal of International Law* (1985): P. 347-372.

²¹² Article 68 of the Law of Environment Protection, which states that all Kuwaiti territorial marine regions are deemed regions that have to be protected from any pollution arising from whichever source or reason. Article 68 deems any pollution in this regard a crime as per this law. These regions include: 1- internal waters of the State of Kuwait, located behind the Kuwait Gulf, 2- Territorial sea of the State of Kuwait, covering 12 nautical mile from the shore, 3- The region adjacent to the territorial sea, covering 24 nautical mile from the shore and 3- The waters adjacent to the territorial sea, covering 50 miles from the shore.

part of the internal waters of the State.”²¹³ The Geneva Convention 1958 defined internal waters as follows: “Waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State.”²¹⁴

Accordingly, coastal waters include ports, roadsteads, straits, semi-enclosed lakes, and harbors. These waters are governed by the regulations that govern the land region of the state, i.e. the state has full legal sovereignty over these waters without exception.²¹⁵

2. Territorial Waters or Territorial Sea

Territorial sea is the part of the waters adjacent to the coast of a state that is considered to be part of the territory of that state and subject to its sovereignty.²¹⁶

Delineating the territorial waters of a state was problematic because of many considerations relating to the rights to fishing, economic utilization, and scientific research in addition to the security of the state itself. Until the early 1900s, the delineation of territorial waters of a state was governed by a conventional principle that a coastal state’s authority included only marine areas under its actual control starting from its land territory. This zone was three nautical miles.²¹⁷

However, the 1982 UN Convention on the Law of the Sea put an end to the disagreements among many countries of the world regarding the determination of the area of the territorial sea of each state, which was the source of disputes. The 1982 UN

²¹³Id Article (8)

²¹⁴Geneva Convention, 1958, Article (5)

²¹⁵Hinrichsen, Don. *Coastal waters of the world: trends, threats, and strategies*. Island Press, 2013.P. 158.

²¹⁶Colombos, Constantine John, and Alexander Pearce Higgins. *The international law of the sea*. London: Longmans, 1967, P. 118-125

²¹⁷Marine Problems in the Arabian Gulf, Egypt Press Agency, 1991

Convention on the Law of the Sea accurately determined the territorial sea in a way that protects the rights of each state. Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention.²¹⁸

The 1982 UN Convention on the Law of the Sea stressed the coastal state's sovereignty over its territorial waters. Pursuant to this sovereignty, the state has the power to exercise all of its sovereignty over these territorial waters, which means that it has complete authority over fishing, security, customs, and legislation concerning such waters. Despite this absolute sovereignty of the coastal state over the territorial waters, there are a number of restrictions. For instance, the coastal state has to adopt laws and regulations in conformity with the provisions of this Convention and other rules of international law relating to innocent passage through the territorial sea.²¹⁹

3. Contiguous Zone

Under the 1982 UN Convention on the Law of the Sea, in a zone contiguous to its territorial sea, described as the contiguous zone, the coastal state may exercise the control necessary to:

(a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea; and

²¹⁸Article (3) of the 1982 UN Convention of the Law of the Sea

²¹⁹IdArticles (19), (21), (24), (27), (25), (28)

(b) punish infringement of the above laws and regulations committed within its territory or territorial sea.²²⁰

The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.

The coastal state will have legislative, administrative and punitive authority over the contiguous zone in a way that allows it to obligate others to respect it by seizing, arresting, penalizing, or fining. Since the safety and security of this zone are the responsibility of the coastal state, it has the right to set rules, regulations and procedures necessary to protect this zone from pollution in light of the international commitment to preserve and protect the marine environment.²²¹

4. Exclusive Economic Zone

As defined by the 1982 UN Convention on the Law of the Sea, the exclusive economic zone is an area beyond and adjacent to the territorial sea, subject to the specific legal regime established in this Part, under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention. Under the same Convention, the exclusive economic zone shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.²²²

However, the coastal state does not necessarily have an economic zone with a breadth of 200 miles. Geographic conditions may reduce this breadth below 200 miles,

²²⁰Id Article (330), of the 1982 UN Convention on the Law of the Sea

²²¹Id Articles (33), (34), (35), (42)

²²²Id Article (5)

as is the case in the Arabian Gulf, where Iran has sovereignty over the eastern side of the zone and Kuwait, Saudi Arabia, Qatar, Bahrain, and Oman have sovereignty over the western side of it.

In view of the above, no state will be affected by a contiguous zone apart from other states. For instance, if Bahrain has sovereignty over an economic zone adjacent to its territorial sea, this area cannot by any means be measured without reaching the Iranian coast and entering the Iranian territorial sea and shores. Therefore, the UN Convention on the Law of the Sea regulated the delineation of the exclusive economic zone among states that have adjacent or opposite shores through agreement based on international law.²²³

Article 56 of this Convention underlines the coastal state's sovereignty over the exclusive economic zone and its rights to explore and exploit, conserve, and manage the natural resources, scientific research, establish and use artificial islands, installations and structures, and protect and preserve the marine environment from pollution.²²⁴

Article 57 of this Convention states that the exclusive economic zone shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.²²⁵

5. Continental Shelf

²²³Id Article (74)

²²⁴ Id Article (56)

²²⁵Id Article (57)

The 1982 UN Convention on the Law of the Sea states that the continental zone of a coastal state comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, where the outer edge of the continental margin does not extend up to that distance. The Convention states that the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.²²⁶

The 1982 UN Convention on the Law of the Sea stressed that the coastal state exercises over the continental shelf sovereign rights to explore it and to exploit its natural resources. Therefore, the coastal state must take all precautions necessary to protect the marine environment in this zone.²²⁷

The 1958 Geneva Convention defines the continental shelf as “(a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 meters or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.” Paragraph 2 states that the continental margin comprises the submerged prolongation of the land mass of the coastal state and consists of the seabed and the subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with

²²⁶Id Article (76)

²²⁷Id Article (77)

its oceanic ridges or the subsoil thereof. This area located outside the territorial jurisdiction of the state is called the “common heritage of mankind.”²²⁸

Paragraph 5 set two criteria for delineating the maximum limit of the continental shelf, stating that it shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 meters isobaths, which is a line connecting the depth of 2,500 meters.²²⁹

Paragraph 9 of Article 1 of the 1958 Geneva Convention obligated the coastal state to publish charts or lists of geographical coordinates that show the outer limits of the continental shelf and to deposit a copy of each such chart or list with the Secretary-General of the United Nations.²³⁰ Accordingly, subject to its right to take reasonable measures to explore the continental shelf, exploit its natural resources and prevent, reduce and control pollution from pipelines, the coastal state may not impede the laying or maintenance of such cables or pipelines.²³¹

The coastal state must pay or contribute in kind with respect to the exploitation of the non-living resources of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured. The payments and contributions shall be made annually with respect to all production at a site after the

²²⁸Id The 1958 Geneva Convention, Article (1)

²²⁹Id

²³⁰Id

²³¹ Christopher, Warren M. "The Outer Continental Shelf Lands Act: Key to a New Frontier." *Stanford Law Review* (1953): 23-68.

first five years of production at that site pursuant to the UN Convention on the Law of the Sea.²³²

B. In Kuwait Law

Determining the territorial waters or sea of any country is an important matter. All coastal countries of the world are concerned with the demarcation of their marine borders. Consequently, they are keen to enact laws that determine the areas of their marine borders. Because Kuwait shares with Saudi Arabia, Iran, and Iraq in complicated and overlapping marine borders, it was keen to issue an Emiri decree that would demarcate its marine regions. This decree is consistent with the 1982 UN Convention on the Law of the Sea as follows:

Article (1) contains a definition of the phrases and terms included therein. It states that:

- Baselines mean the lines from which the territorial sea and other marine regions of the State of Kuwait start.²³³ These baselines are determined as per the provisions of Article (2) of this decree.²³⁴
- Island means every region or area of the land, which was naturally formed and is surrounded by waters. Its surface emerges from waters at high tides.
- A terrestrial projection arises from low ebbs. It is every area or region of land which was naturally formed and is surrounded by waters. Its surface emerges from waters at low ebbs and is submerged by waters at high tides.

²³²Id Article (82) of the 1982 UN Convention on the Law of the Sea

²³³Emiri Decree No. (317) 2014.article (1).

²³⁴Id, article (2).

- A nautical mile is a measurement unit amounting to one thousand eight hundred fifty two meters.

Article (2) determines the standards of baselines, upon which the territorial sea of Kuwait is measured.²³⁵ Article (3) of the decree sheds light on the internal waters of the country.²³⁶ Accordingly, baselines are determined as follows:

A- If the mainland coast or the coast of a Kuwaiti island is overlooking the sea, the baseline will be the minimum line of water ebb along the coast.

B- If there is a port on the coast, the farthest point of the fixed facilities of the port from the side of the sea is considered a part of the coast.

C- If a projection emerges from land at low ebbs and is only up to twelve nautical miles from the mainland or a Kuwaiti island, the outer edge of this projection is considered the baseline.

D- The baseline of the Bay of Kuwait, the waters of which are internal, is the closing line of the gulf as described in Appendix 12 of 1964.²³⁷

Article (4) determined the width of the territorial sea of Kuwait as a distance of 12 nautical miles that can be measured from the baselines in the mainland and Kuwaiti islands. If the Kuwaiti territorial sea waters overlap with the territorial sea waters of another neighboring country, there is no agreement between that country and Kuwait regarding the demarcation of marine borders; the centre line is the outer line of the territorial sea of Kuwait.²³⁸

²³⁵ Id.

²³⁶ Id, article (3).

²³⁷ Id, article (3).

²³⁸ Id, article (4).

On the other hand, Article (5) of the decree determines the scope of the adjacent region and the jurisdiction of Kuwait over it. This article states that the State of Kuwait has a region adjacent to its territorial sea covering an area of twelve nautical miles from the outer border of the territorial sea of the State of Kuwait over which it has jurisdiction and enjoys the right to control and supervise it in addition to its right to impose penalties in case security, environmental, navigational, taxation, customs, immigration or health regulations and laws effective in the country are violated.²³⁹ If the region adjacent to the State of Kuwait overlaps with a region adjacent to another neighboring state, regarding which there is no agreement between the State of Kuwait and the state concerning the demarcation of the marine borders, the centre line is the outer border of the region adjacent to the State of Kuwait.

Article (6) determines the matters relating to the pure economic region of the State of Kuwait, which is located directly beyond its territorial sea. This article states that the State of Kuwait has a pure economic region lying directly beyond its territorial sea and adjacent to it.²⁴⁰ This region extends to the marine border with neighboring countries. Pursuant to this article, the State of Kuwait exercises over this region the same rights and powers it exercises over its territorial sea regarding natural resources in addition to the rights and powers stipulated under Article (56) of the UN Convention on the Law of the Sea. If Kuwait has no agreement with any neighboring country regarding the demarcation of marine borders, the centre line will be deemed the outer border of the economic region of the State of Kuwait.²⁴¹

²³⁹ Id, article (5).

²⁴⁰ Id, article (6).

²⁴¹ The 1982 UN Convention on the Law of the Sea article (56).

Article (7) discusses the region of the continental shelf and the rights and powers exercised by the State of Kuwait over it. This article states that the continental shelf of the State of Kuwait is as described in Article (76) of the UN Convention on the Law of the Sea.²⁴² Pursuant to Article (7), the State of Kuwait has the same rights and powers that it has over its territorial sea regarding natural resources located on or under the seabed or underground. The State of Kuwait also enjoys all rights stipulated under Article (77) of the same convention. If Kuwait has no agreement with any neighboring country regarding the demarcation of marine borders, the centre line will be the outer border of the continental shelf of the State of Kuwait.

The decree of the demarcation of the marine regions of the State of Kuwait is consistent with the UN Convention on the Law of Sea of 1982 ratified by the State of Kuwait in 1982. As a whole, the decree protects the sovereignty of the State of Kuwait and its stipulated rights over the marine regions of the country as per the terms and clauses of the Convention.

In contrast, the 2014 Kuwaiti Environmental Protection Law was more determine of marine regions protected by by Article 68 of the Law of Environment Protection, which states that all Kuwaiti territorial marine regions are deemed regions that must be protected from all pollution arising from whatever source or reason. Article 68 deems the production of any pollution in this regard to be a crime. These regions include: 1- internal waters of the State of Kuwait located behind the Kuwait Gulf; 2- the territorial sea of the State of Kuwait covering 12 nautical miles from the shore; 3- the region adjacent to the territorial sea covering 24 nautical miles from the

²⁴² Id, Emiri Decree , Article (7), (76).

shore; and 3- the waters adjacent to the territorial sea covering 50 miles from the shore.²⁴³

²⁴³ Article (68) of the 2014 Kuwaiti Environmental Protection Law

Chapter Four: Pollution of Marine Environment

To maintain a healthy and pollution-free environment for the good of humanity, most countries of the world have been keen on protecting the components of the marine environment from pollution. This has been achieved through enacting regulations and laws that limit the pollution of the marine environment, the negative effects of which have expanded to all countries of the world. The pollution that happens in the marine environment of a certain country causes harm not only to that country, but to other countries, as well—even to other continents. Of course, this has negative effects on the survival of the living creatures on the earth. Therefore, the pollution of the marine environment is one of the main problems that we face in modern life and it has arisen from human increasing misuse of the natural resources on earth.²⁴⁴

The scale of the marine pollution has increased such a great extent that it has affected the essential elements of the environment, including the water, air, and soil.²⁴⁵ The pollution of the marine environment has taken many forms in the past few decades, including: the crime of burning oil after spilling it in the Arabian Gulf waters during the 1991 Gulf War; the sinking of ships carrying oil; and the disposal of nuclear and chemical wastes in seas by dumping them in the desert, and thus, causing the pollution of the area groundwater.²⁴⁶

²⁴⁴ Oil in the Sea, inputs, Fates, and Effects, National Research Council, et al., National Academy Press, 1985, P 472. Dr. Ahmed Mahmoud Sa'ad, Probing the Rules of Liabilities in Disputes of Environment Pollution, Dar Al-Nahda Al-Arabia, 1994, Page 14

²⁴⁵ Griffiths, J.J., Marine Mammals and Petroleum Activities in Norwegian Waters, A Review of the Literature on the Effects Of petroleum on Marine Mammals and Recommendations for Further Research. 1985, P 68.

²⁴⁶ Dr. Mohsen Abdel Hameed Al Baih, Man's Right to Sound Environment under the International Law, 1998, Page

The harms arising from the pollution of the marine environment have pushed the researchers of the environment to draw the attention of the authorities to the seriousness of these harms and the necessity of facing them at all levels. At the legal level, the pollution of the marine environment has imposed on the legal professionals to face it, depending on the relationship between the environment and the law that governs the behaviour of individuals in a society, which is a social phenomenon. In such, this relationship is reflected in the regulatory rules governing the behaviour of individuals and their relationships with the environment, whether this behaviour is positive and protects the environment or negative and causes harm to it.²⁴⁷

Fighting pollution has become the main focus of the international community during the past fifty years. This focus has resulted in the enactment of hundreds of laws and regulations and scores of environmental covenants and treaties aimed at the treatment of pollution. This focus corresponds with scientists' and jurists' attempts through international law and Kuwait law to explain what pollution is, its types, and its sources. Therefore, this chapter will discuss the efforts by scientists, jurists, and environment treaties to define pollution and to determine its types and sources.

I. Definition of pollution

Pollution is the primary target of environmental law. During the past forty years, hundreds of federal and state statutes, administrative regulations, and international treaties have established multiple approaches to addressing pollution of the air, water, and land. Yet, the law still struggles to identify precisely what constitutes

²⁴⁷ Nabila Abdel Haleem Kamel, *Towards a Unified Law for the Protection of Environment*, Dar Al-Nahda Al-Arabia, 1993, Page 16

pollution, how much of it is tolerable, and what should be done about it.²⁴⁸

A. Scientific Definition of Pollution

Although it is difficult to set a scientific definition of pollution for every time and place, and in a way that copes with the continuous development of life, this has not prevented scientists who are interested in studying the environment from providing a scientific definition of pollution. Pollution can be defined as “the introduction of contaminants into an environment that causes instability, disorder, harm or discomfort to the ecosystem.”²⁴⁹ Pollution can also be defined as “the occurrence of a change or an imbalance in the living and non-living components of the environment, which paralyses the ecosystem or reduces its capability to perform its natural role of getting rid of the contaminants arising from natural or industrial substances.”²⁵⁰ This definition is consistent, to a great extent, with the report issued by the UN Economic and Social Council,²⁵¹ which defines pollution as “the change that arises, whether directly or indirectly, from human activities, in the surroundings or the environment in which man lives in a way that adversely affects some uses or activities that would have been carried out if these surroundings or environment has maintained its normal conditions.”²⁵² Some scientists, however, define the pollution of environment as “the

²⁴⁸ Hawkins, Keith. "Environment and enforcement: Regulation and the social definition of pollution." (1984), P. 40.

²⁴⁹ Gray, John S., and John M. Bewers. "Towards a scientific definition of the precautionary principle." *Marine Pollution Bulletin* 32.11 (1996): 768-770.

²⁵⁰ Dr. Khaled Zaghoul, Issues of Environment and Development in the Arab Region, during the Conference Held by College of Law, Kuwait University from 20/9 to 2/10/2000, Page 8

²⁵¹ <http://www.un.org/en/ecosoc/docs/docs.shtml>

²⁵² Dr. Ahmed Abdel Kareem Salama, Law of Environment Protection, a Foundational Study, Page 69, Margin 27. And see Hawkins, Keith. "Environment and enforcement: Regulation and the social definition of pollution." (1984), P. 249.

introduction of a substance or energy such as heat to the environment at a rate that harmfully exceeds the environment's capacity to disperse, dispose, reuse, or store."²⁵³

However, some scientists believe that pollution is "every increasing deterioration of the natural elements that arises from the disposal of all kinds of waste which affect the soil, the sea, the air, and the water in a way that gradually makes them unable to perform their role; or it is a physical, chemical, or biological change that causes harm to man's health and other living creatures."²⁵⁴

From the definitions provided above, we can say that the pollution of environment is the introduction of an element that is not found in the environment, or increases the levels of one of its elements, or reduces these levels in a way that imbalances the environment.²⁵⁵

B. Legal Definition of Pollution²⁵⁶

Kuwaiti law does not usually contain definitions of legal matters. It leaves these definitions to jurists who are more capable of providing accurate definitions.

However, Kuwaiti environmental law does not follow this rule and provides a definition of the term of environment pollution. Kuwaiti legislators provide a comprehensive definition that includes many of the causes of pollution and its adverse

²⁵³Dr. Hesham Sherif Gabr, Towards a More Comprehensive Concept of Different Types of Environment Pollution and Its Effect on Development in the Arabian Gulf, Page 98, Researcher Proposed to a conference on "The Effects of Environmental Pollution on Development in the Arabian Gulf" held in Kuwait from 17 to 17/3/1999.

²⁵⁴Dr. Ahmed Salama, Law of Environment Protection in Islamic Sharia, 1994, Page 16

²⁵⁵Fou'ad Basyouni, Humanity and Pollution, 1994, Page 16

²⁵⁶Jurists provide different definitions of pollution. Some define pollution as "the change of the natural environment, which may have dangerous effects on a living creature." Others define pollution as "every change arising from man's interference with the ecosystems, which may cause harms, whether directly or indirectly, including water, air, and food." Pollution is also defined as "everything that affects any element of the environmental elements including plants, animals and man" and also as "everything that affects the structure of nonliving natural elements such as air, soil, lakes, seas, etc. Pollution is also defined as "the presence of any foreign substances in environment or any of its elements in a harmful way."

effects on the environment. This is clear in Article (1) of the Kuwait Environment Protection Law which defines environment pollution as “the introduction of any substances or pollutants with quantities or characteristics for a period of time to the environment in a way that leads, whether directly or indirectly, and whether separately or collectively, to jeopardizing public health. Environment pollution includes any activities or acts that may lead to the deterioration of the natural system or prevent man from enjoying life and utilizing public and private properties.”²⁵⁷.

However, some jurists define environment pollution as “the presence of foreign substances that causes harm to the environment or any of its elements or causes an imbalance in the levels of the environmental components or any of its elements in a way that may be harmful.”²⁵⁸

Other jurists define pollution as “any change, whether intentional or unintentional, in the form of the environment in which human lives.”²⁵⁹ This definition, as we see, highlights the question of whether the pollution of an environment is a behaviour that may be intentional and deliberate, or an unintentional behaviour arising from an error. The definition also mentions the perpetrator of the harm or the error as it connects to the changes taking place in an environment due to humanity’s acts.

Another jurist opinion is focused on the result arising from pollution, which is the harm; in such, pollution can be defined as “the immediate or future harm that

²⁵⁷ Article (1) of the Kuwait Environment Protection Law. On another hand Egyptian law does not elaborate on the definition of environment pollution as the Kuwaiti legislators have done. Egyptian law defines environment pollution in Article I of Law no. 4 of 1994 as “any change in the properties of environment, which may, directly or indirectly, cause harm to living organisms or facilities or may affect man’s normal activities.”

²⁵⁸Dr. Salaheddine Amer, Introduction to International Law of Environment, Page 723, Dr. Ahmed Sa’ad, Id, Page

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²⁵⁹Dr. Ahmed Salama, Id, Page 65

affects any element of the environmental elements, arising from man's activities or the activities of one of the facilities run by the state, or the harm arising from nature due to environmental imbalance, whether it comes from inside the environment or is caused to it.”²⁶⁰ This definition focuses on the causes of pollution, its sources and the elements comprising it. It does not make pollution limited to the activity of the average person, since the pollution may arise from the state activity or any of its legal public personalities, such as public authorities, public corporations and governorates; in addition to private legal entities, such as companies and the private sector. This definition, however, does not dictate whether the nature of this pollution-causing activity is legal, which is enough to incur civil liability once the harm occurs; or if it is an illegal activity that has caused harm that should be remedied through criminal liability.²⁶¹

By reviewing the legal definitions of environmental pollution, we find that all definitions highlight precise balance upon which the essential elements of environment are based. The earth was very carefully created but the pollution caused by human affects the ecological balance.

II. Definition of the Pollution of Marine Environment

Environment pollution is a modern phenomenon that has accompanied modern technological developments, and has threatened human life. As we know, the issues of the pollution of the marine environment and the attempts made to protect it have recently received the attention of a great number of researchers and intellectuals at both

²⁶⁰Dr. Mohamed Mustafa Younus, Protection of Environment from Pollution under International Law, 1996, Page 22

²⁶¹Dr. Ahmed Sa'ad, Id, Page 65

the international and the national levels. moreover, the issue of the pollution of the marine environment has received a great deal of interest from the makers of international treaties and from jurists. First, I will shed light on the definition of the pollution of the marine environment according to international treaties; second, I will explain the definition of the pollution of the marine environment that is provided by jurists.

A. Definition of Pollution of Marine Environment as Per International Treaties

1. Definition provided by the International Convention for the Prevention of Pollution from Ships, London (MARPOL 1973).²⁶²

The International Convention for the Prevention of Pollution from Ships defines pollution of the marine environment as “any substance which, if introduced into the sea, is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea, and includes any substance subject to control by the present Convention.²⁶³ On the other hand the MARPOL Convention defines dumping as “any incident that involves the actual or possible dumping of a harmful substance in the sea or any flows of this substance.”²⁶⁴ This definition is based on two essential elements: the first is that the act of dumping is considered pollution of the marine environment, and the second is that the harmful substance is dumped in the sea.²⁶⁵ The Convention clarifies the meaning of “dumping” as the process of sewage, draining, flowing, or pumping this harmful substance in the

²⁶² [http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx) (last visited Dec. 30, 2015)

²⁶³ H. A. Cole Marine Pollution Oceanology International. 1969. P11

²⁶⁴ Article (2) of the International Convention for the Prevention of Pollution from Ships, (MARPOL 1973) Convention.

²⁶⁵ Boyle, Alan E. "Marine pollution under the Law of the Sea Convention." *American Journal of International Law* (1985): 347-372.

sea. The Convention also defines the “harmful substance” as the substance that causes risks to man’s health when mixed with the seawater, causes harm to the marine creatures, or prevents the normal use of the sea.²⁶⁶

2. Definition Provided by the Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution (1978).²⁶⁷

The Kuwait Convention²⁶⁸ elaborates on defining pollution that afflicts the marine environment in Clause (A) of Article (1), which defines pollution of the marine environment as “the introduction by human, directly or indirectly, of substances or energy into the marine environment resulting or likely to result in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea and the reduction of amenities.”²⁶⁹

3. Definition provided by the United Nations Convention on the Law of the Sea (1982).²⁷⁰

Pollution of the marine environment is the introduction by human, directly or indirectly, of substances or energy into the marine environment, including estuaries,

²⁶⁶ Clause B of Article II, MARPOL Convention, 1973

²⁶⁷ <http://ropme.org/home.clx>

²⁶⁸ The Regional Conference of Plenipotentiaries on the Protection and Development of the Marine Environment and the Coastal Areas of Bahrain, I.R. Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates was convened in Kuwait from 15-23 April 1978. The Conference adopted on 23 April 1978 the Action Plan for the Protection and Development of the Marine Environment and the Coastal Areas, the Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, and the Protocol concerning Regional Co-operation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency).

²⁶⁹ Alheritiere, Dominique. "Settlement of public international disputes on shared resources: elements of a comparative study of international instruments." *Nat. Resources J.* 25 (1985): 701. And See Alhéritière, Dominique. "Marine pollution control regulation: regional approaches." *Marine Policy* 6.3 (1982): 162-174.

²⁷⁰ http://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm (last visited Dec. 30, 2015)

which results, or is likely to result, in deleterious effects. These effects could be harm to living resources and marine life; hazards to human health; hindrance to marine activities, including fishing and other legitimate uses of the sea; impairment of quality of sea water; and reduction of amenities.²⁷¹ This definition is one of the most common definitions of pollution of the marine environment.²⁷²

B. Definitions of Pollution of the Marine Environment Provided by Jurists:

Defining marine pollution is one of the main difficulties encountered when dealing with this kind of pollution. Consequently, jurists have not agreed on a common definition of pollution of the marine environment.²⁷³

Some jurists define pollution of the marine environment as “the introduction of any substance or energy by human to the marine environment, whether directly or indirectly, in a way that causes harmful effects on living organisms or threaten man’s health, hinder the marine activities such as fishing, or spoil the quality of water and reduce its advantages.”²⁷⁴ This definition has been widely endorsed and adopted. However, the definition suffers from deficiencies which become increasingly apparent as new technologies and processes emerge. For example, dredging the sea floor to extract sand or gravel falls outside of the “introduction ... of substances or energy,” but is still a cause of serious impairment.²⁷⁵

²⁷¹ Clause 4 of Article I of Convention of the Law of Sea, 1982

²⁷² Miles, Edward L., and William L. Burke. “Pressures on the United Nations Convention on the Law of the Sea of 1982 arising from new fisheries conflicts: the problem of straddling stocks.” *Ocean Development & International Law* 20.4 (1989): 343-357.

²⁷³ <http://www.startimes.com/?t=30804013> (last visited Dec. 30, 2015)

²⁷⁴ Dr. Mamdouh Shawky, Protection of the Mediterranean Environment in View of Barcelona Convention, 1976, Page 408

²⁷⁵ Thus, others define pollution of the marine environment as “any human activity that changes environment, marine life, plants, fisheries, and public health. It also includes any human activity that affects the marine utilities or prevents the development of coasts and beaches, the utilization of oil and gas resources and the excavation of marine

Some other jurists also define pollution of the marine environment as “the presence of any substance or energy in the marine environment, whether intentionally or unintentionally, whether directly or indirectly, in a way that harms the living and non-living resources or threaten human health, hinders the marine activities such as fishing and tourists activities, or spoils the quality of seawater or change the water properties.”²⁷⁶

Some jurists define pollution of the marine environment as “the presence of any harmful foreign substances arising from the human activities or the concentration of activity on marine utilization in a way that affects the current and the future uses of the sea.”²⁷⁷

By reviewing these definitions provided by jurists, we prefer define pollution of the marine environment as “the addition of a substance or energy by human, whether directly or indirectly, to the marine environment, including estuaries, in a way that has harmful effects. These effects can be on the living resources or man’s health; or on the marine activities, including fishing; or on the properties of the seawater, thereby reducing the uses of it.”²⁷⁸

C. Definition of Pollution of Marine Environment in Kuwait Law

Article (1) of the Law of Environment Protection defines "pollution of the marine environment" as the introduction by man, directly or indirectly, of substances or

resources in addition to any other activities such as the disposal of radioactive waste.” Dr. Ahmed Sa’ad, Probing the Rules of Liability in Environmental Issues, Dar Al-Nahda Al-Arabia, 1994, Page 85.

²⁷⁶ Dr. Adel Maher ◊.Alalfy, criminal protection of the environment, University publishing house , P. 137 (2009)

²⁷⁷ Dr. Mohamed Mustafa Younis, Protection of the Marine Environment under the International Law, Dar Al Nahda Al Arabia, 1996, Page 22

²⁷⁸ Miller, Jeffrey G., Ann Powers, and Nancy Long Elder. *Introduction to environmental law: cases and materials on water pollution control*. Environmental Law Institute, 2008.P. 2This definition was adopted by the Kuwaiti Environment Protection Act in article (1)

energy into the marine environment, including estuaries, which results in or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities including fishing and other legitimate uses of the sea, impairment of the quality for the use of sea water and the reduction of amenities. By adopting this definition, the Kuwaiti legislature expanded the definition of marine pollution to include all kinds of pollution that may cause harm to the marine environment. The Kuwaiti legislature succeeded in avoiding most criticisms raised against legal jurists during their effort to define the process of pollution of the marine environment.²⁷⁹

III. Kinds of Marine Pollution

Marine pollution can be categorized into several kinds. First, According to the characteristics of the pollution, which can be categorized in three categories: biological, physical, and chemical. Second, Based on its source, which can be natural or industrial. Third, Based on its effect, which can be average, hazardous, or destructive. Finally, When considering the geographical scope of pollution, which can be local, transnational, or cross-border.²⁸⁰

A. Kinds of Marine Pollution Based on Its Characteristics

Based on its characteristics, marine pollution can be categorized into three categories:

²⁷⁹ Article (1) of Kuwaiti Environment Protection Law

²⁸⁰ There are also different types of pollution of the environment in general. These kinds are categorized according to the kind of environment they afflict, the kind of the pollutant causing them, or the nature of the causes leading to them. Environment pollution also varies according to its source, and thus, pollution arises from geographical phenomena such as volcanoes and earthquakes. Furthermore, pollution arises from man's intervention in the environment, particularly throughout the Industrial Revolution, including car exhausts; factory wastes and radioactive materials; and industrial, household and petroleum wastes. Grassle, Judith P., and J. Frederick Grassle. "Sibling species in the marine pollution indicator *Capitella* (Polychaeta)." *Science* 192.4239 (1976): 567-569. And See Dr. Ahmed Abel Kareem Salama, Id, Page 75

1. Biological pollution:

Biological pollution is one of the oldest forms of pollution. It is caused by pollutants coming from living organisms, such as viruses and bacteria; if these exist in the marine environment, they can cause harm to man, plants, and animals.²⁸¹

2. Physical or radioactive pollution:

This kind of pollution of the marine environment involves various radioactive pollutants coming from nuclear reactors. The radioactive substances pose a big risk to man's life and existence. Radioactive pollution is one of the most dangerous kinds of pollution, since it cannot be seen, smelled, or felt. It also causes harm easily to living organisms. In such, radioactive pollution of the marine environment may arise from natural sources, such as the rays coming from space; or may emit from industrial sources, such as nuclear reactors.²⁸²

3. Chemical pollution:

Chemical pollution of the marine environment is one of the most threatening kinds of pollution due to the increased levels of chemicals currently and the variation of such chemicals. Some chemical substances may join together to form compounds that

²⁸¹This means the existence of living organisms, whether they can be seen with the naked eyes or not, in a place or a time or a quantity that harms man or animals or plants, or leads to the damage of facilities built by man. These can include pollens that spread from the flowers of some plants, such as the willow, in the spring season, which may cause allergies of the respiratory system; the viruses that spread in air and cause cold and flu; and the bacteria that cause diseases to man.²⁸¹ An example is the phenomenon happened in Kuwait in 1978, when rats and mice spread widely and extensively. Additionally, the number rats in Norway has increased dramatically, and this increase has been accompanied with an increase in the quantity of insects living on rats. Dr. Yousri Debas, Pollution of Marine Environment and Challenges to Survival, Page 19, Dr. Mona Qasem, Environment Pollution and Economic Development, 1993, Page 50

²⁸² This consists of physical pollutants that create an unfavourable change for the environments in which the living organisms exist, such as the radioactive pollution arising from the use of nuclear energy, explosions, and the catastrophes that happen in the places where work depends on the use of radioactive substances. This kind of pollution will undoubtedly have adverse effects on the coming generations. An example of its harmful effects was the catastrophe of the Chernobyl nuclear reactor in the former Soviet Union and radioactive substances include Gamma rays, which are more dangerous and have high capability to penetrate body tissues; and Alpha rays, which are less dangerous. Dr. Khaled Zaghloul, Id, Page 12, Dr. Hala Salah, Id, Page 31, Dr. Mahmoud Nasrallah, Protection of Air Environment from Pollution, 1990, Page 11

are more toxic and more dangerous to human health. What makes it worse is that the number of chemical pollutants resulting from modern civilization is estimated to be in the thousands, and the number of new chemical products is growing at a rate that exceeds the estimates reached by a number of studies focused on the risks of such products and their toxicity. Chemicals can be divided in two categories according to their solubility in water: soluble and non-soluble. The non-soluble chemicals, which may accumulate in living organisms in the marine environment, are more dangerous. Among the dangerous polluting chemical compounds are cadmium compounds, insecticides, mercury, and petroleum products.²⁸³

In Kuwait, chemical pollution is one of the most serious issues that the marine environment faces. It presents a threat to the health of man and marine creatures. Oil and natural gas are the main sources of pollution in the waters of the Arabian Gulf, which contains the largest oil reserves in the world. The Gulf States have witnessed much progress and development, which have worsened the pollution in the Arabian Gulf. The petrochemical and fertilizer industries and the urban development witnessed by the Gulf region have contributed to the increasing levels of pollution.²⁸⁴

The operations of excavating marine oil wells, the accidents that occur during the shipment at the oil ports, and the waste dumped by commercial ships and oil tankers

²⁸³This kind of pollution arises from the presence of chemical or organic substances—whether in solid, liquid or gaseous state in a place, time, quantity, or condition unsuitable for the environment in which they exist, such as insecticides of different types and the particles emitting from factories of cement and asbestos. This also includes liquid chemicals, which are added to soil or water, in addition to the waste of household activities. This type of pollution also includes the dust coming from the smoke of factories, oil refineries, fertilizers factories, and all other risks that threaten the population near industrial areas, such as Um Al Haiman, Fahaheel, Mina Abdullah, and Shuaiba. And These Conventions include London Convention, 1954, Brussels Convention, 1969, Dr. Ahmed Abdel Kareem Salama, Oil Pollution and Protection of Marine Environment, 1989, Page 74 and 75. And See Pearson,²⁸⁴http://www.beatona.net/CMS/index.php?option=com_content&view=article&id=496&Itemid=84&menuid=&lang=ar (last visited Jan. 3, 2016)

into the Gulf are among the most important sources of oil pollution in the State of Kuwait. The waste dumped by solid and liquid factories into the sea from time to time increases the level of pollution in the Gulf waters. Pollution is a growing issue especially with the urban and industrial expansion witnessed by the Gulf States in a way that threatens the future of the marine environment in the State of Kuwait, unless strict regulations are applied to combat such pollutants. Thus, the government and environmental organizations must take necessary actions to combat sources of pollution to create a healthy and clean environment.²⁸⁵

Therefore, Kuwaiti authorities should cooperate with environmental organizations to combat marine pollution reinforced through the following procedures:

- 1- Establish a Gulf regional center for research to fight pollution in a way that facilitates the exchange of information and data and the results of research in this regard.
- 2- Provide necessary equipment and qualification of technical cadres to face the danger of continued oil leaks into the Arabian Gulf's waters.
- 3- Obligate the factories not to dump their liquid or solid waste into the Gulf's waters and to establish plants for the treatment of such waste.
- 4- Establish and use plants to treat sewage waters.
- 5- Establish factories for recycling household waste and transform it into organic fertilizers and crude materials for many industries.²⁸⁶

²⁸⁵ T. H., and Rutger Rosenberg. "Macrobenthic succession in relation to organic enrichment and pollution of the marine environment." *Oceanogr. Mar. Biol. Ann. Rev* 16 (1978): 229-311.

²⁸⁶ <http://kuwaitallery.com/arabic/home/air.html> (last visited Jan. 3, 2016)

B. Kinds of Marine Pollution, Based on Its Source

Marine pollution can be categorized as natural pollution and industrial pollution.

1. Natural pollution:

The source of this kind of pollution is nature itself. This kind of pollution changes the natural characteristics of the marine environment and happens without human intervention. Pollutants of this kind include gases and dust thrown by volcanoes in the marine environment, affecting the ecological balance of this environment and threatening some of its natural components. This kind of pollution is not considered pollution from a legal perspective because human is not its source. Laws only addresses man and concentrate only on human actions. Therefore, some international conventions excluded from liability such cases in which the cause of pollution is out of man's control or comes from nature itself.²⁸⁷

2. Industrial pollution:

This pollution is caused by human intervention and its source is human different activities, as well as his use of modern life utilities, inventions, industrial wastes, and nuclear blasts, which affect, whether directly or indirectly, the marine environment.²⁸⁸

Areas located south of Kuwait suffer from this kind of pollution, because the majority of Kuwaiti factories are found there. One recent study found that pollution levels in air in Aum Al Hayman adjacent to the industrial Shuaiba industrial region are high. This region is filled with oil refineries and petrochemical factories. The government

²⁸⁷Dr. Farag El Hareesh, Crimes of Environment Pollution under Libyan Law, 1998, Page 55, Dr. Sahar Mustafa Hafez, Environment Protection, 1992, Page 48, Dr. Mohamed Abdel Qader Al Fiqi, Issues of Environment and How to Protect It from Pollution, Page 89

²⁸⁸Gloag, Daphne. "Is low-level lead pollution dangerous?." *BMJ* 281.6255 (1980): 1622-1625. And See Farag Hareesh, Id, Page 56, Dr. Ahmed Abdel Kareem, Law of Environment Protection, Page 75

therefore, was forced to move the residents of this region to safer places. The Environment Public Authority put into effect Article 10 of the Law of Environment Protection, pursuant to which many violating factories were shut down. However, the shutdown process was temporary, which reflects the weakness of the government's supervision and control in the issues relating to environment protection. The procedure failed to reduce the levels of pollution. The southern areas of Kuwait are still suffering from increasing levels of pollution, which may reach hazardous levels.²⁸⁹

C. Kinds of Marine Pollution, Based on Its Effects

The level of pollution that affects the marine environment undoubtedly differs based on the degree of danger such pollution causes to man's life. Each form of marine pollution does not necessarily cause danger to human health. Therefore, we can categorize three levels of marine pollution: average, dangerous, and very dangerous.

1. Limited pollution:

This is the lowest level of pollution and is not often accompanied by obvious threats the marine environment. Few areas across world environments are free from non-industrial sources of pollution. Seas have the capability to contain limited pollution. Self-purification of the sea is able to contain pollution, if it is limited. A level of pollution that is not dangerous is accepted in most countries of the world. However, some countries of the world apply penalties regarding this kind of pollution to ensure that it will not be increased.²⁹⁰

2. Dangerous pollution:

²⁸⁹ <http://annaharkw.com/annahar/ArticlePrint.aspx?id=209217> (last visited Jan. 3, 2016)

²⁹⁰ Dr. Ibrahim Ali Hasan, *Islam and Environment 2000*, Page 73, Id, Page 77

This kind of pollution represents the level in which pollutants exceed the safe limit and start to adversely affect the elements of natural or human environments in different forms, changing the harmony inherent inside the ecological systems and affecting ecological balance. This dangerous level of industrial pollution has appeared due to industrial developments and the huge amounts of wastes of various characteristics and sources in different ecological systems, especially in the marine environment, in a way that exceeds this environment's self-purification abilities. This level of pollution is widely spread in most industrial countries at the present time. Manifestations of such dangerous disasters in marine environments include the sinking or the burning of oil tankers and the spill of their loads in the seawater.²⁹¹ Examples are the Torrey Canyon oil spill on the southwest coast of the UK in the spring of 1967²⁹²; the Exxon Valdez oil spill in 1989;²⁹³ and the explosion of a French oil tanker near the Yemeni coasts in 2002,²⁹⁴ as over 50000 barrels of crude oil spilled and caused pollution in Hadhramaut Coast, killing marine creatures in the process. Despite the growing interest in fighting and containing pollution before it escalates, man does not yet seem to have learned the lesson and his actions in this regard do not seem to be on the level of responsibility. Pollution has even become deadly in some environments.²⁹⁵

On other hand, areas located south of Kuwait are suffering from increasing levels of pollution, because most factories located in such areas violate the terms and

²⁹¹ Vrijhof, H. "Organotin compounds and international treaties on the pollution of water by dangerous substances: black or grey list substances?." *Science of the total environment* 43.3 (1985): 221-231.

²⁹² http://en.wikipedia.org/wiki/SS_Torrey_Canyon (last visited Jan. 4, 2016)

²⁹³ Piatt, John F., et al. "Immediate impact of the Exxon Valdez oil spill on marine birds." *The Auk* (1990): 387-397.

²⁹⁴ Sinai, Joshua. "Future trends in worldwide maritime terrorism." *The Quarterly Journal* 3.1 (2004): 49.

²⁹⁵ Dr. Abdel Wahed Mohamed El Far, International Crimes and Authority of Penalizing, P. 388, Dr. Zine El Abiddine Abdel Maqsood, Man and Environment, Disasters of Arabian Gulf Pollution during Kuwait Liberation War, P. 112

conditions of environment safety, and the state authorities fail to do their jobs regarding reducing the levels of pollution. This eventually affects the health of the residents who live in these areas.²⁹⁶

3. Destructive or very dangerous pollution:

In this kind of pollution, pollutants exceed the dangerous limit to reach a destructive or deadly level. Here in lies the disaster, since the ecological system becomes no longer able to thrive, largely due to imbalance. In fact, the signs of this level of pollution, although not widely spread, are looming in some regions; and this can be considered as a warning of the consequences of carelessness or laxity in fighting this kind of pollution.²⁹⁷ Pollution that happened in Lake Erie is one example of this kind of pollution. Industrial cities in the United States once dumped their wastes into this lake, wrongly believing that the lake waters had the capability of self-purification. However, accumulating wastes caused a deficiency in the ecological system of the lake due to a shortage of oxygen. Thus, the lake could not sustain life. The lake also lost life features due to this kind of destructive pollution. The Chernobyl nuclear reactor in the former Soviet Union is another example of this kind of pollution.²⁹⁸

D. Kinds of Pollution, Based on Geographical Scope

Based on its geographical scope, a marine environment can be categorized as follows:

1. Internal pollution.

²⁹⁶ Id, P. 119

²⁹⁷ Vrijhof, H. "Organotin compounds and international treaties on the pollution of water by dangerous substances: black or grey list substances?." *Science of the total environment* 43.3 (1985): 221-231.

²⁹⁸ Nriagu, J. O., et al. "Sedimentary record of heavy metal pollution in Lake Erie." *Geochimica et Cosmochimica Acta* 43.2 (1979): 247-258. http://en.wikipedia.org/wiki/Chernobyl_disaster (last visited Jan. 4, 2016)

The effect of this kind of pollution does not go beyond the marine space of its source. This kind of pollution is also limited, based on its source or effect to a certain area of the marine environment. It can be easily dealt with if the necessary tools for this are available.²⁹⁹

2. Transboundary pollution.

This kind of pollution arises inside a province of a country or under a country's control. It causes harm to other areas of the marine environment outside the territorial sovereignty of this country, such as overseas regions. Pollution in such cases does not cross the borders of another country but stretches to reach areas that are not under the territorial sovereignty of a country, according to the regulations of the international common law.³⁰⁰

The geographical characteristics of the Arabian Gulf help to increase marine environment pollution across borders. Most marine borders of the Gulf States overlap. Thus, any polluting incident that takes place in one Gulf state affects another. Therefore, all Gulf States are required to enhance their cooperation in protecting the marine environment. The issue of pollution also has international dimensions. Consequently, the governments of the states overlooking the Arabian Gulf should cooperate with the regional and international environmental organizations to fight sources of pollution and to prevent cross-border pollution. This can be achieved by establishing a Gulf regional center to combat pollution in a way that facilitates the

²⁹⁹ SUN, Ya-min, Man-ling DONG, and Jia-quan WANG. "Effects of internal pollution sources on the eutrophic lake and countermeasures [J]." *JOURNAL OF HEFEI UNIVERSITY OF TECHNOLOGY (NATURAL SCIENCE)* 2 (2000): 012. Dr. Nabila Abdel Haleem, Id, Page 255

³⁰⁰ Merrill, Thomas W. "Golden rules for transboundary pollution." *Duke Law Journal* (1997): 931-1019. Dr. Abdel Aziz Mekheimer Abdel Hadi, Role of International Organizations in Environment Protection, Dar Al Nahda Al Arabia, 1986, Page 29

exchange of information and data and the results of the research relating to combating pollution.³⁰¹

E. Kinds of pollution of the marine environment in Kuwait Law

The Kuwaiti Law of Environment Protection issued in 2014 did not clarify the kinds and levels of marine environment. The Legislature states in Article (1) of the Law that environment pollution generally includes "all human and natural activities in amounts that contribute to the presence of substances and pollutants that may lead, whether directly or indirectly, to the deterioration of the environmental system." However, the Legislature failed to determine such amounts. This is illogical, because it is not reasonable to accuse someone or an entity of polluting the environment without determining the amount or level of pollution that cannot be allowed.

F. Causes of Pollution of Marine Environment

The causes of pollution of the marine environment can be categorized as intentional voluntary actions and non-voluntary actions arising from unintentional incidents. This can be explained, as follows:

1. Pollution of the Marine Environment through Voluntary (intentional)

Actions

These actions mean every intentional disposal of hazardous substances and harmful wastes into the sea, such as the ship captain's disposal of harmful substances in small amounts from his ship into the sea. However, in the framework of familiar

³⁰¹https://ar.wikipedia.org/wiki/%D8%A7%D9%84%D9%86%D8%B2%D8%A7%D8%B9%D8%A7%D8%AA_%D8%A7%D9%84%D8%A5%D9%82%D9%84%D9%8A%D9%85%D9%8A%D8%A9_%D9%81%D9%8A_%D8%A7%D9%84%D8%AE%D9%84%D9%8A%D8%AC_%D8%A7%D9%84%D8%B9%D8%B1%D8%A8%D9%8A (last visited Jan. 4, 2016)

operational operations of ships to dispose the sewage waters or the balance waters; or cleaning the ship from wastes of some cargoes, such as living animals, compliance with instructions given by the arrival ports authorities and before entering the port or getting ready for the operations of the following cargo after the unloading of the transported cargo or the disposal of the waste of shipping and unloading wastes, especially for the goods that contain harmful substances.³⁰²

The disposal of wastes is undoubtedly considered to be one of the intentional voluntary actions taken by the ship's captain, the navy's aircrafts, docks, and the structures built inside the sea. The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 stressed this point, since it included in its first addendum a table of substances considered among these wastes.³⁰³ This also includes the pollution expected from facilities or structures constructed at seas for oil exploration, natural gas excavation, and electricity generation, whether these structures are fixed at the seabed or floating on the surface. Therefore, the United Nations Convention on the Law of the Sea (1982) authorized coastal states to establish facilities in internal waters away from the shore, along with taking necessary measures to reduce pollution in the continental shelf and the exclusive economic zone.³⁰⁴

The United Nations Convention on the Law of the Sea (1982) also addressed the pollution arising from Seabed Mining. International systems specializing in sea depths

³⁰² Another way to load a cargo is called 'Load on Top' (LOT). Here, oil is kept on the vessel through a process of isolating oil from water mixed with oil. In tankers equipped with LOT systems, basins are cleaned after the unloading of the oil cargo and the mixture coming from the cleaning process is collected in a basin prepared for wastes called Slop Tank. This is so that the cargo basins are kept clean, and thus, can be filled with seawater without being polluted with oil. S.Z. Pritchard: Load on Top – From the Sublime to the Absurd, J. M. L. and C. Vol. 9, 1978, P. 185.

³⁰³ First Addendum of the International Convention for Prevention of Marine Pollution by Dumping Waste, 1972

³⁰⁴ Article 244 of Convention of Sea Law, 1982

have drawn attention to the circulation of regulations and instructions concerning the side effects of mineral extraction from the seabed and the ocean bottom. These international systems have obligated the states to issue laws and standards that control the seabed activities and comply with the international standards and measures applicable in this regard.³⁰⁵

The United Nations Convention on the Law of the Sea(1982) obligates the states that ratified it to control pollution of the marine environment by taking appropriate measures that contain international and regional regulations and immediate measures, and procedures that help prevent and reduce the marine pollution arising from the disposal of wastes.³⁰⁶

On the other hand, the Law of Environment Public Authority of Kuwait defines hazardous substances that cause harm to the environment, in general, and the marine environment, in particular, as “the substances that have hazardous properties that cause harm to man’s health or adversely affect the environment, including contagious, poisonous, inflammable or explosive substances, or such substances which emit visible radiation.”³⁰⁷ Moreover, this law also explains the ways through which the marine environment is polluted. These ways include dumping, which is defined as any leakage or spillover or unloading of any kind of colored substances, or the disposal of these substances, in the territorial waters, the exclusive economic zone, the sea, the River Nile, or the waterways, taking in consideration the specific levels of some substances in

³⁰⁵ Id., Article 250. DeMestral, A. L. C. "Prevention of Pollution of the Marine Environment Arising from Offshore Mining and Drilling, The." *Harv. Int'l. LJ* 20 (1979): 469.

³⁰⁶ Id., Article 252. Charney, Jonathan I. "Marine Environment and the 1982 United Nations Conventions on the Law of the Sea, The." *Int'l L.*. Vol. 28. 1994.

³⁰⁷ Clause (7) of Article I, of the Law establishing the Environment Public Authority

an executive bylaw. For these purposes, dumping is every intentional disposal of pollutants and wastes from ships, aircrafts, docks, or any other facilities and ground sources, into the territorial waters, the exclusive economic zone or the sea.³⁰⁸

The Gulf's ecosystem was not spared in the least during the Gulf War. An estimated 350 million barrels of crude oil were intentionally released into the Arabian Gulf in 1991. More than 800 miles of Kuwaiti and Saudi Arabian beaches were contaminated by oil, and marine wildlife was devastated. In 1991, during the last Gulf War, Saddam Hussein's regime set alight more than 700 of Kuwait's oil wells. Environmentalists say that these fires caused an environmental disaster that devastated the region's deserts, mangrove swamps and fisheries.

The Nowruz oilfield, in the Gulf was the site of several oil spills in 1983. One spill was initially caused by a tanker hitting a platform. In March 1983, the platform was attacked by Iraqi helicopters and the spill caught fire. The Iran–Iraq War prevented technicians from capping the well until 18 September 1983. A separate spill occurred when Iraqi helicopters attacked a nearby platform in March 1983. The well was capped in May 1985. Approximately 733,000 barrels (100,000 tones) of oil spilled because of this incident. Overall, 80 million gallons (about 260,000 tones) of oil were spilled. Because of its closeness to the Nowruz oilfield, Kuwait was the country most affected by this crisis.

2. Pollution of the Marine Environment through Non-Voluntary Actions

Arising from (Non-intentional) Incidents

³⁰⁸ Clause (8), Id

Pollution of the marine environment arising from non-intentional incidents is one of the most common causes of pollution that afflicts the marine environment. International organizations concerned with protecting the marine environment have taken actions since the Torrey Canyon oil spill on the southwest coast of the UK in the spring of 1967.³⁰⁹

In March 1979, Amoco Cadiz, a very large crude carrier (VLCC) under the Liberian flag of convenience owned by Amoco, ran aground at Ports all Rocks, 5 km (3 mi) from the coast of Brittany, France, on 16 March 1978. Ultimately, the ship split in three and sank, resulting in the largest oil spill of its kind in history to that date—223,000 of oil (10,000 tons of Gulf light oil and 23,000 tons of Iranian crude oil). The expenses incurred for dealing with this crisis amounted to one billion US dollars.³¹⁰

The Exxon Valdez oil spill occurred in Prince William Sound, Alaska, on March 24, 1989, when Exxon Valdez, an oil tanker bound for Long Beach, California, struck Prince William Sound's Bligh Reef and spilled 260,000 to 750,000 barrels of crude oil over the next few days. It is considered to be one of the most devastating human-caused environmental disasters of modern times.³¹¹

The Greek oil tanker, Atlantic Empress, was caught in a tropical storm off the coast of Trinidad and Tobago when it collided with the Aegean Captain. The damaged ship started leaking oil and continued to do so into the ocean while it was towed. The oil tanker finally sank into deep water on 3 August, 1979, where the remaining cargo solidified.

³⁰⁹ http://en.wikipedia.org/wiki/SS_Torrey_Canyon (last visited Jan. 4, 2016)

³¹⁰ Id, P. 240.

³¹¹ https://en.wikipedia.org/wiki/Exxon_Valdez_oil_spill (last visited Jan. 4, 2016)

G. Sources of Marine Pollution

There are five types of marine pollution sources:³¹² 1) The most notorious type of these sources is vessel-source pollution, which is related to many disasters, such as, the Torrey Canyon,³¹³ the Amoco Cadiz³¹⁴ and the Exxon Valdez³¹⁵. Vessel-source pollution constitutes about five percent of all marine pollution. 2) Ocean dumping means transporting land-generated wastes by ships or aircraft and disposing them into the marine environment. 3) Land-generated waste includes dredged material, industrial waste, sludge from waste-water treatment plants, and radioactive waste. The main threat to the environment in developing states arises from domestic waste, while in developed states the primary threat comes from industrial waste in the form of effluent. 4) Land-generated emissions carried from and through the atmosphere is a type of pollution that is often associated with land-based pollution. 5) Exploration for and production of offshore natural gas or oil is frequently associated with pollution from the exploitation of the continental shelf, a type of pollution resulting from platform-based or rig-generated works.

The main concern now is that many potential risks to the marine environment are unknown. These risks may include the adverse effect that deep-sea operations will have on benthic organisms, the scarring and scraping of the ocean-bed, and the effect of operations on fish stocks.³¹⁶

³¹² The term "source" is used predominantly in this article. It denotes both actual sources of harmful substances, as well as human activities which result in degradation of the marine environment; see Daud Hassan Protecting the Marine Environment from Land-Based Sources of Pollution: Towards Effective International Cooperation (Ashgate, Aldershot, 2006) at 15.

³¹³ https://en.wikipedia.org/wiki/Torrey_Canyon_oil_spill (last visited Jan. 5, 2016)

³¹⁴ https://en.wikipedia.org/wiki/Amoco_Cadiz (last visited Jan. 5, 2016)

³¹⁵ https://en.wikipedia.org/wiki/Exxon_Valdez (last visited Jan. 5, 2016)

³¹⁶ Abu-Hilal, Ahmad H., and Mohammad M. Badran. "Effect of pollution sources on metal concentration in sediment cores from the Gulf of Aqaba (Red Sea)." *Marine Pollution Bulletin* 21.4 (1990): 190-197.

1. Land-based Sources

Pollution from land-based sources is the largest component of pollution of the marine environment. This kind of pollution has only recently become a concern for the international community, and regulation is predominantly based on a soft law approach. This is in part due to the complicated character of the problem with a multitude of contaminants and factors influencing pollution. This is an issue for developing and developed states alike, which in turn must take all measures available to them to address this serious issue.

One significant instrument offering guidance to states is the International Programme of Action for the Protection of the Marine Environment from Land based Activities. The main goal of this programme is to regulate national activities with regard to marine pollution from land-based sources. Its implementation in different countries offers valuable insights into the success and challenges on an international level of protecting the marine environment from pollution by land based sources.³¹⁷

However, the United Nations Convention on the Law of the Sea does not define land-based sources; however, the Montreal Guidelines³¹⁸ offer a useful definition especially in the following paragraphs:

1(b)(i) is relevant, which deals with land-based sources as opposed to offshore sources under national jurisdiction:³¹⁹

(b) “Land-based sources” means:

(i) Municipal, industrial or agricultural sources, both fixed and mobile,

³¹⁷ Daud Hassan *Protecting the Marine Environment from Land-Based Sources of Pollution: Towards Effective International Cooperation* (Ashgate, Aldershot, 2006) at 15.

³¹⁸ <http://web.pnuma.org/gobernanza/cd/Biblioteca/Derecho%20ambiental/28%20UNEPEnv-LawGuide&PrincN07.pdf> (last visited Jan. 5, 2016)

³¹⁹ At 16; Montreal Guidelines, above n 65, at 1.(b)(i).

on land, discharges from which reach the marine environment, in particular:

a. From the coast, including from outfalls discharging directly into the marine environment and through run-off;

b. Through rivers, canals [or] other watercourses, including underground watercourses; and

c. Via the atmosphere:

(ii) Sources of marine pollution from activities conducted on offshore fixed or mobile facilities within the limits of a national jurisdiction, save to the extent that these sources are governed by appropriate international agreements.³²⁰

Land-based sources are the main cause of pollution in the State of Kuwait. Most private and public facilities discharge their sewage and waste into the sea directly and without any kind of treatment.

The crisis of the Mishref sewage treatment station is a good example of this. The crisis exposed the authorities' failure to protect the marine environment from pollution. The crisis also revealed that the public facilities in the State of Kuwait play the main role polluting the marine environment. The Mishref crisis, which took place in August 2009, was the result of gross negligence on the part of the company that was running the station, which led to the leakage of water into the equipment chamber and the electrical panels. As a result, the station suffered a complete power outage, and all

³²⁰However, there is no difficulty with determining the rights and duties of a state concerning the land-based sources of marine pollution. Each state has the jurisdiction to legislate and enforce its laws and regulations to protect the sea from pollution in its inland territory. The UN Convention on the Law of the Sea deals with the respective territorial jurisdiction of states. See, Kwiatkowska, Barbara. "Marine pollution from land-based sources: Current problems and prospects." (1984): 315-335.

of the station tanks exploded. This disaster is the second biggest environmental disaster in the State of Kuwait after the wartime burning of the oil wells.

What is most strange about this disaster is that no entity was punished for this crisis. The only consequence was that the Kuwaiti authorities excluded the company involved in the disaster from any contracts with any government agencies in the future.

2. Pollution Resulting from Seabed Activities within the National

Jurisdiction

The national jurisdiction of states to enact and implement their laws was recognized and codified³²¹, because the exploration and exploitation of the seabed and its subsoil within national jurisdiction takes place on the continental shelf or within the seabed of the territorial sea or the internal waters.³²² However, it was necessary to ensure that minimum international standards for the safety of operations were implemented. It was recognized that states have the duty to make and implement laws and rules "as effective as" the international rules and standards regarding the exploration and exploitation of the seabed within a national jurisdiction. In other words, every state has the right to use its own means and technologies to explore and exploit the seabed and its subsoil within its own national jurisdiction on condition that these means and technologies meet an internationally recognized minimum safety level.³²³

2. Pollution Resulting from Seabed Activities in the International Area

Beyond the Limits of the National Jurisdiction

³²¹ Convention on the Continental Shelf, Apr. 29, 1958, 15 U.S.T. 471. T.I.A.S. No. 578- 499 U.N.T.S. 311.

³²² Dubais, Bernard A. "Compensation for Oil Pollution Damage Resulting from Exploration and Exploitation of Hydrocarbons in the Seabed." *J. Mar. L. & Com.* 6 (1974): 549.

³²³ Daoji, Li, and Dag Daler. "Ocean pollution from land-based sources: East China Sea, China." *AMBIO: A Journal of the Human Environment* 33.1 (2004): 107-113.

The UN Convention on the Law of the Sea (LOS) did not find it a legal issue to determine the scope of the jurisdiction of states regarding the protection and preservation of the marine environment from exploration and exploitation activities in the seabed beyond the limits of national jurisdiction.³²⁴

However, the LOS Convention achieved an international recognition that, despite the existence of their sovereign rights over the continental shelf, states have the duty to make and implement laws and rules "as effective as" the international rules and standards concerning the exploration and exploitation of the seabed within their national jurisdiction. This recognition means that states have the right to use their own means and technologies to explore and exploit the seabed and its subsoil within their respective national jurisdictions, provided that such means and technologies reach an internationally recognized minimum safety level. The effectiveness of this achievement depends mainly on the ability of governments to create technical rules and standards which will be binding upon states directly or indirectly.³²⁵

On the other hand, some of the LOS Convention articles concerning this source of pollution are good examples of restatements of existing international law as embodied in the 1958 Geneva Convention on the Continental Shelf;³²⁶ others represent the development of new rules of international law that will be governed by the principle

³²⁴ Kimball, Lee A. "The international legal regime of the high seas and the seabed beyond the limits of national jurisdiction and options for cooperation for the establishment of marine protected areas (MPAs) in marine areas beyond the limits of national jurisdiction." *Secretariat of the Convention on Biological Diversity, Montreal, Technical Series*. No. 19. 2005.

³²⁵ Dottinga, Harm, et al. *Regulatory and governance gaps in the international regime for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction*. Gland., Switzerland: IUCN, 2008.

³²⁶ Convention on the Continental Shelf, Apr. 29, 1958, 15 U.S.T. 471. T.I.A.S. No. 5.-,78. 499 U.N.T.S. 311. And See Krueger, Robert B. "International and national regulation of pollution from offshore oil production." *San Diego L. Rev.* 7 (1970): 541.³²⁶ Convention on the Prevention of Marine Pollution by Dumping, Dec. 29. 1972, 26 U.S.T. 2403. T.I.A.S. No. 8165.

resinter alios acta, until those rules become so generally accepted that they may be considered customary international law.

4. Pollution by Dumping

The UN Convention on the Law of the Seabed dealt with "dumping" as a separate source of pollution, although all substances to be dumped necessarily come from other sources of marine pollution. The Conference dealt with this matter on the same basis as the already existing London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matters.³²⁷ Thus, it was not difficult to codify the already existing jurisdiction of flag states or states or registry of aircraft, because the references to dumping in both the London Convention and the UN Convention on the Law of the Sea applied exclusively to pollution that comes only from ships, airplanes, or platforms and other structures.

However, this raised a question. How will coastal states having large continental shelves extending beyond the Exclusive Economic Zone behave? This was a matter of much debate. Some delegations refused specific national jurisdiction over the water column beyond the Exclusive Economic Zone. An agreement was finally reached that even those having large continental shelves have jurisdiction to control dumping within their territorial sea or Exclusive Economic Zone or onto their continental shelves.³²⁸

The Exclusive Economic Zone and the jurisdiction over the continental shelf were widely accepted, which means that there already exists a customary international law recognizing the right of coastal states to control pollution within their national

³²⁷ Convention on the Prevention of Marine Pollution by Dumping, Dec. 29, 1972, 26 U.S.T. .2403. T.I.A.S. No. 8165.

³²⁸ Nauke, Manfred K. "Obligations of contracting parties to the London Dumping Convention." *Oceanic processes in marine pollution*. 1989.

jurisdiction. However, because this rule is general, it is impossible to determine the scope of the rights of coastal states that are not parties to treaties dealing with these issues.³²⁹

It is important to consider that the London Dumping Convention does not establish areas of maritime national jurisdiction to control dumping. In addition, coastal states that are not parties to the UN Convention on the Law of Sea will have to wait until there is clear customary international law that recognizes the right of the coastal states to control dumping within the Exclusive Economic Zone or continental shelf.³³⁰ Of course, national regulations to control dumping beyond the territorial sea will be valid internally, but such national legislation will not be binding upon all other states.

5. Pollution from or through the Atmosphere

Pollution from or through the atmosphere is a major environmental problem. The LOS Convention deemed it an independent source of marine pollution due to a misunderstanding, since the atmosphere is a vehicle not a source of pollution.³³¹ Hopefully, that misunderstanding will not adversely affect the UN Convention on the Law of the Sea. The absurd inclusion of the atmosphere as a source of marine pollution could not be avoided, because the tremendous impact of pollution carried through the atmosphere forced several delegations to include something about it in the UN Convention on the Law of the Sea.³³²

6. Pollution from Ships

³²⁹ Convention on the Prevention of Marine Pollution by Dumping, *supra* note 3.

³³⁰ Convention, *supra* note 1, art. 216.

³³¹ Daoji, Li, and Dag Daler. "Ocean pollution through the atmosphere: East China Sea, China." *AMBIO: A Journal of the Human Environment* 33.1 (2004): P.120.

³³² Knapp, Edward M., and Stephen J. Nesbitt. "System to prevent pollution of atmosphere." U.S. Patent No. 3,948,224. 6 Apr. 1976.

Pollution from ships is a real issue, because it is a source that moves from one jurisdiction to another or to the high seas. Therefore, it is governed by changing legal systems. During the discussion of this problem, governments agreed to replace traditional divisions between groups of states, such as east and west or north and south by a new division between flag states, which have mainly shipping interests, and coastal states, which have either strong environmentalist groups at home or powerful fishing interests.³³³

At the preparatory stages of the LOS Convention, many developing states that had already approved claims over 200 miles of national jurisdiction had a natural reaction which is based on the following rationale:

- a) Coastal states have exclusive jurisdiction over the exploitation of natural resources within 200 miles of their coasts.
- b) Their livelihoods are adversely affected by ships polluting that area.
- c) Jurisdiction to enact and enforce national laws and regulations applicable to foreign vessels suits coastal states.

Thereafter, these states understood that such jurisdiction was not suitable, because industrialized states could impose very strict standards for all vessels navigating their large areas of national jurisdiction. Some states that had territorial seas of 200 miles had inconsistent positions, because they insisted on the right to exercise

³³³ Juda, Lawrence. "IMCO and the Regulation of Ocean Pollution from Ships." *International and Comparative Law Quarterly* 26.03 (1977): 558-584.

sovereignty over a territorial sea of 200 miles and at the same time denied the right of states to enact and enforce their laws in areas under their sovereignty.³³⁴

Some Latin American states adopted the Declaration of Santo Domingo, which recognized a patrimonial sea, which meant the waters adjacent to a country over which it claims jurisdiction. However, for diplomatic and political reasons, this new marine space was later changed to "exclusive economic zone" to gain the support not only of other states in Latin America but of countries with similar economic interests in Africa and Asia and eventually obtain the acceptance of the international legal community.³³⁵ All governments reached an agreement that such protection from ships required uniform international rules and standards established by the Intergovernmental Maritime Consultative Organization.

Nevertheless, many delegations still refused to abandon the assertion of their jurisdiction to control irresponsible foreign ships within an area, which, for many states, coincides with the Exclusive Economic Zone. Creating a system of port-state jurisdiction was intended to control the behavior of ships through the recognition of the jurisdiction of the port-state to penalize a discharge violation wherever the violation occurred. Through such system, coastal states might obtain the cooperation of one of the next ports of call to enforce international rules and standards by imposing penalties for discharge violations. The goal was to create a legal framework that connects all of

³³⁴ Keselj, Tatjana. "Port State jurisdiction in respect of pollution from ships: the 1982 United Nations convention on the law of the sea and the memoranda of understanding." *Ocean Development & International Law* 30.2 (1999): 127-160.

³³⁵ Declaration of Santo Domingo, June 9, 1972, 11 I.L.M. 892.

the ports of the world through a universal jurisdiction impossible to avoid. Both flag and coastal states favored this new concept.³³⁶

This new universal jurisdiction, known as "port-state jurisdiction", was one of the most obvious examples of the enactment of new rules of international law. This new institution cannot be customary international law. It will take many decades before the port-state jurisdiction is accepted through customary international law. It is supposed that only through ratification of the UN Convention on the Law of the Sea will states enjoy the rights and abide by the obligations stated in Part XII of the convention dealing with pollution from ships. The right of states to have supplementary legislative powers was backed by coastal states, which also supported the right to enforce international rules and standards adopted by the relevant international organization in case such rules and standards fail to control pollution because of the nature of the region or the heaviness of the maritime traffic. That right was rejected by Flag states.³³⁷

The Third United Nations Conference tried to negotiate the extreme positions of the flag and coastal states mentioned above. Thus this Conference moved steadily towards a reasonable compromise as follows:

- a) The universal jurisdiction of port states to penalize noncompliance with international rules and standards regarding discharge of waste.
- b) Ships should comply only with the national laws and regulations of the flag states and with the international and standards applicable.

³³⁶ Boyle, Alan E. "Marine pollution under the Law of the Sea Convention." *American Journal of International Law* (1985): 347-372.

³³⁷ Part XII of the LOS Convention . Nordquist, Myron, and Satya N. Nandan, eds. *United Nations Convention on the Law of the Sea 1982, Volume VII: A Commentary*. Vol. 7. Martinus Nijhoff Publishers, 2011.

c) Coastal states will enjoy the right to implement international rules and standards applicable to foreign ships only within their Exclusive Economic Zones.³³⁸

This scheme was accepted on condition that the coastal states' right to implement international rules and standards should be limited to serious cases affecting their Exclusive Economic Zone or their relevant interests. It was also necessary to negotiate carefully safeguards to prevent abuse by coastal states. The Conference on the Law of the Sea reached a balanced resolution which acknowledges certain rights of coastal states to protect the zones under their jurisdiction and ensures at the same time the universal and uniform characteristics of environmental rules and standards applicable to all ships. The Convention also prevents unilateral actions that could be taken by coastal states.³³⁹

H. Sources of pollution of the marine environment in Kuwait

Unlike the old Law of Environment Protection, which failed to clarify the sources of pollution of the marine environment, the recent Law of Environment Protection sheds light on the sources that may cause pollution to the environment in general. Article (1) of the Law of Environment Protection issued in 2014 states that it is the law for regulations of pollutants, substances, or energy discharged, released or emitted into the sea, the air, or the soil. The law was clear enough regarding what is meant by discharge, deeming it any leakage, spillover, emission, or release, whether

³³⁸ Attard, David Joseph. *The exclusive economic zone in international law*. Oxford: Clarendon press, 1987.

³³⁹ Smith, Robert W. *Exclusive Economic Zone Claims: An Analysis and Primary Documents*. Martinus Nijhoff Publishers, 1986.

intentional or unintentional, of any kind of solid, liquid, or gaseous pollutants or any form of energy into the environment (whether water, air, or soil.)³⁴⁰

Regarding the sources, the Law of Environment Protection prohibits all industrial, commercial, touristic, or residential facilities or institutions from discharging any substances, waste, or liquids that may pollute the Kuwaiti territorial waters whether directly or indirectly. The law obligates the oil facilities operating so as to affect the sea not to discharge waste that may result in any kind of pollution in ports. Regarding the equipment required for prevention and treatment of pollution waste, the law obligates all ships, of whatever nationality, to have equipment and systems that help prevent pollution and treat waste.³⁴¹

However, Article 1 fails to state that the government or public facilities are also prohibited from discharging their waste. It seems as if the Kuwaiti Legislature, when formulating the Law of Environment Protection, did not realize that the government or public facilities can cause pollution as well. It also seems that the Legislature did not wish to sue the government or public facilities for polluting the marine environment, because these facilities enjoy criminal judicial immunity. The Legislature failed to realize that the government or public facilities cause the most pollution compared with other facilities. This is what happened during the crisis of the Mishref sewage treatment

³⁴⁰ Article (1) of the Law of Environment Protection.

³⁴¹ Unlike Egyptian law, Kuwaiti law does not specifically determine the sources of marine pollution. Instead, it only sets a general provision for the sources of marine pollution under Article I, Clause 8 of the law establishing the Environment Public Authority. This law states that the sources of environmental pollution are “any liquid, solid, gaseous substance, fumes, vapors, or microorganisms such as bacteria, viruses, scents, noises, radiation, heat, glow, or vibrations produced by man’s actions and leading, whether directly or indirectly, to environmental pollution or to a deficiency in the ecological balance.” Egyptian law specifically determines the sources of marine pollution under Clause 14 of Article I of Law no. 4 (1994), which states that pollutants of the marine environment are “any substances, the disposal of which into the marine environment, whether voluntarily or involuntarily, changes the properties of this environment or contribute, whether directly or indirectly, to this change, in a way that causes harm to man, the natural resources, or the marine waters; or causes harm to the coastal areas; or overlap with other lawful uses of the sea.

station. The authorities discharged sewage water, which was supposed to be treated at the station. The discharge process continued for months until the station was fixed.

The Law of Environment Protection also prohibits Kuwaiti and foreign oil companies licensed to carry out activities of exploration, extraction, or refining of oil in marine fields from discharging their waste into the sea whether directly or indirectly.

Despite the persistent attempts made by the majority of Kuwaiti national organizations to protect the marine environment aiming to draw the attention of the Kuwaiti authorities to the sources of environmental pollution in general and marine pollution in particular, the Kuwaiti environment still suffers many sources of pollution due to the laxity on the part of the environment departments responsible for environmental protection. These sources can be categorized into three main kinds:

1. Oil pollution

The Arabian Gulf is located in Southwest Asia. It is an extension of the Indian Ocean located between Iran and the Arabian Peninsula. This inland sea of some 251,000 km² is connected to the Gulf of Oman in the east by the Strait of Hormuz. Its western end is marked by the major river delta of the Shatt al-Arab, which includes the waters of the Euphrates and Tigris rivers. The Gulf is 989 kilometers long, with Iran occupying most of the northern coast and Saudi Arabia most of the southern coast. The Gulf is about 56 kilometers wide at its narrowest in the Strait of Hormuz. The waters are overall very shallow, with a maximum depth of 90 meters and an average depth of 50 meters. The Gulf is rich with abundant fishing grounds, extensive coral reefs, and

abundant pearl oysters, but its ecology has come under pressure from industrialization and construction.³⁴²

The Gulf and its coastal areas are the world's largest single source of crude oil, and related industries dominate the region. According to 1998-1999 estimates, the oil production of the Gulf amounted to approximately 40% of global oil production. There are 60 oil refineries, including the Saudi Ras Tanura refinery, the largest oil refinery in the world, and the Abdan refinery in Iran. Other industries are also based in the region. There are eleven cement factories, eight fertilizer laboratories, 26 water desalination laboratories, energy laboratories, and steel, aluminum and copper factories. There are also about 26 oil loading docks. 20 to 30 oil tankers enter the Hormuz Strait on a daily basis. It is estimated that one oil tanker crosses the Hormuz Strait every 6 minutes during rush hours.

The Gulf region was afflicted by many crises during the war between Iraq and Iran, which continued for eight years (1980-1988) and was followed by the 1991 War between Iraq and Kuwait. These caused higher levels of pollution compared with any similar region in the world. Therefore, the oil industry is considered one of the main sources of pollution of the marine environment in Kuwait.³⁴³

2. Industrial pollution:

³⁴² https://en.wikipedia.org/wiki/Arabian_Gulf (last visited Jan. 7, 2016)

³⁴³ The Arabian Gulf has witnessed many intentional and unintentional oil incidents: 1. Unintentional pollution includes the oil tankers accidents and oil pipes explosion. These include the accident of the Greek oil tanker Botienna near Dubai; the accident of the oil tanker Cherry Diack tanker accident west of the island of Das in the UAE; the explosion in one of the Saudi marine oilfields in November 1981 which flowed about 80 thousand barrels and formed an oil slick of 95 Km length that reached the Qatari and Bahraini shores; and the accident of the explosion of oil pipes in Ahmadi, Kuwait, 1982. 2. Intentional pollution includes the oil accidents arising from wars in addition to the discharge of the balance water. Examples of this kind of pollution are oil leakage from marine Nowruz oilfield in 1983; oil leakage from Ahmadi oilfields due to 1991 War, which caused a tremendous environmental damage that affected the southern shores of Kuwait and the Saudi coast comprising important ecologies such as coral reefs, birds, and fish resources.

Industrial pollution is the second main source of pollution of the marine environment in Kuwait following oil pollution. It results from the waste and water discharged by factories, facilities and companies. This waste constitutes 30% of the total pollutants of the Kuwaiti marine environment. Urbanization that took place during the period following the Iraqi Invasion expanded the industrial activities and businesses in Kuwait. This led to an increase in the number of factories. However, this rapid industrial development caused an increase in the pollution levels of the marine environment. The majority of factories and facilities have neglected the criteria and standards set to conserve the environment due to lack of strict control by authorities and the high cost of the recycling process of industrial waste. These companies have gone unpunished because of the difficulty of proving environmental crime due to lack of the state institutions' capabilities.³⁴⁴

3. Sanitary Drainage

Wastewater includes waste from houses and factories, chemical compounds, rainwater from the streets and many pathogens, such as bacteria, fungi, and viruses, which may carry diseases among humans and animals. Moreover, this water contains organic materials with very high concentrations that cause stench and help in the growth and spread of different pathogens.³⁴⁵

Wastewater contains high concentrations of nutritive chemical materials, such as nitrogen and phosphorous, which promote the extreme growth of plants and sphagnum that lead to a sharp decline in the level of dissolved oxygen in the water.

³⁴⁴ Marine Environment Magazine, Issue (75), Jan. 2008, P. 13

³⁴⁵ Mara, David Duncan, and Sandy Cairncross. "Guidelines for the safe use of wastewater and excreta in agriculture and aquaculture: measures for public health protection." (1989).

This results in the death of fish and micro-organisms living in the sea and in the disintegration of organic substances. In addition, the existence of such nutrients will help to grow the kinds of poisonous sphagnum that has the capacity to produce poisons and blue bacteria that can contaminate water sources and cause such serious diseases as liver damage, gastroenteritis, and skin irritation. The growth of sphagnum in large amounts leads to their death, which increases the concentration of organic substances in the water, which in turn will activate bacteria. The large existence and activation of such sphagnum reduces the oxygen rate in the water that endangers health and causes other environmental disorders, summarized as follows:³⁴⁶

1) An increase in the concentration of salts in soil and causing imbalance in soil texture. Discharging this water in valleys without treatment is a serious error, because the lands of the valleys are clay and their absorption amount is very little; this leads to the formation of swamps and impedes the flow of water for very long distances.³⁴⁷

2) Seawater contamination and destruction of the marine environment if sewage is discharged to the sea directly without treatment.³⁴⁸

On the other hand, wastewater and its sediments, after full treatment, have many uses especially in the field of agriculture. Therefore, we find that the European Union has organized the use of wastewater sediments and forbids adding them to soil, if they

³⁴⁶ http://www.beatona.net/CMS/index.php?option=com_content&view=article&id=1680&lang=ar&Itemid=84 (last visited Jan. 7, 2016)

³⁴⁷ Almroth, Bethanie Carney, et al. "Oxidative stress, evident in antioxidant defences and damage products, in rainbow trout caged outside a sewage treatment plant." *Ecotoxicology and environmental safety* 70.3 (2008): P. 370.

³⁴⁸ Al-Bahry, S. N., et al. "Coastal sewage discharge and its impact on fish with reference to antibiotic resistant enteric bacteria and enteric pathogens as bio-indicators of pollution." *Chemosphere* 77.11 (2009): P. 1534.

have high concentrations of heavy elements that may be harmful for humans, animals, and the environment. Unfortunately, the cattle drink from these waters directly and eat what is flooded with wastewater.³⁴⁹

makes wastewater a source of contamination without making use of it practically, as in the irrigation of trees. Groundwater is now being depleted, because groundwater is lost in irrigating hectares of green lands and palms on the pretext of decorating and improving cities.³⁵⁰

Wastewater is considered one of the main sources of marine contamination after oil pollution in Kuwait; rainwater is gathered in the streets and discharged into the sea directly without treatment even though it contains chemical waste and oil infiltrating from cars.

Kuwaiti authorities discharge sewage into the sea directly without treatment if any sewage treatment station has broken down. This happened during the disaster of the Meshref sewage treatment station; Kuwaiti authorities discharged sewage, which was supposed to be treated in the station, into the sea directly throughout the period of the station's breakdown and rebuilding. This also clarifies the reason for fish mortality from time to time.³⁵¹

³⁴⁹ Nadal, M., Schuhmacher, M., & Domingo, J. L. (2009). Cost-benefit analysis of using sewage sludge as alternative fuel in a cement plant: a case study. *Environmental Science and Pollution Research*, 16(3), P. 322.

³⁵⁰Id, P. 328.

³⁵¹ <http://www.daralkhalaf.com/content-subj-ar.php?sid=85> (last visited Jan. 7, 2016)

Chapter Five: Role of Criminal Law in Combating Environmental Crime

In this chapter, I will discuss the role performed by the criminal law of marine environmental protection. Accordingly, I will first define the law of environmental crime under international law and Kuwaiti criminal law, after which I will discuss the special nature of the environmental crimes, which differ from conventional crime in many aspects.

However, the elements upon which environmental crimes are based do not differ if the environmental crime is committed against the marine environment, the gaseous environment, or the terrestrial environment. The criminal law does not often discriminate between different kinds of environmental crimes; therefore it stipulates general provisions to be applied in cases of environmental crimes of whatever kind. Consequently, in this chapter, I will discuss environmental crime in general, whether committed against the marine, the gaseous, or the terrestrial environment. Thereafter, I will shed light on the necessity for international cooperation in combating environmental crimes. Finally, I will discuss the historical evolution of environmental criminal law.

This chapter will also discuss criminal acts that breach the applicable regulations and laws and the administrative resolutions and provisions of international covenants that protect the marine environment from pollution. Lawmakers in Kuwait often refer to these international resolutions and covenants when referring to incriminating acts of marine environmental pollution to determine the elements and conditions of incrimination more broadly. As such, this study will explore the shortcomings of the Kuwait criminal law in protecting marine environments and will

recommend solutions for this issue of great importance for Kuwait due to increased levels of pollution and this country's prominent location.

I. Definition of Environmental Crimes

Depending upon the places where they occur, crimes can be categorized into common crimes and environmental crimes. Common crimes are traditional crimes, which are committed against the society's members or their properties. Societies naturally criminalize such crimes and impose penalties on their perpetrators. These crimes do not ordinarily vary depending upon place or the time. In fact, they existed before societies established laws. They include murder, theft, rape etc.³⁵²

Environmental crimes are committed against an element or component of the environment, including the air, water, and soil. These crimes are relatively new, since societies did not address such crimes until the mid-20th century.³⁵³

A. In Kuwaiti Law:

The Kuwaiti Law of Environment Protection does not define "an environmental crime". In many instances, legislators in Kuwait do not define legal matters but prefer to leave this duty to the judiciary system in the context of actual lawsuits and to legal scholars. Legislators want the definition to be flexible and changeable based on changing circumstances to include new cases.³⁵⁴ Thus, the Law of Environment Protection determined the penalties of environmental crimes in section VII without

352 John Kaplan et Al., *CRIMINAL LAW: CASES AND MATERIALS* 103 (6th ed. 2008). And see Dr. Ahmad Fat'hi Sroor, *Criminology*, 1962. P.63. Dr. Ma' amoon Salamah, *Criminology and Punishment*, P. 61.

353A. P. Simester, G. R. Sullivan, J. R. Spencer and G. Virgo, *Simester and Sullivan's Criminal Law: Theory and Doctrine*, 4th edn (Hart: Oxford, 2010); K. Hawkins, *Environment and Enforcement; Regulation and the Social Definition of Pollution* (Clarendon Press: Oxford, 1984); M. Grekos, 'Environmental Fines—All Small Change' [2004] *JPL* 1330. Dr. Faraj Saleh Alhoreash, Id, P. 85.

354 Dr. Fadel Naserallah, *Interpretation the rules of Kuwaiti Criminal Law* (2010) P.104.

defining the acts that lead to the environmental crime.³⁵⁵ The court may obligate the perpetrator to remove the polluting effect or shut down the source of the pollution within three months at most. If the perpetrator violates the law again, in cases where the defendant is operating under a license, the court may decide to cancel its license.³⁵⁶ Whoever prevents employees from doing their duties stipulated under this law can receive a penalty of imprisonment not exceeding one year and a fine not exceeding one thousand Kuwaiti dinars or both of these two penalties. In addition, whoever breaches the provisions of Article 12 of this law can receive a penalty of imprisonment not exceeding one year and a fine not exceeding five hundred Kuwaiti dinars or both of these two penalties."³⁵⁷

Moreover the Kuwaiti Constitution stipulates in Article 26: "The State protects and improves the environment in which people live and the ecological environment. It prevents and controls pollution and other public hazards."³⁵⁸ The Constitution also includes many provisions that pertain to the crime of misusing natural resources. For example, Article (9) Paragraph (2) says: "The State ensures the rational use of water and natural resources and protects rare animals and plants. Appropriation or damaging of natural resources by any organization or individual using whatever means is prohibited."³⁵⁹

355 Section VII of the Kuwaiti Environmental Protection Law

356 In addition, the court may decide to confiscate the things that polluted or harmed the environment, and obligate the perpetrator to pay all expenses necessary for remedying the damage, which is an immediate result of breaching the Law Kuwait supreme court article 9 section 66, criminal procedure, P.37(1995)[hereinafter Kuwait S.C]

357 Article (12) of Kuwaiti Environmental Protection Law.

358 Article (26) of Kuwaiti Constitution.

359 Id, Article (9) Paragraph (2).

Obviously, the crimes of misusing natural resources cover a wide range of fields from wildlife to sightseeing places and historical sites, valuable cultural monuments and relics and other significant elements of the country's historical and cultural heritage.³⁶⁰

Presently in Kuwait, many provisions of environmental criminal law are backed by administrative regulations.³⁶¹ However, not every violation of criminal law is a violation of administrative regulations. In cases of unlawful licenses or permits questions about justification or excuse often are purely academic, because, in practice, such cases will usually involve corruption or a dereliction of duty. The degree of pollution is an issue, because the penalty is based on it.³⁶²

B. In The International Law:

Under international law, the definition of “environmental crimes” deals with many important semantic issues. Firstly, the definition usually explicitly refers to its effectiveness within the established framework of international law. Such reference is an essential link to the interpretive and procedural requirements of customary international law.³⁶³ Concerning international environmental law (IEL), Sir Geoffrey Palmer of Victoria University School of Law anticipates this issue in his contention that the “flexibility” bequeathed by its customary law foundations is invaluable in IEL interpretation and development.³⁶⁴ Secondly, the definition should in some form

360 Dr. Faraj Horaish, Crimes of polluting the environment, P.203

361 Dr. Dawood Albaaz, The constitutional basis for the protection of the environment in Kuwait (2003) P.65
Id, P. 76

363 For example, Cassese's reference to the ICTY's judgment in Prosecutor v. Drazan Erdemovic (October 7, 1997), in Antonio Cassese, On the Current Trends Towards Criminal Prosecution and Punishment of Breaches of International Humanitarian Law, 9(2) Eur. J. Int'l L. 9, 11 (1998).

364 Geoffrey Palmer, New Ways to Make International Environmental Law, 86 Am. J. Int'l L. 259,P. 264,(1992).

acknowledge that “lawfulness” under a particular domestic legal system is not conclusive with respect to “wrongfulness” under international law. Indeed, illegality or legality under domestic law should be neither a prerequisite for, nor a hurdle to, the jurisdiction of the International Criminal Court.³⁶⁵ Thirdly, the definition should include acts that are reckless, making sure that breaches grounded in both intentional acts and reckless acts are included.³⁶⁶ Fourthly, the definition should identify both the “general elements” of the category of crimes and the specific elements of any sub-categories one may have to deal with such as marine pollution.³⁶⁷ Fifthly, the jurisdictional scope of the crime over actors or perpetrators must be “credible and potent” enough to act as a real deterrent to the widest possible range of non-state actors.³⁶⁸ One way to do this might be to refer to “individuals” as the subjects of the jurisdiction. This would capture not only sole agents, but also military commanders, CEOs of The Nature Conservancies (TNCs), and directors and staff of international organizations, within the scope of the crime.³⁶⁹ Sixthly, the definition should adopt a general and holistic, but not ambiguous, approach to defining the crime. Taking into account the “ad hoc nature” and “piecemeal” approach of most IEL instruments, precise references to such instruments in the text of the definition could both be needlessly restricting and perplexing. As Palmer has observed, previous attempts to codify IEL have completely failed. Thus, the use of a more “general rule” that is not restricted to a list of specific, often contradictory and purposely vague multi-lateral environmental

³⁶⁵Antonio Cassese, *The Statute of the International Criminal Court: Some Preliminary Reflections*, 10 *Eur. J. Int'l L.* 148 (1999)

³⁶⁶*Id.*

³⁶⁷Ronald B. Mitchell, *Compliance Theory: An Overview*, in *Improving Compliance with International Environmental Law 13* (James Cameron et al. eds., 1996).

³⁶⁸*Id.*

³⁶⁹ *Id.*, P.15.

agreement (MEA) provisions would be most effective.³⁷⁰ Finally, and particularly if the crime involves recklessness, the definition would have to provide for scientific input into the assessment of guilt. Providing the court with relevant, independent scientific evidence is crucial and requires the presence of the “foreseeable consequences” concept within the definition.³⁷¹

A starting point for setting a definition of “environmental crimes” might be Article 19(2) of the UN International Law Commission's (ILC) Draft Articles on State Responsibility, which states that “an internationally wrongful act ... is one which results from the breach ... of an international obligation so essential for the protection of fundamental interests of the international community that its breach is recognized as a crime by that community as a whole and constitutes an international crime.”³⁷² Article 19(3)(d) adds that “a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment” should constitute such a crime, citing “massive pollution of the atmosphere or of the seas” as one example.³⁷³

C. Definition of Marine Pollution as an International Crime

The best way to protect the marine environment from pollution and to combat environmental crime is to consider the crimes of assaulting the environment as international crimes, like war crimes, crimes against humanity, and terrorist crimes as

370 Giulio M. Mallarotti & Arik Y. Preis, *Toward Universal Human Rights and the Rule of Law: The Permanent International Criminal Court*, 53 *Austl. J. Int'l Aff.* 95 (1999).

371 Tullio Scovazzi, *Industrial Accidents and the Veil of Transnational Corporations*, in *International Responsibility for Environmental Harm* 395, 423 (Francesco Francioni & Tullio Scovazzi eds., 1991).

372 International Law Commission (ILC) Draft Articles on State Responsibility, U.N. GAOR, 51st, Art.(19) Paragraph (2).

373 *Id.*, (19) Paragraph (3) Section (d).

humans are the target of protection in all these laws. The idea of considering the crimes of assaulting environment as international crimes may cause a strong reaction in the international community; this may catch the attention of the world towards the marine environment suffering from environmental crimes whose impact and damages do not differ from international crimes that the international community does care about combating.³⁷⁴

The idea adoption by international law of an international crime due to causing harm to human beings is not a new thing for the international community as the beginning of applying international law on international crimes dates back to the time of the Customary Law of the Sea. The crime of piracy is the most obvious example for that matter. Moreover, the crimes of military treason and espionage are added to the list of international crimes adopted by the customary international law.³⁷⁵

At present, the principal source for the proposition of State criminal responsibility is contained in the International Law Commission's (ILC) Draft Articles on State Responsibility (Part One). Article 19 of Part 1 states that international crimes and international delicts include:

- a. An act of a State which constitutes a breach of an international obligation is an internationally wrongful act, regardless of the subject-matter of the obligation breached.
- b. An internationally wrongful act which results from the breach by a State of an international obligation so essential for the protection of fundamental interests

³⁷⁴ Van Niekerk, Barend. "Environmental Pollution-The New International Crime." S. African LJ 93 (1976): P. 68.

³⁷⁵ White, Rob. Transnational environmental crime: Toward an eco-global criminology. Routledge, 2011. P. 208.

of the international community that its breach is recognized as a crime by that community as a whole constitutes an international crime.³⁷⁶

c. Subject to paragraph 2, and on the basis of the rules of international law in force, an international crime may result, inter alia, from:

(1) a serious breach of an international obligation of essential importance for the maintenance of international peace and security, such as that prohibiting aggression;

(2) a serious breach of an international obligation of essential importance for safeguarding the right of self-determination of peoples, such as that prohibiting the establishment or maintenance by force of colonial domination;

(3) a serious breach on a widespread scale of an international obligation of essential importance for safeguarding the human being, such as those prohibiting slavery, genocide and apartheid;

(4) a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment, such as those prohibiting massive pollution of the atmosphere or of the seas.

d. Any internationally wrongful act which is not an international crime in accordance with paragraph (2) constitutes an international delict emphasis added.³⁷⁷

It should be noted that such a step would not eliminate State responsibility for criminalization of environmental crimes. The term "international crimes" is accepted as denoting certain internationally wrongful acts of a particularly grave nature.

³⁷⁶ the International Law Commission article (19) of Part (1)

³⁷⁷ Id, paragraph (2)

Furthermore, the ILC expressly draws a distinction between the expression "international crime" as used in Article (19) of the Draft Articles on State Responsibility and similar expressions such as "crime under international law," "war crime," "crime against peace," and "crime against humanity". It also draws a distinction between "international crimes" and "international delicts," in accordance with State practice and doctrine.³⁷⁸

The foregoing does not preclude individuals and corporations from being held criminally liable for marine pollution violations under international law. Individual responsibility for crimes is well established.' Similar liability has evolved for legal entities, with sanctions akin to criminal sanctions for individual criminal responsibility. Thus, legal entities may be fined for breaches of conduct and harmful results. Individuals who are the responsible decision-makers within a corporation, i.e., officers and directors, may be held liable in their personal capacities for breach of their duties through commissions or omissions, and may be held vicariously liable for the conduct of those under their supervision.³⁷⁹ However, this personal liability is virtually never enforced.

As for the possibility of providing international criminal liability for persons, it can be proved for a person according to the rules of international law even in cases where the state co-operates with him in committing a certain environmental crime. In such a case, the question is: Is the state considered criminally liable for the commitment of the crime according to the rules of international law, and consequently might it be

³⁷⁸ Id, Article (19)

³⁷⁹ Clifford, Mary. Environmental crime: enforcement, policy, and social responsibility. Jones & Bartlett Learning, 1998. P. 423

punished - especially if that state, by some rules of international law, has the responsibility for some crimes like war crimes and crimes of genocide?

Another question is raised here: if the rules of international law permit the states to be held responsible for some crimes, why should there not be criminal liability for a state if it commits environmental crimes, especially if those environmental crimes do not differ from such crimes with regard to damage and interests?³⁸⁰

On the other hand, it is sure that states cannot be punished in the same way that is used for punishing persons. Yet that does not mean that a state is exempted from criminal liability if it commits an environmental crime, since international law contains several punishments that can be applied to states in case of contaminating the environment, like the punishments of economic and diplomatic blockade, depriving the states of international participation, whatever their nature, and paying compensation. The best example for the effectiveness of such punishments is what happened to Iraq after invading Kuwait in 1990; as the United Nations imposed, according to Chapter (7) of this dissertation of the UN, a group of international punishments which contributed finally to the Iraq surrender. Iraq has paid a large amount of money as compensation for invading Kuwait and destroying its environment, and is still paying them now. In summary, the idea of considering the crime of contaminating the marine environment an international crime, even if it is not applied currently due to the existence of some obstacles which will be explained in detail in the seventh chapter of this thesis, yet the international community and through the rules of international law, should consider crimes of environmental pollution as crimes against humanity. Consequently such

³⁸⁰ Id, P. 551.

crimes could be combated by applying the international punishments stipulated by international law in this regard.

II. The Nature of the Environmental Crime and the Essence of Criminal Protection of the Marine Environment:

Why is certain environmental behavior criminalized? What social negative effects are addressed, and what kind of interests justify using the criminal sanction? We do not find the answer to these two questions in traditional criminal law principles, because environmental interests and values do not receive absolute protection under the law. In contrast to theft or homicide, which may produce personal benefits only to the criminal, most polluting activities generate substantial societal harms as well as environmental damage. Therefore, environmental law in many states is aimed mainly at an administrative control of pollution, usually through licensing and permitting regulations.³⁸¹

Environmental law is complicated. Environmental law poses conceptual and practical challenges even for esteemed scholars and experienced practitioners. A large part of environmental regulation involves sophisticated and technologically advanced industrial processes. As a consequence, from a theoretical perspective at least, it can be difficult to integrate environmental law and criminal law effectively. The criminal law requires the violation of clear statutory obligations; environmental law imposes complex regulatory requirements.³⁸²

381 R. Khan, " Marine Pollution and International Legal Controls" I. J. I. L. Vol. 13, 1973, P.389.

382 Similar concerns could be raised about prosecution for other regulatory crimes, such as antitrust, securities, and tax violations, which also involve complex regulatory schemes and highly technical issues of proof

Criminal law is focused on protecting the interests and values of society. For the criminal law to intervene and incriminate a certain act or behavior, that act or behavior should cause harm to society or adversely affect the values shared by the members of society. Since one of the most important common interests of a society is the ability of its members to live in a healthy and sound environment free from pollution, it certainly fits this prescription. The marine environment is one of the most important elements of the environment shared by the members of society. Thus it is natural that the criminal law should intervene to prohibit and incriminate any behavior whether intentionally or negligently that causes harm to the marine environment or deprives the members of society from enjoying it. Furthermore, the criminal legal scholars in Kuwait believe that environmental crime is a positive or negative behavior whether it is intentionally or negligently performed by a real or legal personality, which causes or tries to cause harm to any element of the environment whether directly or indirectly.³⁸³

Environmental crime may be a national crime if committed by a person who has violated the provisions that preserve the ecological balance, such as a person who dumps sewage, pesticides or radioactive substances into the marine environment or an industrial and agricultural organization that fails to comply with the allowable standards and levels of substances and gases that cause harm to the environment. Environmental crime may also be international, and thus a certain state may be liable if a certain activity or incident harmful to the environment is attributed to that state, such as the second Gulf War, when Iraqi forces dumped thousands of gallons of oil into the waters

383C. Dupont and P. Zakkour, Trends in Environmental Sentencing in England and Wales, A Report by Environmental Resources Management Ltd for DEFRA, November 2003; C. Hatton, P. Castle and M. Day, 'The Environment and the Law—Does our Legal System Deliver Access to Justice? A Review' (2004) 6 Env Law R 240.

of the Arabian Gulf and burnt more than 700 oil wells, leading to the pollution of many Asian states..³⁸⁴

III. The Need for International Cooperation to Combat Environmental Crimes.

International public awareness of environmental problems has been increasing during the past six decades. As the rise of green energy and the willingness of several countries to work with their international partners to reduce environmental damages, and in the case of climate change, a possibly inevitable catastrophe, considerable progress has been made that is measurable and remarkable. The speed and seriousness of degradation of the environment is pushing the speed and scope of global reaction.³⁸⁵

In present times, growing disruptions to human society have become inevitable. The reported warming of the ice caps in Greenland and recent reports of Antarctic melting will both cause the flooding of coastal cities and a crisis of mass migration worldwide. The example to be cited here is Hurricane Katrina and the alarms raised by some states, such as the Maldives, that they are under the threat of absolute submergence within the next few decades. Although the mission of reversing the current momentum is enormous, crimes of unregulated and unrestrained pollution add to the foreseeable crisis of climate change.³⁸⁶

In light of the expanding scope of actions worldwide, the need for criminal sanctions and injunctive measures to combat environmental crime becomes highly

384Price, Andrew RG. "Impact of the 1991 Gulf War on the coastal environment and ecosystems: current status and future prospects." *Environment international* 24.1 (1998): 91-96.

385J. C. Sweeney, *Environmental Protection by Coastal States*, GA. J. INT'L & Comp. L., Vol. 4, 1994, P. 285-290. <http://digitalcommons.pace.edu/lawfaculty/883>, (last visited Jan. 7, 2016)

386 International Criminal Court, ICC Jurisdiction and Admissibility, <http://www.icc-cpi.int/Menus/ICC/About+the+Court/ICC+at+a+glance/Jurisdiction+and+Admissibility.htm>. (last visited Jan. 7, 2016)

important. Crimes equal in their wide impact and deliberate destruction of ecosystems during war lie within the jurisdiction of the International Criminal Court (ICC). The law also covers mass migrations of people following environmental damage.³⁸⁷

For several years, the international community has been examining means to establish a legal formula that would redress the balance regarding international crimes against the environment. This move became urgent in light of the apparent incompetence of national entities to provide effective enforcement. Environmental activists started to urge that the destruction of ecosystems be designated as crimes against peace and the welfare of nations. This classification would put these crimes equal to genocide and crimes against humanity. It is argued that if the United Nations adopts "ecocide" as one more "crime against humanity," then specific cases of egregious misconduct could be adjudicated at the International Criminal Court. Such a legal development would create a precedent to provide support for existing environmental mechanisms to protect community interests.³⁸⁸

There is a revealing possibility that global crimes against the environment may fit at a certain point into the Court's jurisdiction. This could become real because domestic laws are viewed as not being adequate to deal with the most egregious transnational environmental crimes. Nationally, these types of crimes generally bring about civil penalties from the relevant government agencies. However, the

³⁸⁷ The International Court for the Environment Coalition has been established on the model of the International Coalition for the International Criminal Court., INT'L CT. FOR THE ENV'T COALITION, <http://www.environmentcourt.com/welcome.php> (last visited Jan. 7, 2016)

³⁸⁸ Margaret Cronin Fisk & Allen Johnson Jr., Bloomberg Businessweek, P. 17 (Apr. 24, 2012), <http://www.businessweek.com/news/2012-04-24/halliburton-opposes-bp-s-proposed-settlement-of-gulf-oil-spill> (last visited Jan. 7, 2016)

insufficiency is evident when these laws fail to penalize perpetrators or stop their polluting activities.³⁸⁹

The severity of the consequences on biodiversity and the deterioration of environmental health witnessed while considering these acts gives enough reasons to consider the criminality of such behavior on a global scale. When pollution spins out of control, it may have the ability to destroy entire eco-systems including biodiversity in an affected specific or even world-wide. Equally important, the health of residents in the polluted areas can be severely harmed.³⁹⁰ as is the case with South America and the US oil spills.³⁹¹

Those who oppose international environmental laws have worked diligently to prevent any substantial measures to develop legislation that would protect the environment. Many arguments have been postulated through lobbyists, governments and even scholars to undermine any attempt to create a unified system that criminalizes even the most serious environmental crimes. For example, some have argued that it is very difficult to determine the cause of the pollution, not to mention the difficulty of determining whether it was deliberate or not. Those supporting this argument further state that it is very difficult to establish the link between harm and specific corporations given the diversity of players who commit crimes and the relative absence of

³⁸⁹States may be more inclined to criminalize and prosecute private transnational offenses rather than state or interstate ones (at least prosecuting private actors is not subversive of sovereignty), but the multiplicity of locations in which the private transnational crimes are committed can make jurisdictional reach difficult, Ruchi Anand, INTERNATIONAL ENVIRONMENTAL JUSTICE: A NORTH-SOUTH DIMENSION (2004). Ray Michalowski, International Environmental Issues, in ENVIRONMENTAL CRIME: ENFORCEMENT, POLICY, AND SOCIAL RESPONSIBILITY 315, 318 (Mary Clifford ed., 1998). Linda A. Malone, The Chernobyl Accident: A Case Study in International Law Regulating State Responsibility for Transboundary Nuclear Pollution, 12 COLUM. J. ENVTL. L. 203, 205-06 (1987).

³⁹⁰ Chapin III, F. Stuart, et al. "Consequences of changing biodiversity." Nature 405.6783 (2000): P. 234.

investigatory resources. This is why culpability is not given enough weight to environmental crimes worldwide. Many of these crimes are classified nationally as giving rise to only civil fines.³⁹²

There is proof that much environmental damage is made deliberately with full awareness of the violation of applicable environmental laws, civil or criminal. Often, the benefits derived from such acts outweigh the risk of apprehension and penalty. Usually, the aim behind corporations committing crimes intentionally rests on their efforts to seek an economic way to conduct their businesses, even if considerable fines could be imposed as a result of such conduct. Such corporations are usually fully aware that their actions are illegal but act nevertheless in pursuit of the most economically effective way of safeguarding their best interests regardless of the element of illegality involved.³⁹³

IV. The Development of Criminal Law in the Protection of the Environment in Kuwait:

The concern of the State of Kuwait for the environment started earlier than many other countries in the Middle East. In 1964, the first law preventing the pollution of the marine environment was issued in Kuwait. It prevented ships from polluting the

³⁹²For example cited here are the recent disaster in the Gulf of Mexico, the hazardous waste crisis in the Ivory Coast, and other infamous environmental disasters that show how environmental crimes can have destructive effects on people and the environment together. These tragedies stress the need for more drastic measures to ensure a sustainable future. Dr. Hasen Almarsfawy *Criminal Causation Element*, at 149 (1969). And see Eric Holder, Attorney Gen., U.S. Dep't of Justice, Attorney General Eric Holder on Gulf Oil Spill (June 1, 2010) (transcript available at <http://www.justice.gov/ag/speeches/2010/ag-speech-100601.html>). (last visited Jan. 8, 2016)

³⁹³DESISLAVA STOITCHKOVA, *TOWARDS CORPORATE LIABILITY IN INTERNATIONAL CRIMINAL LAW* 13–22 (2010) (discussing the dilemmas presented by treating corporations as legal persons for the purposes of the Rome Statute of the International Criminal Court); Peter W. Singer, *War, Profits, and the Vacuum of Law: Privatized Military Firms and International Law*, 42 *COLUM. J. TRANSNAT'L L.* 521, 534 (2004) (showing the “failure of international law to establish the exact legal status of privatized military firms”).

seawater.³⁹⁴ This law was issued pursuant to the International Convention for the Prevention of Pollution of the Sea by Oil (London, 1954), which Kuwait joined in 1961.³⁹⁵ Article (1) of this law prevents ships from discharging oil into seawater, polluting seawater with any kind of liquids leaked from ships.³⁹⁶ Article (4) of the same law imposes a penalty upon whoever violates Article (1), which is a fine of no less than 1500 Kuwaiti dinars and no more than 40 thousand Kuwaiti dinars. Under this law, the fine may be doubled against a repeat offender of Article (1) within a year. This law did not contain any articles providing for a sentence of imprisonment. All penalties were limited to a fine. The amount of the fine is very low compared with the huge revenues generated from oil transactions.³⁹⁷

In 1972, the first law protecting the marine environment was issued in Kuwait. Under this law, the Municipality of Kuwait was granted authority over environmental conservation and to issue the regulations relating to the environment. The law also authorized the Municipality of Kuwait to apply penalties to whoever violates its regulations. However, this law did not stipulate that the Municipality of Kuwait had the right to apply any penalty other than imposing fines.³⁹⁸

The Municipality of Kuwait continued to issue regulations and decisions relating to the environment until 1980, when a new law focusing on environmental protection was enacted. This law consisted of 13 articles. Article (1) states that an independent department of the environment must be established and that the department

³⁹⁴ The Law of Prevent Pollution Navigation Water by Oil

³⁹⁵ London Convention (1954)

³⁹⁶ The Law of Prevent Pollution Navigation Water by Oil article (1)

³⁹⁷ Id, article (4)

³⁹⁸ http://www.beatona.net/CMS/index.php?option=com_content&view=article&id=597&Itemid=84&menuid=&lang=ar (last visited Jan. 8, 2016)

is to be concerned with regulating and protecting the environment in the State of Kuwait, directly and independent of the Municipality of Kuwait.³⁹⁹ Articles 7, 8, 9 and 10 of the law empower the Environmental Protection Council to suspend the activities of any establishment or facility or prohibit the use of certain equipment, wholly or partially, if such activity or equipment presents a threat to the environment.⁴⁰⁰ Article 11 of the Criminal Law states the penalties to be applied when the provisions of the law are violated. These penalties range from a financial penalty of no more than 10 thousand Kuwaiti dinars and imprisonment of no more than three years or both of these two penalties for anyone who violates the regulations and requirements stipulated under the law.⁴⁰¹

Although this law contains an imprisonment penalty, it sets a standardized penalty for whoever violates the provisions of the law. This is unreasonable, since the severity of the crime or violation differs from one act to another. However, the majority of jurists acknowledged that this law managed to provide a minimum level of environment protection. It also managed to reduce significantly environmental crimes and violations that were committed by private companies.

In 1995, another new law of environment protection was enacted. This law established the duties of the board of directors of the Environment Public Authority and expanded its powers.⁴⁰²

Pursuant to Article 3 of the law, the Environment Public Authority is charged with all duties and activities that provide protection for the environment. Paragraphs 1

³⁹⁹ The 1980 Environmental Protection Law

⁴⁰⁰ Id, articles (7), (8), (9), (10).

⁴⁰¹ Id, articles (11).

⁴⁰² <https://translate.google.com.kw/translate?hl=en&sl=ar&u=http://www.gcc-legal.org/LawAsPDF.aspx%3Fopt%26country%3D1%26LawID%3D3674&prev=search> (last visited Jan. 8, 2016)

through 16 determine the duties with which the Environment Public Authority is charged as follows:⁴⁰³

1) Determination and implementation of the general policy of environmental protection; setting strategies and a work plan to achieve sustainable development.

2) Preparation and supervision over the implementation of an integrated work plan that is focused on protecting the environment for the long and the short terms through coordination with relevant state authorities pursuant to environmental policies.

3) Supervision, follow-up and assessment of activities, procedures and practices relevant to environment protection.

4) The power to request data deemed necessary by the Environment Public Authority from any agency that practices certain activities that may lead to environmental pollution or deterioration.⁴⁰⁴

5) Imposing the penalties under Article 13 of the Criminal Law upon anyone who violates the regulations and requirements stipulated in Article 8. The penalty ranges from imprisonment of no more than three years, a fine of no more than ten thousand Kuwaiti dinars or both of the two penalties. The court shall have the right to confiscate the objects that have caused pollution or caused harm to the environment. The court shall also obligate the entity that has caused pollution to pay all expenses necessary to repair the damage. The perpetrator further shall be obligated to remove the pollution at its own expense

⁴⁰³ Law No. 21 of 1995 Establishing the Public Authority for the Environment (21/1995), article 8

⁴⁰⁴ Id

or shut down the place where work is a source of pollution for a period of no more than three months. If the violation is committed again, the court may nullify the license.⁴⁰⁵

This law was amended in 1996 under Law no. 61 of 1996. The first and the second paragraphs of Article 10 of the law regarding the Higher Environmental Council's power to require cessation of activity or work at any facility or to prevent environment pollution for a period not exceeding one week was extended to two weeks. Pursuant to the amended fourth paragraph of the stated article, the Higher Council was also authorized to permit the general manager of the Environment Public Authority to require cessation of activity or work at any facility if necessary for seven days, after which the case must be brought to the Higher Council.⁴⁰⁶

Pursuant to the new amendment of Article 8 of the law, the board of directors was given the power to require compensation for any environmental damage that was caused. Other relevant authorities that were affected by such environmental damage were also entitled to receive compensation.⁴⁰⁷

The board of directors of the Environment Public Authority (EPA) has imposed penalties for environmental crimes and violations on a gradual basis. This gradualness includes warning the violating facility, requesting the facility to remove or stop the source of pollution, shutting down the facility temporarily, and finally shutting down the facility permanently, withdrawing its license and possibly imposing a prison sentence upon the perpetrator of the environment crime. However, the law has set a standardized imprisonment sentence (not exceeding three years) for every person or

⁴⁰⁵ Id, article (13), (8).

⁴⁰⁶ Id, article (10).

⁴⁰⁷ Id, article (8).

entity that violates the provisions of the law. This is unreasonable, because the gravity of the crime differs from one to another.

In December 2014, another new law was enacted to protect the environment. This law includes 181 articles; 29 articles of this law are allocated to criminal penalties, which range from capital punishment to a fine penalty to warning the violating facility.⁴⁰⁸ Part 7 of this law focuses on the criminal penalties.

For example, Article 180 of the Environmental Protection Law of Kuwait imposes the death penalty or imprisonment for life as punishment for violating the laws dealing with nuclear waste within the territory of Kuwait.⁴⁰⁹ The first paragraph of Article 25 of the Environmental Protection Law states that "the import, introduction, filling, flooding, or storing nuclear waste or disposal of it is prohibited in any form within the whole territory of Kuwait".⁴¹⁰ The second paragraph states that "it is prohibited to allow the passage of sea, air, or land transports which carry any nuclear waste without a prior permit from the authority across the territory of the state in coordination with the concerned bodies of the state."⁴¹¹

Article (130) of the Environmental Protection Law stipulated that "any person who violates the provisions of article (25) of this law shall be punished by death or life imprisonment and a fine of not less than 500.000 dinars and not more than 1000.000 dinars."⁴¹²

⁴⁰⁸ <http://www.epa.org.kw/article.php?id=28> (last visited Jan. 8, 2016)

⁴⁰⁹ Environment Protection Law 2014, article (180).

⁴¹⁰ Id, article (25).

⁴¹¹ Id.

⁴¹² Id, article (130).

Any person who violates the provisions of Article 25 first paragraph of this law may be sentenced to life imprisonment and a fine of not less than 250,000 dinars and not more than 500,000 dinars.

Any person who violates the provisions of Article 25 second paragraph must re-export the nuclear waste in question at his own expense. However, Article 141 imposes imprisonment of not more than six months and a fine of not more than 50,000 dinars for anyone who deliberately contaminates the marine environment as provided in this law. Article 142 stipulates the contamination of the marine environment that is not deliberate, the punishment is a fine of not less than 30,000 dinars and not more than 150,000 dinars.⁴¹³ The contradiction in these provisions is very confusing and hard for the agencies and courts to administer.

V. Legal Basis for Criminal Protection of the Marine Environment

Criminal law intervention to incriminate and punish acts or behaviors that cause harm to the marine environment reveals the real importance of that environment and the necessity to maintain a healthy environment free from pollution. The marine environment has an economic value upon which all countries of the world depend. Therefore, all international treaties and conventions executed to protect the marine environment from pollution have been keen to urge the countries of the world to enact criminal laws to protect the marine environment and many have deemed causing harm to any of the marine environment elements a criminal crime and its perpetrators subject

⁴¹³ Id, article (141), (142).

to penalties.⁴¹⁴ Hence, criminal law plays an important role in protecting the marine environment from pollution.⁴¹⁵

Despite the great importance of the criminal law's intervention to protect the environment, the criminal law is not independent from other branches of law, since the branch of law related to the issue must be considered to determine the elements of incrimination. In addition, there are many regulations in environmental law, and more are being developed every day. For example, special rules have been set for determining the kind of pollution that causes harm to the environment. Therefore, criminal law cannot be used to set a general penalty for all such acts. Accordingly, the law of the marine environment is a law that stipulates protections for non-criminal rules (administrative, civil, etc.) as well as criminal penalties to protect the environment through regulations and provisions of international treaties and conferences in this regard. From this perspective, the criminal law of the marine environment is indistinguishable in its provisions from the provisions of criminal liability stated in the criminal law with respect to the definition of crimes and penalties and the conditions of criminal liability. Thus, the criminal law plays a role in securing and reinforcing the role of noncriminal rules in this field.⁴¹⁶

On the other hand, criminal legislation varies from civil law in the manner in which it intervenes to protect the environment. Some legislation prefers criminal law

414 Dr. Marta Bitto and Sandor FuloP .P. 974 – Crimes Against the Environment ...et. Dr. Miguel Polaino Navarrete. P. 879. Anti-Ecology and Criminality..et.. Dr. Patrik Fitzgerald. P. 653.Problems of Criminal Responsibility and Sanctions in Respect of Environmental Violations. Dr. Mohan Prabhu, QC P. 700 General Report. (LA Protection Penal Du Mlieu Naturel).

415 Dr. Salwa Tawfiq Bakir, Criminal Protection of Environment and Its Applications in Kingdom of Saudi Arabia, P. 66. Dr. Faraj El Hareesh, Id, P. 7.

416 Dr Patrik Fitzgerald,Id, P. 654.

intervention. Other legislation deals with the issue of environmental protection as an emergency different and distinct from traditional crimes. This is attributed to the criminal policy adopted by the legislature of each state with respect to fighting environmental crimes.⁴¹⁷

Whatever the approach through which the criminal law intervenes, its existence has become necessary to protect its value to society. We should deem the criminal law's intervention to protect the environment with all of its elements to be as important as the criminal law's intervention to protect other societal values. In fact, the choice of any such legal system depends on many factors.

There should be a law that determines the general provisions of liability for causing any harm to the elements of the environment. There should also be special criminal laws relating to each element of the environment. In addition to general provisions, there should be special provisions and rules for each of the environmental crimes along with those that determine the elements of the crime and the penalty to be applied thereto. Stages of criminal procedure should also be designated. General provisions should not be applied to these crimes under the penal law, because often such crimes have different characteristics than traditional crimes under the penal law. A

⁴¹⁷ Some legislation prefers the criminal law's intervention conventionally, i.e. the agreed-upon way in the traditional criminal law. Other legislation deals with the issue of environmental protection as an emergency different and distinct from traditional crimes. This is attributed to the criminal policy adopted by the legislature of each state with respect to fighting environmental crimes. Accordingly, the legislature may implement any one or more of the following ways to protect the marine environment: 1. Set a comprehensive law that governs all conditions relating to the protection of the marine environment regardless of other elements. 2. Set a law that includes all conditions relating to all elements of the environment. The marine environment is not so different from other elements of the environment in this respect. 3. Set special laws that deal with different elements of the environment in addition to the special provisions under the penal law relating to the protection of persons and property. Kuwait and Egypt, among others, follow this approach. 4. Set a law that determines the general provisions of responsibility for causing harm to the environment. 5. Legislators may depend on the general provisions under the penal law and apply them to protect the environment, including all of its elements. This approach has been adopted by Japan, since protecting the environment through the Japanese criminal law is still dealt with through the traditional criminal law. Dr. Kensuke Itoh. Criminal Protection of the Environment and the General Part of Criminal Law in Japan, . P. 1038

special court should be established to consider the crimes against the environment has been done in Finland and many other countries.⁴¹⁸ These positions are based upon the following:

First:- Legal provisions of crimes involving marine environment pollution often are distinct from those of traditional criminal liability. The provisions of crimes involving marine environment pollution are elaborately stated, and their criteria are flexible. Legislators often refer to other laws or international treaties and conventions, as will be seen in the discussion below of the material aspects in this research.⁴¹⁹

Second: The results of criminal conduct in this type of crimes are not clear and may take a long time to emerge or may gradually and intangibly appear.⁴²⁰ The results often occur in a place and a time different from the place and time where and when the criminal act or behavior occurred. In addition, it is difficult to prove the causal relationship in such cases.

Third: The special nature of the victim, because this nature in environmental crimes can be widespread, crossing State borders, and thus is not sufficiently clear, unlike traditional crimes such as theft or murder.⁴²¹

VI. The Objective of the Criminalization of Polluting the Environment

⁴¹⁸ Faure, Michael G., and Günter Heine, eds. Criminal enforcement of environmental law in the European Union. Vol. 8. Kluwer Law International, P.207, 2005.

⁴¹⁹ The progress of international criminal law is often very closely associated with the fortunes of international humanitarian law. See Antonio Cassese, On the Current Trends Towards Criminal Prosecution and Punishment of Breaches of International Humanitarian Law, 9 EUR. J. INT'L L. 2 (1998).

⁴²⁰ Dr. Kimmo Nuotio, Crimes Against the Environment, P. 924.

⁴²¹ Geoffrey Robertson, CRIMES AGAINST HUMANITY: THE STRUGGLE FOR GLOBAL JUSTICE, P. 398, (2006), "providing a history of crimes against humanity and describing the evolution of the international framework that has emerged to deter and protect crimes against humanity".

Incrimination of any behavior that causes a serious harm to society is an effective way to protect the common interests of the members of the society. The objectives of incrimination of behavior that may cause harm to environment includes the following:

First: To protect human life, because that is the main focus of criminal protection. Legislators in every state relate between the incriminating behavior that pollutes water and the human use of such water. They also relate between incriminating such behavior and the possibility of causing harm to human health. This means that legislators in every state consider the danger and the effect of such behavior on human life.⁴²²

Second: To protect all elements of the environment, since the criminal law seeks to protect a something of a special nature, which is necessary for the survival of humans, animals, and plants. The criminal law does not seek only to ensure the survival and soundness of humans, but it also aims to make human existence sustainable. Consequently, the marine environment in itself requires protection not only to be utilized for the benefit of humans but also for its own value.⁴²³

Therefore, the goal of incriminating the behaviors or acts that pollute the marine environment is the marine environment itself (including all of its elements: water,

⁴²²Thomas Wemyss Fulton, *The Sovereignty of the Sea*, P.3 (Edinburgh, Blackwood, 1911, 1976 rep).

⁴²³Mohammed Saif Alden Wattad, *The Rome Statute & Captain Planet: What Lies Between "Crimes Against Humanity" and the "Natural Environment?"*, 19 *FORDHAM ENVTL L. REV.* 265, 270 (2009).

marine living creatures, marine plants, .etc.)⁴²⁴ The following substantiates this position:

1. The legislation that protects marine environment from pollution is a set of rules and regulations that preserve the economic value of the environment, which is vital for life.⁴²⁵

2. It is difficult in crimes of marine environment to identify all the victims afflicted by harm caused by the polluting act or behavior. Therefore, it is necessary to incriminate the behavior or the act, because it threatens many people and the environment on which they depend. Even though a particular human victim of such a crime may not be capable of identification, this does not mean that the crime with all of its elements does not exist. It does exist, and it deserves a penalty even if a particular human cannot be identified as an immediate victim.⁴²⁶

Furthermore, the criminal result may not occur immediately but may arise within a short or long period of time. Therefore, much legislation is keen to incriminate the act or the behavior regardless of the result or the consequence to guarantee protection of the marine environment itself. This view is substantiated by the content of legislative provisions and international treaties.⁴²⁷

⁴²⁴Robert McLaughlin, Improving Compliance: Making Non-State International Actors Responsible for Environmental Crimes, 11 COLO. J. INT'L ENVTL. L. & POL'Y 377, 390 (2000).

⁴²⁵Dr. Faraj El Hareesh, Environmental crimes, Page 78.

⁴²⁶For a critique of environmental law's anthropocentrism, see Catherine Redgwell, Life, the Universe and Everything: A Critique of Anthropocentric Rights, in HUMAN RIGHTS APPROACHES TO ENVIRONMENTAL PROTECTION P. 71-88 (Alan E. Boyle & Michael R. Anderson eds., 1996)

⁴²⁷NADA AL-DUAIJ, ENVIRONMENTAL LAW OF ARMED CONFLICT 3 (2003); Symposium, The International Responses to the Environmental Impacts of War, 17 GEO. INT'L ENVTL. L. REV. 565, 573 (2005);

Chapter Six. Elements of Environmental Crime

Oil pollution from ships and land is one of the main sources of contamination of the marine environment, as most marine disasters during the last decades were due to either accidents of oil tankers or marine refineries spread out along shores. Even though criminal responsibility in most of these accidents was proven either as to the ship captain, the sailors, the refinery-owned company that owned the refinery or its workers, governmental demands of the affected states were limited to civil procedures and compensation. Most pollution-affected states do not prefer to file criminal actions due to the length and complexity of the procedures involved in environmental criminal cases on the one hand and the ease of reaching a financial settlement with the companies responsible for environment pollution on the other hand. Oil companies are ready to pay any amount of money demanded by the affected states if this leads to a waiver of prosecution.⁴²⁸

Moreover, the different and complex nature of proving the existence of criminal responsibility in environmental crimes and incidents requires criminal investigation of all persons having any relation to the incident, including officials, employees, and workers, and requires environmental criminal evidence necessitating involving qualified technical personnel and often specialized laboratories and a long time. These

Carl E. Bruch, *All's Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict*, 25 VT. L. REV. 695, 698 (2001)

⁴²⁸ Dinstein, Yoram. "Oil pollution by ships and freedom of the high seas." J. Mar. L. & Com. 3 (1971): P. 363.

complicating and costly factors motivate most states to pursue civil actions which require only proof of the commission of a tort.⁴²⁹

I. Nature of Criminal Liability in Environmental Crimes

Proving criminal liability for disasters caused by contaminating the marine environment must be preceded by a criminal investigation through specialized investigators of any person who is proven to be involved in the environmental disaster, such as the ship captain, all workers, officials, and staff of the company which caused this disaster. Such an investigation can be made by resorting to high quality environmental laboratories and then laying charges if the accused person has committed any of the elements of criminal liability. This operation cannot be achieved except by making use of provisions found in both environmental and criminal laws.⁴³⁰ For example, in the Exxon Valdez grounding, Captain Hazelwood was charged under environmental statutes for the negligent discharge of oil, as well as under general criminal statutes for criminal mischief, reckless endangerment and operating a vessel while intoxicated. In addition, the ship-owner corporation may be held vicariously liable for the acts of crewmembers acting within the scope of their employment, if such acts constitute a violation of environmental statutes and, under certain circumstances, general criminal statutes. Additionally, corporate officers can be held criminally liable under environmental statutes merely because of their position of responsibility in the company, regardless of their actual knowledge or participation in any culpable conduct. Finally, corporate officers can be held criminally liable for violation of general criminal

⁴²⁹ Id, P. 401

⁴³⁰ Carmichael, Kepten D. "Strict criminal liability for environmental violations: A need for judicial restraint." Ind. LJ 71 (1995): P. 729.

statutes depending on their actual knowledge of the facts surrounding the incident and whether they committed acts contributing to its occurrence.⁴³¹

II. Overview of Elements of Environmental Crime:

Most criminal laws have global elements that constitute the environmental crime. These elements require that the first environmental conduct is criminalized by law; that the offender commits this conduct knowing that it violates the criminal law; and finally that this conduct is committed with intent to cause harm to the environment.⁴³²

Moreover, the elements of environmental crime do not differ from those of conventional crime.⁴³³ Thus, environmental crime consists of three elements. The first element is the act or the criminal conduct that is deemed criminal by law. The second element is knowledge, which means the perpetrator's awareness that the act that he commits is deemed a crime by law. The third element is criminal intent. I will discuss in this chapter the issue of proving an environmental crime in the State of Kuwait.

A. Actus Reus

Kuwaiti Law of Environmental Protection neither defines environmental crime nor determines its elements. Kuwait is among those countries that has not enacted a law that defines the environmental crime and its elements, because the Kuwaiti legislature assumes that environmental crime does not differ from other modern crimes and

⁴³¹Bragg, James R., et al. "Effectiveness of bioremediation for the Exxon Valdez oil spill." (1994): 413-418.

⁴³²Antonio Cassese, On the Current Trends Towards Criminal Prosecution and Punishment of Breaches of International Humanitarian Law, 9 EUR. J. INT'L L. P. 42 (1998).

⁴³³Id, P. 50

therefore has the same elements, which include the conduct or the behavior criminalized by law; the criminal's knowledge that his conduct or behavior is a crime, and the criminal's intent to commit the crime.⁴³⁴

1. Polluting is an Actus Reus

Polluting conduct or behavior occurs when pollutants are added to a certain environment, which means that the polluting conduct is the adding conduct. Kuwaiti Law of Environmental Protection defines polluting substances and factors as any solid, liquid and gaseous substances or any noise, radiation, heat or vibrations produced by man and which lead, whether directly or indirectly, to environment pollution or deterioration.⁴³⁵

In this definition, the legislature refers to all substances and factors that cause pollution to environments of all kinds, whether they are soil, air or water. Pollution occurs when a matter cause pollution is added to any component of the environment. "Addition" here means that the offender introduces pollutants to a natural environment that do not exist in the natural environment. The added substance may be similar to or different from the natural components of the environment. The addition of the substance may adversely impact the natural balance of the environment either by increasing or decreasing the levels of some substances.⁴³⁶

Regardless of whether the added substance is similar to a certain component of the natural environment, it would affect the natural balance of the environmental

⁴³⁴ Dr. Farag Al Hareesh, Crimes of Environment Pollution, P. 203

⁴³⁵ Article(1) of Kuwaiti Law of Environment Protection

⁴³⁶ Dr. A'adel Maher Alalfi, The Protection of Criminal Law to the elements of the environment, P.134, (2009).

components and thereby cause the environmental pollution. Gas emissions from factories or cars, which adversely impact the air, are a good example, because they show that the adding conduct affects the natural balance of the air components by adding gases to the air, thus polluting it.⁴³⁷

2. The Nature of Environmental Pollutants

The polluting substances are the material element of the criminal conduct in crimes of environmental pollution. This means that the offender has added polluting substances to the environment protected by law.⁴³⁸

Kuwaiti Law does not make it a condition in the crime of environmental pollution that the polluting substance added by the offender in the environment be of a particular nature or kind or have specific characteristics. All substances, regardless of their nature, characteristics or danger, are deemed to be pollutants as long as they pollute the air protected by law. For example, the law states that "spraying or using pesticides or any chemical compounds for purposes of agriculture, public health or other purposes, is prohibited." The law also states that "the burning of any kind of fuels or other things for the purposes of industry, power generation or constructions or any other commercial purposes" that cause harm to the environment is prohibited, if exceeded the limit permitted by law.⁴³⁹ These two provisions of Articles (38) and (40) of the Kuwaiti Law of Environment Protection demonstrate that legislators use flexible and indefinite language to include all elements that would pollute the environment.⁴⁴⁰

⁴³⁷ Dermidz: Strict of Liability for Pollution, AIDI, Budapest, P. 76, (1986). Dr. Faraj Alhareesh, Id, P.46.

⁴³⁸ Dr. Mirvat Albarodi, Criminal liability for the peaceful use of nuclear energy, P. 88, (1993).

⁴³⁹ Dr. A'adel Maher Alalfi, Id, P. 254.

⁴⁴⁰ Article (1) of Law of Environment Protection, 2014

3. Polluting Conduct Must Affect One Element of the Environment Crime

For polluting conduct or act to occur, polluting substances must be added to one element of environment. In other words, the criminal conduct of the offender must lead to the offender's addition of a substance or energy to water or air environment in a way that pollutes the environment.⁴⁴¹ In the Kuwaiti Law of Environment Protection, the legislature used two different ways to determine the environment as the subject of protection. These two ways are as follows:

First Way:

This way is based on fully specifying the environment that is the subject of protection. This means that the stated crime does not occur unless a pollutant is added to this specific environment and according to the legislature's determination of it. For example, Article (141) of the Law of Environment Protection states that everyone who intentionally commits a polluting act in any of the marine regions described in Article 68 of this law will be punished by imprisonment of no more than three years and no less than six months and a fine of no more than two hundred thousand Kuwaiti dinars and no less than fifty thousand Kuwaiti dinars or either of these two penalties.⁴⁴²

Article (68) states: "The following areas are marine and above in the upper layers of the air and in the seabed and subsoil of the sea areas, in which it is prohibited to make any pollution of the marine environment by introduction of harmful substances caused by whatever source and quantities, or to prepare to commit any such action, which shall constitute an offense punishable in accordance with the provisions of this

⁴⁴¹Provision of Article (1) of Law of Environment Protection

⁴⁴²Provision of Article (68) of Kuwaiti Law of Environment Protection

law:

(A) Inland waters of the State of Kuwait, located behind the line closure Kuwait Bay.

(B) The territorial sea of the State of Kuwait, which extends to a distance of 12 nautical miles from the baseline.

(C) The area adjacent to the territorial sea, which extends to a distance of 24 nautical miles from the baseline, which is measured from the territorial sea.

(D) The water adjacent to the territorial sea, which extends to a distance of 50 nautical miles from the baseline, which is measured from the territorial sea"⁴⁴³

Second Way:

The legislature here provides for incrimination in general terms without determining a specific environment. Therefore, for a crime to occur, it is not a condition that such a crime happens in a specific environment. The crime occurs as soon as its elements exist regardless of the environment to which these pollutants are added. For example, Article (140) of the Law of Environment Protection states that everyone who violates any provision of Article (64) of this law shall receive a penalty of imprisonment of no more than six months and a fine of no more than five thousand Kuwaiti dinars or either of these two penalties.⁴⁴⁴

B. Knowledge of Environmental Violations

⁴⁴³ Article (68) of Environment Law Protection.

⁴⁴⁴ Article (64) of Environment Law Protection 64 of this Law states that "Prohibits the disposal of containers and cylinders and offal containing controlled substances, except in accordance with the requirements and controls the executive regulations of this law" according to the above article, the legislature uses this provision to protect environment generally with all its elements and components including land, air and water.

In environmental crimes, like other modern crimes, the conduct is punishable if done “knowingly”. The requirement of knowledge helps to avoid arbitrary and unfair prosecutions; provides prosecutors with wide discretion; and is embedded in the constitutional guarantee of due process. The “knowing” requirement in environmental crimes, however, has recently created great controversy, and environmental statutes do not always clearly specify a standard of knowing. For instance, the Clean Water Act (CWA), which has led to important litigation over the meaning of intent, forbids one to “knowingly” dispose of a pollutant into navigable waters without obtaining a permit. A number of questions are raised here. Must one, under this law, “know” that the substance being discharged is classified as a “pollutant”; that it reaches “navigable water”; that those specific permit requirements were violated; or merely that a discharge is being caused, without knowing that the substance reaches navigable water or is a pollutant or that a permit is required or missing? Is it a defense to believe in good faith that the substance was not being discharged into water, that the substance was not a pollutant, or that the discharge was properly permitted? As courts begin to deal with these and similar issues, the complexity of environmental crimes requires a higher standard of knowledge and intent.⁴⁴⁵

⁴⁴⁵ Moreover, under the American public welfare doctrine, the usual requirement of proof of evil intent in environmental crimes is relaxed in the context of regulatory offenses designed to protect public health and safety. The rationale behind the public welfare doctrine is twofold: first, that the public does not have the means to protect itself from the harm the regulations seek to avoid, and, second, that the offender is dealing with a dangerous substance and should “know” that his activities are heavily regulated. In *United States v. International Minerals & Chemical Corporation*, 402 U.S. 558 (1971), the United States Supreme Court construed a statute identical in approach and virtually identical in language to the criminal provisions of the CWA, the CAA, and the RCRA. The statute made it a crime to “knowingly violate any . . . regulation” promulgated by the Interstate Commerce Commission in regulating the transport of corrosive liquids under 18 U.S.C. § 834(a). The Court construed this language so that the “knowingly” requirement referred to the specific acts or omissions regulated, but not the regulations themselves. In other words, the defendant must be aware of the criminalized actions and know all of the relevant facts that make his activity criminal; but the defendant need not know the law that criminalizes his behavior. As a result, defendants who are ignorant of the illegality of their actions may nevertheless be successfully prosecuted

In Kuwaiti Law, for the knowledge or awareness of a crime to exist, the offender must be aware of all elements of the crime. If this awareness does not exist due to ignorance or mistake, the criminal intent does not exist.⁴⁴⁶ In other words, the elements of which the crime consists as defined by the criminal law may differ. Some of these elements relate to the subject of the right violated, some relate to the nature of the conduct and its adverse impact on such right, and others relate to the consequences of the crime. For the criminal intent to exist in a murder, the offender must know that his behavior or conduct is against a living human being rather than a dead body. If the offender believes that his conduct is against a dead body, this criminal intent does not exist. In environmental crimes, the offender must know that the substances added to the environment will cause pollution⁴⁴⁷

The offender must know that his criminal behavior adversely impacts and violates the interests protected by the Criminal Law. This means that the offender must be aware of the circumstances and facts relating to his behavior and determine the extent to which his behavior is hazardous. If the offender of the criminal behavior is unaware of such facts and commits his behavior without knowledge of its consequences, the criminal intent does not exist.⁴⁴⁸ This knowledge is composed of three aspects:

for violating the criminal statutes. Richard J. Lazarus, Assimilating Environmental Protection into Legal Rules and the Problem with Environmental Crime, 27 LOY. L.A. L. REV. 867, 881–82 (1994).

⁴⁴⁶ In the Kuwaiti, the issue of the offender's knowledge or awareness of the crime is based on the offender's knowledge of the material aspects of the crime and the incrimination provision governing the criminal behavior. Therefore, to determine whether knowledge of the crime exists or not, these elements have to be determined in every crime by referring to the provision of the Criminal law which incriminates the activity or the behavior committed. Kuwait S.C article 93 section 291, criminal Law, P.211,(2009)

⁴⁴⁷ Dr. Fouziyah Abualsatar, Non-intentional error in the criminal law, P. 482

⁴⁴⁸ The knowledge of the law requirement in the RCRA is more complicated, because the language in § 6928(d) employs the word “knowingly” differently in different provisions. Under the RCRA, knowledge of the violation is

1. Knowledge of the violated right;⁴⁴⁹
2. Knowledge of the danger and threat posed to the interests protected by the law;⁴⁵⁰ and
3. Knowledge of the time and place of the criminal conduct.⁴⁵¹

Some scholars believe that “an act is done knowingly if the defendant is aware of the act and does not act through ignorance, mistake or accident.”⁴⁵² While this definition requires awareness of the act, it does not explain which facts a defendant must know. In some contexts, the Court of Appeals states that a defendant must know that the material is waste and that it has the substantial potential to be harmful to others and the environment. It is less clear, however, that appellate courts have required knowledge of all non jurisdictional facts. For example, in the same case, the government would not be required to prove that the defendant knew that she did not have a permit, even though the absence of a permit is an element of the offense.⁴⁵³

Therefore, when criminal law renders illegal the “knowing violation” of a regulation or permit, it incorporates knowledge of the law into the elements of the offense. This is suitable in the majority of environmental crimes, because

relevant only in the two provisions that specifically require that the defendant “knowingly do something . . . in knowing violation of a permit or a regulation.” In *United States v. Wagner*, 29 F.3d 264 (7th Cir. 1994), the Seventh Circuit concluded that the word “knowingly” attached to conduct constituting a criminal offense does not alone necessitate knowledge or awareness of the fact of a violation. For example, to be convicted, one accused of possessing a machine gun must know both that he possesses a firearm and that it is a machine gun, but need not know that such possession violates a criminal statute. Similarly, one accused of possessing child pornography must know both that the material is pornographic and that the person depicted is in fact a child, but need not know that such materials are illegal.

⁴⁴⁹For example, in environmental crimes, the offender should know that he is adding harmful substances to environment. If the offender is unaware of such facts, his criminal intent does not exist.

⁴⁵⁰If the offender thinks that his behavior does not pose a threat to these interests, his behavior will not be deemed an intentional crime.

⁴⁵¹ Dr. Ahmad Abo Khatiwa, *Damage Crimes*, P. 210.

⁴⁵²Dr. Jmeel Abualbaqi, *Criminal protection the environment against pollution*, P. 23, (1998).

⁴⁵³Kuwait S.C article 13 section 204, *criminal Law*, P.496,(1995)

environmental regulations are so complicated that the criminal law must guard against convictions for mere misunderstandings or mistakes.⁴⁵⁴ That is, conviction should require proof that the defendant knew the law and knowingly violated it. In the alternative, a good faith, reasonable misinterpretation of the law should be a defense, especially when the alleged violation concerns exceeding a permit that the defendant could have misunderstood.⁴⁵⁵

In recent years, the distinction between knowledge of the elements of the offense and knowledge of the criminal law has become confused by a debate over the Supreme Court's 1971 decision in *United States v. International Mineral*. As set out below, *International Minerals*, properly read, does not alter this distinction or lower the burden of proof in environmental crimes.⁴⁵⁶ In *United States v. International Mineral*, the defendant shipped sulfuric acid without proper labeling in violation of Interstate Commerce Law regulations governing the transportation of corrosive liquids. Title 18 U.S.C. Section 834 provided criminal penalties for "knowingly violating these regulations." The Court held that this statute required proof that the company knew what it was transporting and how it was labeled but not that it knew of the regulation or what labeling the law required. The Court stressed that this interpretation did not amount to "strict liability" but only an application of the principle that ignorance of the law is no defense. Then, in the final sentence of the opinion, the Court added: "Where ... dangerous or deleterious devices or products or obnoxious waste materials are

⁴⁵⁴Dr. Faraj Horaish, Crimes against the environment, P133.

⁴⁵⁵Kuwait S.C article 19 section 93, criminal procedure, P.303,(1995)

⁴⁵⁶ Ronald C. Kramer. Climate Change: A State-Corporate Crime Perspective, 2012, Western Michigan University, available at http://www.envirosecurity.org/ecocide/nov2012/Kramer.R.C.%282012%29-ClimatChange_A_state-corporate_crime_perspective.pdf (last visited Jan. 10, 2016)

involved, the probability of regulation is so great that anyone who possesses or deals with them must be presumed to be aware of the regulation.” In the years since *International Minerals*, some courts and prosecutors have labeled this rule the “public welfare” doctrine.⁴⁵⁷

1. The Fair Notice Doctrine

A criminal prosecution cannot be supported by a regulation that is ambiguous or that fails to give “fair notice” of its clear meaning. In this way, when an authority fails to give “fair notice” in advance of its interpretation of an ambiguous regulation, the government penalize those who follow a different, reasonable interpretation of “violations” happening before the government clarifies its interpretation.⁴⁵⁸

The Kuwait Court of Appeal recently upheld the “notice” principle in a criminal case that involved a Japanese oil tanker whose operators considered the regulation prohibiting certain discharges of “oil” at sea. The government prosecuted the operators of oil tankers who discharged “muck,” or scrapings created when the insides of oil cargo tanks are cleaned, on the theory that such “muck” fell within the definition of “oil.” The Court held that the definition of “oil” was ambiguous and did not clearly include all oil-containing substances, such as the “muck” in issue. Thus, the Court dismissed the indictment, holding that the regulation could not support a criminal

⁴⁵⁷ *United States v. Hoflinat*, 375 (knowledge of absence of a permit is not an element of an RCRA violation)
⁴⁵⁸ *United States v. Weitzenhoff*, 35 F.3d 1275, 1289 (9th Cir. 1993) (lowering fair notice requirements for “conduct of a select group of persons having specialized knowledge” (quoting *Precious Metals Assocs., Inc., v. Commodity Futures Trading Comm’n*, 620 F.2d 900, 907 (1st Cir. 1980))). Although fair notice requirements are more relaxed in the business context,⁴⁷ statutory and regulatory requirements are “void for vagueness” if a reasonable person in the defendant’s position would be unable to determine what conduct is forbidden by the law. *Papachristou v. City of Jacksonville*, 405 U.S. 156, 162 (1972) (citations omitted); *Grayned v. City of Rockford*, 408 U.S. 104, 108 (1972).

prosecution.⁴⁵⁹

On the other hand, Many U.S. courts have adopted the fair notice doctrine against the government as described below. Such cases are relevant to criminal prosecutions. The due process interests guarding against unfair prosecution should be at least as strong in criminal cases as in civil cases. In *General Electric Co. v. EPA*, 53 F.3d 1324 (D.C. Cir. 1995), the D.C. Court of Appeals barred even a civil penalty for conduct that violated the EPA's interpretation of the Toxic Substances Control Act ("TSCA"), because the EPA's interpretation was not "ascertainably certain" from the regulation. General Electric violated the TSCA's requirement that facilities "dispose" of certain solvents containing PCBs by incineration. The company incinerated the solvents but first distilled them to recycle some of the dirty solvent, and the EPA disapproved when it found out. The Court upheld the EPA's interpretation on the ground that it must "defer" to agency interpretations unless they are arbitrary, capricious or "plainly wrong." However, it vacated the penalty charged, because the regulation was ambiguous, and the EPA had not given the company fair notice

In *Diamond Roofing Co. v. OSHRC*, 528 F.2d 645 (5th Cir.1976), the Fifth Circuit Court of Appeals similarly held that OSHA's regulation requiring railings on "open sided floors" was too ambiguous to support a penalty for unprotected "rooftops." The government argued that safety and health regulations should be "liberally construed" to further the public interest in safety and health. The Fifth Circuit held that those interests do not excuse compliance with due process. Even in the important area of public health, no penalty may be charged when the regulation does not actually

459 Kuwait S.C article 95 section 106, Environment Law, P.335,(2000)

express its requirements with “ascertainable certainty.”⁴⁶⁰

Many environmental regulations around the world are highly complex and even obscure, lacking any court or other authoritative interpretation, and suspected crimes often take place in complicated factual settings within large organizations. The requirement of “fair notice,” especially in such cases, is a main safeguard of due process.⁴⁶¹

2. Ignorance of the Environment Regulations

Kuwaiti courts should decide whether setting knowledge of a particular material element as a condition will create the defense of ignorance of the law. Courts try hard to avoid permitting such a defense out of respect for the familiar principle that ignorance of the law is not an excuse. But, while in most cases knowledge of the law should not be an issue, there are cases in which not recognizing ignorance of the law as a defense would violate due process. A court thus must balance the need to avoid creating such a defense against the need to avoid criminalizing innocent conduct.⁴⁶²

To achieve this balance, a court should consider whether not allowing the defense might encourage arbitrary enforcement, whether the defendant would or could have had notice of the law, and whether ignorance of the law does itself deserve blame. When the activity or the act is ordinary and unremarkable, a court could consider allowing ignorance of the law to be a defense. However, a court should not allow the

⁴⁶⁰ Diamond Roofing Co. v. OSHRC, 528 F.2d 645, 649 (5th Cir.1976)

⁴⁶¹ Andrew Clapham, The Complexity of International Criminal Law: Looking Beyond Individual Responsibility to the Responsibility of Organizations, Corporations and States, in FROM SOVEREIGN IMPUNITY TO INTERNATIONAL ACCOUNTABILITY: THE SEARCH FOR JUSTICE IN A WORLD OF STATES 233, 245–46 (Ramesh Thakur & Peter Malcontent eds., 2004).

⁴⁶² Kuwait S.C article 75 section 502, criminal Law, P.211,(2010)

defense when such activity or act poses a threat to public health and welfare and this is serious enough to be prohibited by a public welfare statute.⁴⁶³

These factors in the balancing process already play a role in courts' approaches to the ignorance-of-the-law defense. Instead of articulating this process, though, courts have responded by using different meanings of the words "the law" to justify their decisions concerning whether a material element should be modified by the culpability requirement. By alleging that a material element does not involve "the law," a court can require knowledge of that element while stating that it has not created an ignorance-of-the-law defense. Therefore, the Court of Appeals held that ignorance of "facts," as opposed to ignorance of "the law," can be a suitable defense.⁴⁶⁴

C. Criminal Intent in intentional Environmental Crimes

⁴⁶³ In the United States, environmental criminal provisions, in particular, illustrate how difficult it is to decide what "the law" means as used in the principle that ignorance of the law is no excuse. Environmental statutes often regulate undesirable activities by using a permit system. Permits are not issued unless the activity meets the standards promulgated by the statute or by regulation. The existence of the permit is a physical fact that may be confirmed in the same way that a shipper specifies the fact that the shipper is shipping hazardous waste. The essential difference between these two facts is that a permit is a fact brought into existence by operation of law. A permit exists only because a law has created it. Knowledge of the law, therefore, may be an essential part of knowledge of a fact. *International Minerals*, 402 U.S. at 560 at 560 (holding that "knowledge of the shipment of the dangerous materials is required. The sole and narrow question is whether 'knowledge' of the regulation is also required."); *id.* at 563 (stating that "we decline to attribute to Congress the inaccurate view that that Act requires proof of knowledge of the law, as well as the facts"); see also *id.* at 562 ("We therefore see no reason why the word 'regulations' should not be construed as a shorthand designation for specific acts or omissions which violate the Act.").

⁴⁶⁴ The knowledge of the law necessary for a person to know that a facility has a permit is different from knowledge that one's own behavior is regulated by law or that one's conduct is illegal. Therefore, a transporter of hazardous waste may be aware that a certain facility does not have a permit but may not be aware that the law regulates the transport of waste to such a facility. Even if the transporter knows that a statute regulates the transport of waste to a facility, the transporter may not know that the law makes such transportation illegal. As illustrated in the permit example, knowledge of the law may have a wide scope of meanings. It may mean anything from recognition of an item created by law to awareness of regulations to knowledge that conduct is illegal. As a result, the differentiation in *International Minerals* between ignorance of facts and ignorance of the law is, from a practical perspective, meaningless. The Model Criminal Law states that the law involved in a "legal element" is different from the law that defines the offense but must be part of some other legal rule. For example, theft requires awareness that property belongs to someone else. Awareness of property law in such a case is a legal element of a theft offense. Joshua D. Yount, *The Rule of Lenity and Environmental Crime*, 1997 U. Chi. Legal, F. 607, 615, 622 (1997). The rule of lenity provides that courts ought to construe ambiguous criminal statutes narrowly, usually in favor of the defendant.

The concept of criminal intent is essential for any system of criminal law, and the burden of proving that intent lies with government in all countries in the world. However, most appellate courts reviewing this issue have stated that the majority of criminal environmental laws, including felony provisions, are general-intent rather than specific-intent crimes.⁴⁶⁵ The prosecutor is not usually required to demonstrate that the defendant had a specific intent to violate the law. It is not necessary that the government prove that the defendant knew the exact identity of the substance being released into the environment or even that the disposal of the substance was governed by specific regulations; rather, criminal intent can be demonstrated by evidence that the defendant was aware of the potential of the substance to cause harm to persons or the environment.⁴⁶⁶

Claiming ignorance or misunderstanding of the law is generally not a defense. It might in some cases be a defense that a party relied upon an administrative action; but the defendant would have to prove reasonable reliance. It is not a defense to non-compliance that the corporate official took actions due to economic hardship or business necessity, such as when an official acts to save the company from having to close down a facility or risk people's jobs. This lessened intent requirement

465 Sarah Calcote, *Criminal Intent in Federal Environmental Statutes: What Corporate Officers and Employees Should "Know,"* 20 Am. J. Crim. L. 359, 368-69 (1992) (stating that "if courts apply the rationale of the public welfare offense to environmental statutes, a 'responsible corporate officer' could be criminally prosecuted for penal violations of environmental statutes without regard to requisite intent or participation in the violation.").

466 *United States v. Baytank, Inc.*, 934 F.2d 599, 612 (5th Cir. 1991); *United States v. Sellers*, 926 F.2d 410, 416 (5th Cir. 1991); *United States v. Dee*, 912 F.2d 741, 745 (4th Cir. 1990); *United States v. Merkt*, 764 F.2d 266, 273 (5th Cir. 1985).

considerably broadens the class of persons or entities who may be subject to criminal prosecution.⁴⁶⁷

Kuwaiti Criminal Law defines criminal intent in Article (41), which states that "the criminal intent will exist if it is proven that that offender had the intention to commit the behavior constituting the crime and to produce the effect penalized by law with regard to this crime."⁴⁶⁸ By reviewing the provision of Article (41), it becomes clear that the essence of criminal intent, i.e. its main element, is the intention to commit the prohibited behavior and to produce the effect penalized by law. However, this effect does not practically exist and does not play its role in constituting the criminal intent unless it is based on "knowledge". Therefore, the criminal intent is based on two elements. Intention is defined as "man's ability to control his conduct, whether positive or negative"⁴⁶⁹ Such intention is based on awareness and realization on part of the offender. In other words, the offender should have knowledge of the targeted purpose and the means he uses to achieve that purpose. Intention is one of the elements of criminal intent, which consists of a psychological tendency manifested in physical conduct committed by one of a person's organs and that adversely affect the interests protected by the criminal law to achieve an illicit purpose.⁴⁷⁰

Although intention is an element that should exist in all crimes whether intentional or unintentional, in intentional crimes, it is focused on the criminal conduct and the effect penalized by law, while, in unintentional crimes, it is focused on the

⁴⁶⁷ Jane F. Barrett & Veronica M. Clarke, Perspectives on the Knowledge Requirement of Section 6928(d) of RCRA After United States v. Dee, 59 Geo. Wash. L. Rev. 862, 872-73 (1991) (discussing the intent requirement in the context of environmental crime prosecutions).

⁴⁶⁸ Article (41) of Kuwaiti Criminal Law.

⁴⁶⁹ Dr. Abdel Wahab Houmad, Id, P. 90

⁴⁷⁰ Dr. Mahmoud Naguib Hosni, Ibid, no. 414, page 562

criminal conduct alone. The occurrence of intentional crimes requires a free intention or will. In other words, the offender must have a free will. Thus, intention in intentional crimes is the element that drives the offender to commit the criminal conduct, whether such conduct is positive or negative, and it is also the element that drives the offender to produce the criminal effect penalized by the law.⁴⁷¹

1. Common Law Requirement of Proof of Criminal Intent.

Historically, criminal liability was founded on “the concurrence of an evil-meaning mind with an evil-doing hand” The common law requirement of a literally evil mind has been called variously criminal intent or deliberate.⁴⁷² The opinion of the Supreme Court in *Morrisette v. United States*, 342 U.S. 246 (1952), which traces the historical development of the requirement of an evil mind, sheds light on how deeply rooted the concept of criminal intent is in US criminal jurisprudence.⁴⁷³ However, the application of this touchstone requirement to particular cases has been troublesome. Thus, twenty eight years later in *United States v. Bailey*, the Court noted that “few areas of the criminal law pose more difficulty than the criminal intent required for any particular crime.” A major cause of this difficulty, of course, is that the actor's state of mind is rarely susceptible of direct proof.⁴⁷⁴

In Kuwait, the common law recognized a distinction between crimes requiring proof of specific intent and those requiring proof of general intent. Specific intent

⁴⁷¹ Dr. abdu Alraouf Mahdi, *The result of criminal*, P 211

⁴⁷² *Morrisette v. United States*, 342 U.S. 246, 251 (1952); Wharton's Criminal Law § 27 (Charles E. Torcia ed., 14th ed. 1978).

⁴⁷³ *Morrisette v. United States*, 342 U.S. 246, 251 (1952), where the Court stated, "The contention that an injury can amount to a crime only when inflicted by intention is no provincial or transient notion. It is as universal and persistent in mature systems of law as belief in freedom of the human will and a consequent ability and duty of the normal individual to choose between good and evil."

⁴⁷⁴ *United States v. Bailey*, 444 U.S. at 394, 403 (1980).

crimes were characterized by a “malicious will,” i.e., an intent to disobey or disregard the law. General intent crimes, which include most of the environmental crimes proscribed under the criminal law, require merely proof that the accused had knowledge of the facts sufficient to render the conduct a crime. Unlike specific intent crimes, the prosecution need not prove a bad purpose or even that the defendant knew that his conduct was unlawful.⁴⁷⁵

The confusion engendered by the sometimes murky distinctions between specific intent crimes and general intent crimes in the American legal system led to attempts to reform federal law to establish workable principles for determining criminal intent. In 1962, the American Law Institute proposed a hierarchy of culpable states of mind. In descending order of culpability, they are: purpose, knowledge, recklessness and negligence.⁴⁷⁶

Different from most federal criminal statutes involving white collar crimes, environmental statutes usually require that the prosecution provide evidence that the defendant acted “knowingly.” The federal pattern jury instructions define “knowingly” to mean an act that is done voluntarily and intentionally, and not because of error, accident or other innocent reason. The word “knowingly” was added to ensure that no

⁴⁷⁵ Dr. Fadel Nassera'allah, General rules for the interpretation of the rules of Kuwaiti Criminal Law, P.227-229, (2010).

⁴⁷⁶ 42 U.S.C. § 6928(d), (e) (1988) (criminal penalties for knowing violations of RCRA); 33 U.S.C. § 1319(c) (1988) (prescribing criminal penalties for knowing violations of Clean Water Act)

one will be condemned for an act done because of error, accident, or other innocent reason.⁴⁷⁷

2. The Dilution of the Common Law Requirement of Criminal Intent

The requirement of proof of criminal intent under the Kuwaiti common law has been diluted both legislative and judicial. First, the Supreme Court has held that, for certain kinds of public welfare offenses involving hazardous substances and products, the criminal law may impose criminal penalties based on strict liability without proof of criminal intent. Second, the courts have stated that intentional ignorance of the facts to avoid prosecution may be deemed the equivalent of actual knowledge.⁴⁷⁸

D. Unintentional criminal acts stipulated in Criminal Law

Certain conduct is treated as an environmental crime without proof of criminal intent:

1. Recklessness

Recklessness in criminal issues means "faulty judgment, lack of skill or knowledge, and ignorance of something which should be known. Recklessness is represented in a positive action taken by a person without considering its danger or the consequences it might have". Recklessness occurs if the person does or refrains from doing an act without considering technical basics or the act is due to his rashness, misbehavior, or lack of technical efficiency.⁴⁷⁹ The person who commits these acts of unintentional

42 U.S.C. § 6928(d), (e) (1988) (criminal penalties for knowing violations of RCRA); 33 U.S.C. § 1319(c) (1988) (prescribing criminal penalties for knowing violations of Clean Water Act) Hon. Edward J. Devitt & Charles B. Blackmar, *Federal Jury Practice and Instructions* § 14.04 (3d ed. 1977)477

478 Kuwait S.C article 309 section 199, criminal Law, P.43,(2011)

⁴⁷⁹ Williams, Glanville. "Recklessness in Criminal Law." *The Modern Law Review* (1953): 234-236.

fault is doing a serious activity without regard to its danger to the interests protected by the criminal law.⁴⁸⁰

An example of recklessness in marine environmental crimes is non-compliance with the speed limit and the safety procedures while entering the narrow sea lanes by an oil tanker captain. Another example is failing to follow the required procedures while loading oil into an oil tanker by the person in charge of oil transportation operations. An example of recklessness in ordinary crimes is the person who throws a stone from a high building without considering the possibility of injuring any of the pedestrians below and such consequences have already happened. Similarly, a driver who turns his vehicle suddenly without warning pedestrians and consequently he hits someone or causes an accident is reckless.⁴⁸¹

2. Carelessness and Inattention

Carelessness and inattention mean a failure to take the necessary precautions required by the general duty of precaution and care to avoid the occurrence of a criminal result. Consequently, unintentional crime occurs when a person does not take the precaution that he should have taken through the experience of the ordinary man. As in the activities discussed above, here, the person is doing a criminal activity, but, unlike those activities, he really knows the nature of his behavior and the resulting harmful consequences. However, he takes the required precautions which may prevent the occurrence of such harmful consequences but he depends on circumstances in avoiding the occurrence of these results. For example, one who sprays agricultural fields with pesticides without making sure that no persons are near the fields or that his equipment

⁴⁸⁰ Low, Peter W. "Model Penal Code, the Common Law, and Mistakes of Fact: Recklessness, Negligence, or Strict Liability, The." *Rutgers LJ* 19 (1987): 539.

⁴⁸¹ Colvin, Eric. "Recklessness and criminal negligence." *University of Toronto Law Journal* (1982): 345-373.

used in oil transportation is safe before using them is committing a criminal act.

Another example in ordinary crimes is the building owner who starts destroying the building without taking the required precautions to avoid accidents. Similarly, the owner of a dangerous animal who delivers it to someone unable to control it due to his young age is committing a criminal act.⁴⁸²

3. Disregard for Regulations

Regulations in this context has a wide definition that contains all legal texts included in laws, resolutions, and instructions set for preserving order, security, and maintaining public health. An example of this in the context of unintentional crimes is the failure to follow the environmental laws and regulations if this conduct leads to the pollution of the environment or disregard for traffic rules or for the laws concerning building and demolishing if it leads to accidents.⁴⁸³

Disregard for regulations is often considered a punishable offence even if it does not lead to harmful results. If it leads to harmful results, then the perpetrator is liable for committing two crimes; the first is failure to follow the environmental laws and regulations, while the second is an environmental crime. If the two crimes result from a single action, a severe punishment is imposed on the perpetrator.⁴⁸⁴

Finally, the difference in the nature of unintentional crimes does not result in a difference in the punishment stipulated by the law, as the punishment of environmental crime is defined by the severity of the resulting damage that affects the environment, not by the nature of the unintentional crime. In addition, the aim behind the diversity in

⁴⁸² Fitzgerald, P. J., and Glanville Williams. "Carelessness, Indifference and Recklessness: Two Replies." *The Modern Law Review* (1962): 49-58.

⁴⁸³ Hansen, Karen M. "Knowing Environmental Crimes." *Wm. Mitchell L. Rev.* 16 (1990): 987.

⁴⁸⁴ Kadish, Sanford H. "Some observations on the use of criminal sanctions in enforcing economic regulations." *The University of Chicago Law Review*(1963): 423-449.

the nature of unintentional crimes is to describe the perpetrated action so that it can be adjusted from a legal aspect that facilitates for the judge the application of a suitable punishment.

III. The Relationship Between Criminal Liability And Civil Liability

It is also important to consider the relationship between criminal liability and civil liability with regard to the occurrence of a maritime incident. Initially, we can assume that, in every major maritime incident which results in an oil spill and an environmental impact, there will also be a deluge of civil cases against the ship-owner and crewmembers for damages based on negligence and punitive damages based on willful or reckless conduct. Nearly all of the issues that can later be the basis for large civil recoveries will be the same issues involved in most criminal prosecutions arising out of the same incident. Thus, since a criminal case will invariably be tried before the corresponding civil case, it is very important to preserve the viability of a civil defense by defending vigorously any criminal prosecution of the crew, corporation or corporate officers arising out of a maritime incident.⁴⁸⁵ In practical terms, this means that long before the civil case even gets into serious discovery, the issues relating to negligence, recklessness and the specific facts regarding what happened will have already been determined by a court and jury. For instance, a finding of guilt based on recklessness or negligence, because it is a finding beyond a reasonable doubt, can be introduced as a final determination of that issue in a subsequent civil trial. In other words, a party's civil liability, including liability for punitive damages, can for all intents and purposes

⁴⁸⁵ Lowndes, Charles LB. "Civil Liability Created by Criminal Legislation." *Minn. L. Rev.* 16 (1931): 361.

be decided by a criminal conviction arising out of the same incident dealing with the same issues and parties.

IV. Problems of Proving Environmental Crimes in Kuwait.

The injuries and damage caused by many environmental crimes in Kuwait may not be immediately obvious, and the threat they pose may “be gradual and silent, going undetected for years.” The victims of most environmental crimes are not as easily identified as those in a case in which the defendant is convicted of illegally dumping highly acidic wastewater into a city sewer line. At the other end of the line, the contaminated water badly burned two employees of the sewage treatment plant.⁴⁸⁶

Dangerous environmental pollution, such as toxic substances discharged illegally, often do not have immediate, discernable damage and may be absorbed into the tissues of the body, remaining there for years before their effect manifests itself usually in the form of disease. The slow manifestation of environmentally related harm shows the extent to which it may be difficult to identify the victims of environmental crimes. These crimes can often be too vague and difficult to evaluate and therefore create a continuing challenge for the court system.⁴⁸⁷

Prosecutors and investigators are often concerned that fines and administrative sanctions are insufficient to deter bad conduct, which is most often driven by greed.

Yet, imprisonment may not be the solution, because prison terms that incapacitate and

⁴⁸⁶ Kuwait S.C article 12 section 10, Environment Law, P.250,(1999)

⁴⁸⁷ In the United States, Congress has relaxed the usual standard of criminal intent in federal white collar crimes, i.e. frauds committed by business and government professionals, by providing criminal sanctions in environmental statutes for knowing and even negligent violations. As mentioned earlier, a statute that requires proof of knowledge requires only proof that the defendant “knows factually what he is doing,” not knowledge that his act or activity was illegal. Clean Water Act § 309(c)(1), 33 U.S.C. § 1319(c)(1) (1988); Clean Air Act § 113(c)(4), 42 U.S.C.A. § 7413(c)(4) (West 1983 & Supp.1991). United States v. Baytank, Inc., 934 F.2d 599, 613 (5th Cir.1991)

deter environmental criminals from recidivism impose a high price upon society or do not adequately seek to overcome the root causes of environmental law violations. The inadequacy of current methods indicates the need for additional sentencing strategies that can be coupled with the civil, administrative, and the already existing criminal penalties.⁴⁸⁸

There are many reasons to favor alternative sentences for environmental crimes that do not include prison or fines. Among these reasons are reducing expenses to taxpayers, keeping the employee as a productive member of society and the workforce, and concentrating on education and deterrence goals. In addition to the arsenal of sentencing possibilities for environmental defendants, models can provide quicker resolutions for smaller crimes, improve self-reporting and monitoring problems, and assure more positive outcomes by ensuring that offenders are held accountable and that the public can participate. These models have some similar goals to those of criminal and civil approaches, including deterring offenders from future lawbreaking and supporting offender rehabilitation.⁴⁸⁹

V. The Punishments of Environmental Crimes in The Kuwaiti Law

In December 2014, a new law was enacted to protect the environment. This law includes one hundred and eighty-one articles, twenty-nine articles of which are allocated to criminal penalties, which ranged from a warning to the imposition of a fine to capital punishment. Part 7 of this law focuses on the criminal penalties. For example, Article 180 of the Environmental Protection Law of Kuwait imposes the death penalty

488 Dr. Abu Alala'a Ali Alnimer, *Methods of proving criminal evidence*, P.50, (1992).

489 Dr. Ramzi Reyad, *The authority of the judge in assessing the evidence*, P. 193, (2004)

or imprisonment for life as punishment for dealing with nuclear waste within the territory of Kuwait. The first paragraph of Article 25 of the Environmental Protection Law stipulates that "the import, introduction, filling, flooding, or storing of nuclear waste or disposal of it are prohibited in any form within the whole territory of Kuwait". The second paragraph stipulates that "it is banned to allow the passage of sea, air, or land transports which carry any of such waste without a prior permit from the authority across the territory of the state in coordination with the concerned bodies of the state." Article 130 of the Environmental Protection Law stipulates that "any person who violates the provisions of Article 25 of this law shall be punished by death or life imprisonment and a fine of not less than 500,000 dinars and not more than 1,000,000 dinars. Any person who violates the provisions of Article 25 first paragraph of this law is liable to life imprisonment and a fine of not less than 250,000 dinars and not more than 500,000 dinars. Any person who violates the provision of Article 25 second paragraph must re-export the nuclear waste in question at his own expense. Article 141 stipulates the imprisonment of not more than six months and a fine of not more than 50,000 dinars for anyone who contaminates deliberately the marine environment provided in this law. Article 142 stipulates that, if the contamination of the marine environment was not deliberate, then the punishment is a fine of not less than 30,000 dinars and not more than 150,000 dinars.

Chapter Seven: Obstacles that Hinder Establishing an International Criminal Law to Combat Environmental Crimes

The crisis created by oil leakage caused by British Petroleum (BP) and which led to serious pollution of the Gulf of Mexico, renewed continued demands to apply criminal penalties to fight such crimes committed against the environment.⁴⁹⁰ Despite the huge amount of oil that caused such a disaster (according to estimation, more than two million gallons), the semi-enclosed nature of the Gulf of Mexico kept most of the oil spill inside the territorial waters of the United States.⁴⁹¹ However, in most cases, this kind of environmental disaster remains inside the territorial waters of the states where the disaster takes place. The effects of such environmental disasters expand to cover parts of other states' territorial waters. This occurred as the result of the Chernobyl disaster,⁴⁹² where a radioactive cloud covered the majority of Eastern Europe and affected many countries. It also happened in the environmental disaster caused by the Iraqi invasion of the State of Kuwait in 1990.⁴⁹³ This kind of disaster happens regularly now, and the environment, particularly the marine environment, is at risk. Despite continued development as witnessed by the provisions of international environmental law designed to combat this kind of environmental disaster, the solutions presented do not focus on the criminal aspect, which relates to the criminal penalties applied to combat the occurrence of such disasters.

⁴⁹⁰ Eric Holder, Attorney Gen., U.S. Dep't of Justice, Attorney General Eric Holder on Gulf Oil Spill (June 1, 2010) (transcript available at <http://www.justice.gov/ag/speeches/2010/ag-speech-100601.html>). (last visited Jan. 10, 2016)

⁴⁹¹ Linda A. Malone, The Chernobyl Accident: A Case Study in International Law Regulating State Responsibility for Transboundary Nuclear Pollution, 12 Colum. J. Envtl. L. 203, 205-06 (1987).

⁴⁹² Adam Markham, A Brief History of Pollution (1994) (providing an account of past and contemporary environmental disasters and linking instances of historical pollution to the urgent environmental problems of today).

⁴⁹³ <http://www.counterspill.org/article/gulf-war-oil-disaster-brief-history> (last visited Jan. 10, 2016)

Instead, most international environment conventions focus on the provisions that call for fighting environmental pollution, deal with its effects or limit its expansion. They do not obligate the state in which pollution has taken place to put into effect the provisions of its environmental criminal law and apply penalties in this regard.⁴⁹⁴ Therefore, some say that international law is unable to combat criminally cross-border environmental disasters for the following reasons:

1. It is difficult to perform the procedures of a criminal investigation into international environmental disasters because of the lack of cooperation by the authorities of the state where the disaster has taken place. This leads to failure to prove the tort, the criminal intent, and the causal relationship, and this, in turn, leads to failure to determine the person or the entity involved in such a disaster.
- 2- The internal criminal laws of most states are unable to try and to punish those involved in international environmental disasters for many reasons, including legislative restrictions in issues of the environment, the corruption of the managerial systems of such states, and the weakness of their environmental management.⁴⁹⁵

On the other hand, some international criminal provisions are included in some prominent conventions and in conventions that protect the environment from pollution indirectly, such as the first protocol of the Geneva Convention, which deems crimes committed against the environment during wartime as war crimes.⁴⁹⁶ Such protocol

⁴⁹⁴ presentation of political and legal responses to environmental catastrophes, see Robert R.M. Verchick, Facing Catastrophe: Environmental Action for a Post-Katrina World (2010).

⁴⁹⁵ John Vidal, Nigeria's Agony Dwarfs the Gulf Oil Spill. The US and Europe Ignore it, The Observer, May 30, 2010, P. 20.

⁴⁹⁶ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts art. 35(3), adopted June 8, 1977, 1125 U.N.T.S. 3 (entered into force Dec. 7, 1979). Mark Allan Gray, The International Crime of Ecocide, 26 Cal. W. Int'l L.J. 215, 217 (1995).

includes an explicit provision that prevents armed conflicts that lead to or are aimed at the destruction of the environment or causing harm to it. Some conventions contain explicit provisions that obligate the signatory states to apply criminal penalties against the violation of their provisions, such as the International Convention for the Prevention of Pollution from Ships⁴⁹⁷, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention), and many regional conventions deal with the pollution of oceans⁴⁹⁸, such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.⁴⁹⁹

The European Council ratified a convention for environment protection through the criminal law of the European Union. This convention contains many strict criminal provisions to protect the marine environment. Among those provisions are various criminal penalties, determination of criminal liability, and submission of periodic reports on the implementation of the provisions of the convention.⁵⁰⁰ The United Nations sheds light on the significance of criminal law for the protection of the environment through the conventions that combat organized crime that may result in environmental pollution. The Economic and Social Council of the United Nations advised authorities in all countries of the world to adopt a number of precautionary measures and criminal penalties within the constitutional and legal frameworks in

⁴⁹⁷ International Convention for the Prevention of Pollution from Ships, Nov. 2, 1973, 1340 U.N.T.S. 61 (modified Feb. 1978, entered into force Oct. 2, 1983).

⁴⁹⁸ Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, opened for signature Dec. 29, 1972, 1046 U.N.T.S. 120 (entered into force Aug. 30, 1975).

⁴⁹⁹ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal art. 4, Mar. 22, 1989, 1673 U.N.T.S. 125 (“The Parties consider that illegal traffic in hazardous wastes or other wastes is criminal.”).

⁵⁰⁰ For example, the European Union has enacted a series of measures inspired by the Erika Oil Spill. See, e.g., Third Package of Legislative Measures on Maritime Safety in the European Union, COM (2005) 585 final (Nov. 23, 2005), available at <http://www.un.org/documents/ecosoc/res/1994/eres1994-15.htm> (last visited Jan. 11, 2016) (containing Recommendations Concerning the Role of Criminal Law in Protecting the Environment). <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0585:FIN:EN:PDF>. (last visited Jan. 11, 2016)

accordance with the basic principles of criminal law to ensure the protection of the environment and incrimination of every act that causes harm to the environment.⁵⁰¹

However, all of these efforts exerted to protect the environment criminally remain limited and insufficient to obligate the countries of the world to apply criminal penalties to combat environmental crimes. The implementation of most of these efforts is restricted to some European countries. In addition, the European Council Convention for the Protection of the Environment through criminal law has not come into effect yet⁵⁰², while the efforts exerted by the United Nations did not achieve any effective results, let alone the removal of every reference to the environment in the UN Convention against Transnational Organized Crime.⁵⁰³

Some attribute the lack of criminal environmental legislation in international law to the keenness of many countries to deal with environmental crimes that take place on their territories through the provisions of their own environmental law instead of an international criminal law. The idea of combating environmental pollution through an international criminal environmental law is a recent idea.⁵⁰⁴

Therefore, to keep their sovereignty intact, the majority of the countries of the world do not prefer the idea of incorporating criminal provisions into international environmental conventions. Many countries think that enactment of an international criminal law to protect the environment will violate their sovereignty. Therefore, most countries prefer to deal with the crimes of environmental pollution through

⁵⁰¹ International Convention for the Regulation of Whaling, Sept. 24, 1931, 49 Stat. 3079, 155 L.N.T.S. 349.

⁵⁰² Convention on the Protection of the Environment Through Criminal Law, opened for signature Nov. 4, 1998, E.T.S. 172.

⁵⁰³ Protocol I, supra note 7.

⁵⁰⁴ Environment Protection and Biodiversity Conservation Act 1999 (Cth) (Austl.); Canadian Environmental Protection Act, S.C. 1999, c. 33 (Can.).

environmental laws and regulations rather than the provisions of criminal law. The European Council stressed this position regarding the purpose of environment protection by stating that many of the penalties that were applied to environmental crimes were enacted to contain people's angry reaction and demonstrations, which often arose after environmental disasters and accidents, not for the purpose of environment protection. This ensures that it is difficult to establish a comprehensive criminal environmental law to protect the environment from pollution.⁵⁰⁵

For example, on 23 July 2010, a Netherland court fined the Trafigura Company, a multinational company, a million euros, because it illegally exported poisonous wastes to many locations in Abidjan in the Ivory Coast. Although Trafigura was convicted in a Netherland court of illegally exporting the waste from the Netherlands, the company was given immunity from prosecution in Côte d'Ivoire. Trafigura claimed that the dumping and its aftermath were not its fault. The investigation undertaken by Amnesty International and Greenpeace concluded that Trafigura's claim lacked credibility.⁵⁰⁶ However, the Ivoirian government did not bring a lawsuit against the ship and neither cooperated with investigators nor responded to the court's correspondence.

⁵⁰⁵ However, the few notable evolutions that have emerged remain somewhat haphazard and uncoordinated. Their subject matter, the intensity of the prohibitions involved, and the modes of enforcement vary considerably. This uncoordinated approach is in stark contrast to the many areas of international criminal law that have become highly structured over the years, most notably through the operation of international criminal tribunals. Moreover, there is no commonly agreed upon criminological theory of the uses of criminal law to better protect the environment. Both international environmental law and international criminal law are booming disciplines in their own right, but their interaction remains, apart from a few exceptions curiously under-explored. While international criminal law increasingly appears to be the global community's preferred mode of enforcing its most cherished norms, colossal threats to the environment have arisen that remain unaddressed by it.

⁵⁰⁶ For example, in *Trafigura*, the company paid for its violations. Rb. Amsterdam 23 juli 2010 (Trafigura Beheer BV/de Staat der Nederlanden) (Neth.). The individual sentences reflect the lesser gravity of such offenses: a five year suspended jail term for the Captain of the ship carrying the toxic waste, and a 25,000 euro fine for the employee in charge of operations at Amsterdam harbor. *Trafigura* as a company was fined close to a million euros. See Rob Evans, *Trafigura Fined €1m for Exporting Toxic Waste to Africa*, *The Guardian*, July 23, 2010, <http://www.guardian.co.uk/world/2010/jul/23/trafigura-dutch-fine-waste-export>. (last visited Jan. 11, 2016)

Consequently, the Appeal Court rejected the claim because of the lack of cooperation on the side of the state in which the pollution took place.⁵⁰⁷

Some think that it is possible to overcome the difficulty of establishing an international environmental criminal law by establishing a new international crime called "Ecocide" under the jurisdiction of the Criminal Court.⁵⁰⁸ This proposal was an extension of former proposals calling for establishing an international criminal environmental court to combat the continued deterioration of the environment, which will cause harm to the life of the next generations. What characterizes this proposal most is that it was not only discussed by academics, but it also received a strong interest and support from many countries and environmental organizations, civil society associations, and environmentalists.⁵⁰⁹

After discussing the arguments that support the idea of applying international criminal penalties to combat the crimes of environmental pollution, and having reviewed the deterioration inflicted on the environment in general and the environmental disasters that have been on the rise, the logical question is: Why not establish international criminal law to combat environmental pollution, especially when the majority of the countries of the world understand the environmental threats suffered by the world and know that they share the hazardous results of environmental pollution? What are the obstacles and difficulties that hinder establishing a

⁵⁰⁷ Greenpeace Netherlands, Trafigura Avoids Prosecution for Dumping Waste in Ivory Coast, Eur. Coalition for Corp. Just. (Apr. 15, 2011), http://www.corporatejustice.org/spip.php?page=article&id_article=781. (last visited Jan. 11, 2016)

⁵⁰⁸ While the issue was not debated last year at Kampala, where ICC delegates may have already had too much on their agenda, it has been featured periodically at the U.N. Increasingly, the prospect of international criminal law has been raised in relation to what is probably one of the greatest dangers to the environment, global warming. The threat of global warming is creating a heightened sense of urgency and also poses intriguing questions about the proper scope of international offenses against the environment.

⁵⁰⁹ This particular effort has been spearheaded by Polly Higgins, an English barrister. Her proposal builds on earlier suggestions to create an offense of environmental degradation, ecocide, or genocide, and proposals to criminalize harm done to future generations

comprehensive criminal international law to combat environmental crimes, like the counterterrorism law, the anti-organized crime law, and the law of war crimes, given that the environmental crimes have no less destructive and harmful effects than other crimes suffered by the world? For all of these reasons and in an attempt to answer these questions, this chapter will discuss the restrictions and obstacles that hinder establishing an international criminal law to combat environmental crimes.

I. Many countries believe that establishing an international criminal law for the protection of the environment will adversely affect their sovereignty.

The insistence by countries on protecting and preserving their sovereignty rather than implement international law on their territories is deemed one of the most significant obstacles that hinder establishing an international criminal law to combat environmental crimes. Many countries claim that establishing an international criminal environmental law that applies penalties to those involved in environmental crimes will threaten their sovereignty.⁵¹⁰ For the same reason, these countries oppose the implementation of all provisions of the current international law.

Most provisions and regulations of international law depend directly upon international cooperation to apply them, which is why all international conventions contain a legal provision that stresses international cooperation among the signatory countries to execute these conventions' provisions. Moreover, environmental issues cannot be faced individually, but rather through the cooperation of the international

⁵¹⁰ Reisman, W. Michael. "Sovereignty and human rights in contemporary international law." *American Journal of International Law* (1990): 866-876.

community by holding international conferences, signing international conventions and through the activities of the international environmental organizations.⁵¹¹

On the other hand, many international legal experts think that directly applying international penalties to the perpetrators of environmental crimes in any state is not possible, because the provisions of international law work through national laws, i.e. by applying internal procedural provisions rather than by applying international legal provisions. The national criminal law is often more effective than international law regarding conducting investigations and making accusations, thereby applying criminal penalties to perpetrators as quickly as is required in the process of combating environmental crimes. Moreover, the majority of environmental conventions do not even contain criminal penalties to implement laws that protect the environment but stress that signatory countries should affect their criminal laws to combat environmental crimes.⁵¹²

For example, the classic principle of freedom of the high seas, even as it seeks to preempt unwanted assertions of sovereignty, has as one of its corollaries the exclusive jurisdiction of the flag state. The only exception is for the international crime of piracy, which can be prosecuted by all states. However, piracy does not include harm caused to the ocean environment. Boarding a ship to plunder it is still considered by the international community to be a graver crime than intentionally dumping significant

⁵¹¹ Examples of international environmental cooperation, environmental issues such as climate change and desertification have been consistently handled through international conventions and the conference mechanisms created by them. See generally United Nations Framework Convention on Climate Change, adopted May 9, 1992, 1771 U.N.T.S. 107 (entered into force Mar. 21, 1994); Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 148 (entered into force Feb. 16, 2005); United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, adopted June 17, 1994, 1954 U.N.T.S. 3 (entered into force Dec. 26, 1996).

⁵¹² Frédéric Mégret, Three Dangers for the International Criminal Court: A Critical Look at a Consensual Project, in 12 Finnish Y.B. Int'l L. 193, 207-09 (Martti Koskenniemi ed., 2001).

pollution from a ship into the oceans. The focus on piracy and attacks against ships greatly limits the ability of states to arrest and prosecute those responsible for environmental harms on the high seas.⁵¹³

Some scholars see that the way in which the provisions of conventional international law are applied, whether inside the territories of the countries or in international waters, presents a real challenge to those calling for the necessity that any environmental abuse should be internationally criminalized.⁵¹⁴ The international community has developed over decades some categories of criminal international legal provisions and rules for the purpose of criminalizing the acts that cause harm to the world. However, environmental crimes do not fall under any of these categories. These categories are considered below.

The first category of international criminal law regulations concerns combating the organized crime that takes place across international borders, such as drug trafficking and human trafficking. However, this category of international criminal regulations cannot be correctly or effectively applied independently of the national criminal laws. Coordination should occur between such international regulations and the national criminal regulations applied in the states in which this kind of crimes takes place.⁵¹⁵

⁵¹³This is distinct from the Marpol Convention, which only anticipates that the state of the ship's flag has jurisdiction. Although attempts to describe various types of ocean degradation as piracy (for example large-scale driftnet fishing) exist, they have failed thus far. This is also distinct from the marginal possibility that acts of piracy might lead to environmental catastrophes, which could then be prosecuted as piracy. Barry H. Dubner, *Human Rights and Environmental Disaster--Two Problems That Defy the Norms of the International Law of Sea Piracy*, 23 *Syracuse J. Int'l L. & Com.* 1, 6-11 (1997); Ylva Ugglå, *Environmental Protection and the Freedom of the High Seas: The Baltic Sea as a PSSA from a Swedish Perspective*, 31 *Marine Pol'y* 251 (2007).

⁵¹⁴Akehurst, Michael. "Jurisdiction in international law." *Brit. YB Int'l L.* 46 (1972): 145.

⁵¹⁵ Mohammed Saif-Alden Wattpad, *The Rome Statute & Captain Planet: What Lies Between "Crimes Against Humanity" and the "Natural Environment?"*, 19 *Fordham Env'tl L. Rev.* 265, 270 (2009).

The second category of international criminal law regulations includes those regulations and provisions designed directly to protect mankind rather than countries from genocide and crimes committed against humanity. This category of international criminal law regulations stresses the important and vital role played by the international community in protecting mankind from harmful crimes. The category is very concerned with combating all crimes committed against humanity regardless of the capacity of the perpetrator, whether it is a state, an organization, or even an individual, and also regardless of where the crime takes place, whether all of its elements take place on the territory of the state or in part of its territory as long as the crime has been committed against humanity.⁵¹⁶

The third category includes international legal regulations designed to protect countries with sovereignty from the aggression of other countries. As an example, Iraqi forces invaded and occupied Kuwait in the Second Gulf War. The international community did not accept this act, and an international coalition was formed with support from the UN General Assembly to force the Iraqi forces to leave Kuwait and to impose an international economic siege to obligate Iraq to comply with the resolutions of the United Nations that were issued during the Iraqi invasion of Kuwait.⁵¹⁷

Therefore, some scholars believe that the peculiar nature of environmental crimes does not match currently applicable international criminal legal regulations. That peculiar nature is different from the nature of other crimes committed against

⁵¹⁶ Devyani Kacker, *Coming Full Circle: The Rome Statute and the Crime of Aggression*, 33 *Suffolk Transnat'l L. Rev.* 257 (2010); Claus Kreß, *The Crime of Aggression Before the First Review of the ICC Statute*, 20 *Leiden J. Int'l L.* 851 (2007); Claus Kreß & Leonie von Holtendorff, *The Kampala Compromise on the Crime of Aggression*, 8 *J. Int'l Crim. Just.* 1179 (2010).

⁵¹⁷ O'Connell, Mary Ellen. "Enforcing the Prohibition on the Use of Force: The UN's Response to Iraq's Invasion of Kuwait." *S. Ill. ULJ* 15 (1990): 453.

humanity, as the latter have shaken the human conscience. For crimes committed against the environment, we cannot affirm that such crimes affect the human conscience, even if some acts committed against the environment are unacceptable.

Furthermore, human rights protected by international criminal regulations exist to serve one idea: the protection of the rights enjoyed by man. Thus, such regulations are not concerned mainly with protecting the natural environment, which presents an obstacle that hinders the application of international regulations to environmental crimes. In addition, the prosecution and proof of human crimes differs greatly from the prosecution and proof of crimes committed against the environment because of the widespread impact of environmental harm that may continue unnoticed for a long time.⁵¹⁸

On the other hand, the claim that crimes committed against the environment do not suit, in terms of applicability, with criminal regulations of the currently applicable international law can be refuted by the fact that the regulations of international criminal law, of whatever nature they have been issued in the first place, serve the interest of man and protect him from all acts that may cause him harm. This was stressed by the International Criminal Court. In other words, there is no difference, in terms of consequences, between the crimes of war and environmental crimes, since both cause harm to man.⁵¹⁹

⁵¹⁸ Steven Freeland, Human Rights, the Environment and Conflict: Addressing Crimes Against the Environment, 2 Sur - Revista Internacional de Derechos Humanos 112, 114-15 (2005); Eric Talbot Jensen, The International Law of Environmental Warfare: Active and Passive Damage During Armed Conflict, 38 Vand. J. Transnat'l L. 145, 146-47 (2005); Jessica C. Lawrence & Kevin Jon Heller, The First Ecocentric Environmental War Crime: The Limits of Article 8(2)(b)(iv) of the Rome Statute, 20 Geo. Int'l Envtl. L. Rev. 61, 64 (2007); Aurelie Lopez, Criminal Liability for Environmental Damage Occurring in Times of Non-International Armed Conflict: Rights and Remedies, 18 Fordham Envtl. L. Rev. 231, 234 (2007); Marcos A. Orellana, Criminal Punishment for Environmental Damage: Individual and State Responsibility at a Crossroad, 17 Geo. Int'l Envtl. L. Rev. 673, 673-74 (2005).

⁵¹⁹ Indeed, the progress of international criminal law is often very closely associated with the fortunes of

However, environmental crimes differ in their nature from other international crimes, not because environmental crimes are international crimes that cannot be combated, but rather because of the way in which their effects harm man are dealt with. It is also difficult to predict the possibility of the occurrence of such crimes' before they actually occur. Moreover, environmental crimes require special investigations and necessitate the substantiation of criminal intent to ensure successful litigation and to guarantee that the perpetrator of the environmental crime does not go unpunished.⁵²⁰

Thus, establishing an international environmental criminal law will not have an effect on any state's sovereignty. Such sovereignty consists in a compact, integrated system of laws. Therefore, it can be said that establishing an international criminal law to protect the environment from pollution and combating crimes that are committed against the environment will by no means adversely affect the sovereignty or laws of any state, but rather will have a positive impact on every state. Add to this that many international criminals may escape penalties because of the state's adherence to its sovereignty and its refusal to concede its immunity in the face of the international community's demands.⁵²¹

I. Poor administrative capabilities and states' inability to understand the real benefit of the law's protection of the environment

This restriction significantly hinders establishing an international criminal law to protect the environment from pollution. Many countries do not have administrations

international humanitarian law. San Antonio Cassese, On the Current Trends Towards Criminal Prosecution and Punishment of Breaches of International Humanitarian Law, 9 Eur. J. Int'l L. 2 (1998)

⁵²⁰ Sarah D. Himmelhoch, Comment, Environmental Crimes: Recent Efforts to Develop a Role for Traditional Criminal Law in the Environmental Protection Effort, 22 Env'tl. L. 1469, 1471 (1992).

⁵²¹ Nada Al-Duaij, Environmental Law of Armed Conflict 3 (2003); Symposium, The International Responses to the Environmental Impacts of War, 17 Geo. Int'l Env'tl. L. Rev. 565, 573 (2005); Carl E. Bruch, All's Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict, 25 Vt. L. Rev. 695, 698 (2001).

or administrative systems that can confront environmental problems. Many countries find it difficult to understand or realize the nature of the provisions of environmental law or the real benefit of an international environmental law designed to protect the environment. Many countries fail to keep pace with the rapid and continuing development of environmental systems, because the idea of a clean environment free from pollution may seem complicated and difficult to achieve, which may lead to challenges that the administrative capabilities of such countries cannot meet.⁵²²

Therefore, the idea of applying international penalties to those who harm the environment will have serious dimensions and procedural problems that many countries will not be able to face. Furthermore, many international companies use their premises to complicate international criminal procedures in order to escape penalty in case such companies commit any environmental violations. Therefore, there should be coordination between the national and international laws to ensure that such companies will not go unpunished.⁵²³

Administrative corruption experienced by many countries, especially developing countries, has increased the rate of environmental abuse. Many of these countries allow the process of illegal dumping on their territories for money. Such countries are not very serious about combating environmental crimes.⁵²⁴ In addition,

⁵²² Adam L. Moskowitz, *Criminal Environmental Law: Stopping the Flow of Hazardous Waste to Mexico*, 22 Cal. Int'l L.J. 159, 179 (1991).

⁵²³ Michael Anderson, *Transnational Corporations and Environmental Damage: Is Tort Law the Answer?*, 41 Washburn L.J. 399, 401 (2002).

⁵²⁴ For example, the compensation agreement signed between Trafigura and the government of the Ivory Coast has been criticized as hardly benefiting the victims. Only a quarter of the \$152 million paid by the company was used for compensation. See *L'affrèteur du "Probo Koala" aurait proposé un accord aux victimes ivoiriennes* [The Charterer of the "Probo Koala" Has Proposed a Settlement to Ivoirian Victims], *Le Monde* (Fr.), Sept. 17, 2009, http://www.lemonde.fr/afrique/article/2009/09/16/l-affreteur-du-probo-koala-auroit-propose-un-accord-aux-victimes-ivoiriennes_1241483_3212.html. (last visited Jan. 11, 2016) The same is true of the compensation paid by Trafigura following a London High Court Order that was supposed to more directly benefit 30,000 victims. Robert Verkaik, *Court Freezes Trafigura Compensation: Lawyers Concerned that African Ruling Could Deprive Toxic Waste*

the geographical spread of environmental harm arising from environmental crimes is an important factor that helps perpetrators of such crimes escape from penalty. Moreover, many countries find it difficult to coordinate procedurally and administratively with each other in terms of criminal investigation, determining criminal liability, and initiating litigation, especially if the environmental effects have extended to more than one country and when such harmful effects have been caused by a governmental administration.⁵²⁵

For example, in the *Trafigura* case, the Netherlands lacked legislation that would have allowed it to prosecute acts committed in the Ivory Coast, because neither its territory nor its nationals were involved. Moreover, because environmental offenses can have such global reach, states prosecuting them may face unprecedented problems of extraterritoriality and suspicions of interference in the internal affairs of other states. Additionally, some harm may be “unlocalizable” in that it occurs in many locations at once (e.g., global warming). The transnational--most notably North/South--nature of much of the harm caused to the environment also creates a permanent disjunction between perpetrators and victims, ensuring that those private actors responsible for the harm are shielded from its consequences.⁵²⁶

What makes these obstacles worse is that many countries wish not to bear the consequences of international criminal penalties arising from their environmentally abusive acts and the burdens arising from the international criminal litigation and

Victims of £30m, *Independent*, Nov. 5, 2009, <http://www.independent.co.uk/news/world/africa/court-freezes-trafigura-compensation-1814793.html>. (last visited Jan. 11, 2016)

⁵²⁵ See the United Nations Environment Programme for examples of the many elements and actors encompassed by the rubric of “the environment.” U.N. Env’t Programme, <http://www.unep.org> (last visited Jan. 11, 2016)

⁵²⁶ Ray Michalowski, International Environmental Issues, in *Environmental Crime: Enforcement, Policy, and Social Responsibility* 315, 318 (Mary Clifford ed., 1998).

criminal lawsuits not only because of the cost of such procedures but also because of their failure to perform such procedures. This may draw the world's attention to the poor capabilities of such countries and the administrative corruption they suffer. Thus, these countries may be rated lower on the scale of development, which, in turn, will reduce their opportunity to attract investments and international companies to do business in them.⁵²⁷

For example, the threat of criminal sanctions might deter a state or companies operating or incorporated within it from participating in certain environmentally damaging but otherwise economically worthwhile activities that would fall under the criminal prohibition. This presents a classic free rider problem, in which some states are unlikely to consider themselves bound by international criminal obligations and, as a result, will be free to reap the benefits of environmental protection while acting outside of the rules and while others must pay the costs associated with abiding by those same rules. States may thus be tempted to engage in “beggar thy neighbor” policies that shift the responsibility and costs of prosecution to other states. Intensive economic competition may further encourage states to “insource” crime and thus benefit from failing to shoulder their share of the global duty to prosecute.⁵²⁸

⁵²⁷ Garrett Hardin, *The Tragedy of the Commons*, 162 *Science* 1243 (1968).

⁵²⁸ Consequently, a few states may end up bearing a disproportionate share of the burden of prosecuting those who commit international environmental offenses. Belgium faced this problem when its universal jurisdiction law exposed it to the possibility of becoming the world's courtroom, a sort of dumping ground for causes that would not have found a forum anywhere else. Belgium ended up assuming responsibility for matters the rest of the world did not want to address and for which it got little in exchange. In this type of situation, other states might benefit from the positive externality of fewer international criminals becoming fugitives and the deterrence of would-be criminals by the efforts of a few countries. However, such third-party states essentially free ride on the efforts undertaken by others, without paying the price. For example, these states will avoid offending other states, resulting in fewer foreign policy complications. In the case of Belgium, the cost became too much to shoulder, and it substantially narrowed its universal jurisdiction law. One of the lessons learned from this situation is that any system of international criminal punishment based solely on the good will of an *avant-garde* is likely to be unsustainable in the long term.

In addition, it is difficult for many countries to balance industrial progress aimed at achieving development and environmental conservation. The increasing global industrial revolution has continued to be the real obstacle that hinders establishing an international criminal environmental law. The rapid industrial growth and the world's permanent need for development and achieving welfare have pushed the major international companies to compete with each other industrially to meet the world's increasing requirements for technology. In contrast, this has led to an overuse of environmental resources whether renewable or not. This in turn has led to the deterioration of elements of the environment.

The international community is incapable because of the influence and control of the major international companies over the centers that would otherwise enact environmental laws and regulations in many countries. Therefore, the attempt to set an international criminal law to protect the environment will undoubtedly conflict with the economic interests of major companies, and, thus, it is inconceivable that an environmental criminal environmental law can be established to penalize the companies that commit environmental crimes.

III. Organizational complexity of environmental law

The way in which the international community deals with environmental challenges and problems during the past decades has helped to draw attention to the idea of establishing an international criminal environmental law to combat environmental crimes. Local and international efforts are always focused on the theories of tort and nuisance to deal with the environmental effects caused by

environmental pollution.⁵²⁹ The ease of providing evidence to prove the tort and environmental harm contrasts with proving criminal intent and a causative relationship in environmental crimes.⁵³⁰ Moreover, the special nature of the regulations of international law may indirectly lead to reinforcing the idea of the lack of international legal regulations to protect the environment at the criminal level, because the environment is being protected through international environmental conventions. These regulations are deemed a branch of international law, which has a special nature, since it concerns mainly the regulation of the political relations between countries and systems. Thus, setting a criminal regulation to protect the environment is not among the priorities of this law. International law favors the resolution of issues relating to environmental pollution by urging countries to activate their administrative systems by executing environmental international conventions, which do not contain criminal penalties to combat pollution. In addition, the regulations of international law depends on encouraging and urging countries to cooperate in resolving environmental issues, since international law is focused on international principles, which include building trust, negotiation, persuasion, and transparency in exchanging information.

International law is also holding conferences to reinforce the relationship among countries and on reviewing opinions to confront environmental challenges instead of using force and the criminal law.⁵³¹ For example, many international norms are articulated in terms of guidelines and codes of conduct. Indeed, there seems to be a

⁵²⁹ Keith N. Hylton, *When Should We Prefer Tort Law to Environmental Regulation?*, 41 Washburn L.J. 515, 515-16 (2001); Christopher H. Schroeder, *Lost in the Translation: What Environmental Regulation Does That Tort Cannot Duplicate*, 41 Washburn L.J. 583, 584 (2001).

⁵³⁰ Joseph Smith & David J.C. Shearman, *Climate Change Litigation: Analysing the Law, Scientific Evidence & Impacts on the Environment, Health & Property* 35-103 (2006) (describing public law and private law causes of action potentially available to climate change litigants).

⁵³¹ Daniel Bodansky, *What's So Bad About Unilateral Action to Protect the Environment?*, 11 Eur. J. Int'l L. 339, 339-40 (2000).

fascinating schism in professional and legal cultures between “consensual,” “horizontal” public international environmentalists and top-down “urge to punish” international criminal law enthusiasts.

The world of international environmental law tends to be more regulatory and technocratic, focused for example on tinkering with the economic determinants of behavior affecting the environment and the broad responsibility of states, whereas the world of international criminal law tends to emphasize individual guilt, immorality, and gross wrongdoing. In practice, these are professional milieus that have emerged separately and continue to ignore each other.⁵³²

On the other hand, the ambiguity and the lack of clarity of environmental information announced by the majority of countries may lead to difficulty with the application of the criminal international law, since many countries may hide or change their environmental information and acts. This would criminally condemn these countries, because their violation of international regulations, bylaws, and criteria relating to the protection of the environment would lead to difficulty with the application of criminal law, since the regulations and provisions upon which the criminal law is based always depend on certainty and clarity, as they are related to important issues, such as conviction and innocence. This has made some jurists call for executing an international convention that obligates the countries to provide real

⁵³²For a discussion on the segmentation of international legal regimes, see Oscar Schachter, *International Law in Theory and Practice* 18-30 (1991); Joost Pauwelyn, *Bridging Fragmentation and Unity: International Law as a Universe of Inter-Connected Islands*, 25 *Mich. J. Int'l L.* 903 (2004) (discussing the fragmentation of international law).

information regarding their environment to facilitate dealing with criminally environmental incidents.⁵³³

However, some jurists argue in this regard that applying penalties under criminal law to violations of environmental law may be unreasonable. Therefore, they believe that the best way to deal with such violations is to put into effect the local and international administrative regulations, because the organization of the environmental law is complex. The best solution to such organizational complexities can be achieved through an administrative law for each state, rather than establishing an international criminal environmental law.⁵³⁴

IV. The nature of legal regulations of criminal environmental law

In addition to the restrictions discussed above that may hinder the existence of an international criminal environmental law, some factors in the criminal law itself may hinder establishing an international criminal law to combat environmental crimes. These factors can be summarized as follows:

A. The different nature of harm in environmental crimes in comparison with other crimes under international law.

Environmental pollution often arises out of activities, factories, and facilities that help achieve the welfare and prosperity of the society and make the life easier for the people. In contrast, non-environmental crimes, such as war crimes and crimes against humanity and organized crimes, lead to the destruction of society and have no

⁵³³Mohamed Shahabuddeen, Does the Principle of Legality Stand in the Way of Progressive Development of Law?, 2 J. Int'l Crim. Just. 1007 (2004) (explaining the legality principle and arguing that it does not inhibit the progressive development of the law, notwithstanding narrow circumstances).

⁵³⁴Michael Faure, Towards a New Model of Criminalization of Environmental Pollution: The Case of Indonesia, in Environmental Law in Development: Lessons from the Indonesian Experience 188, 188 (Michael Faure & Nicole Niessen eds., 2006).

benefit to society. Therefore, investigating harm that arises from environmental crime and recognizing whether it is a result of a legitimate activity that achieves benefit to the society conflicts with the purpose of the criminal law, which is not concerned with the benefit achieved by criminal behavior. In other words, it is impossible, according to the criminal law, to discriminate between legitimate pollution arising from activities that relate to the development of the society and illegitimate pollution arising from criminal activities.⁵³⁵

B. The manner in which environmental pollution spreads.

The manner in which environmental damage spreads may hinder efforts to establish an international criminal environmental law. It is difficult to harmonize environmental damage that covers a wide scope and extends the territory in which the environmental damage occurs with the general regulations of tort theory, upon which providing evidence under the modern criminal law is based. Harm should be clear and definite so that a lawsuit can be brought against perpetrators because of the rapid spread of environmental pollution in addition to the inability to predict its occurrence. This does not suit the regulations of the criminal law, which requires clarity with regard to the harm caused by the crime and the effect arising from it at a single place, and the need to report the occurrence of the crime quickly to initiate the procedures of criminal prosecution.⁵³⁶

C. Shared liability for environmental crimes.

⁵³⁵ Michael Faure, Towards a New Model of Criminalization of Environmental Pollution: The Case of Indonesia, in *Environmental Law in Development: Lessons from the Indonesian Experience* 188, 188 (Michael Faure & Nicole Niessen eds., 2006).

⁵³⁶ Robert L. Rabin, *Environmental Liability and the Tort System*, 24 *Hous. L. Rev.* 27, 29-33 (1987).

Shared liability for environmental crimes makes it more difficult to establish an international criminal law to combat environmental crimes. This leads to an inability to determine criminal liability and to prove the causative relationship between the act that constituted the environmental crime and the criminal result or effect. Consequently, all involved parties will go unpunished.⁵³⁷

D. The occurrence of the majority of environmental crimes is unintentional, such as carelessness and failure to comply with regulations.

The fact that most environmental crimes occur as the result of negligence or carelessness undermines the effectiveness of the penal provisions of the criminal law, because the application of a criminal penalty is intended to deter the future commission of the crime. The tougher the penalty, the more effective is the deterrent. But the idea of deterrence cannot be achieved unless the crime is intentional; i.e. those crimes in which the perpetrator has a criminal intention of committing a criminal act and achieving a criminal result. Because most environmental crimes happen through unintentional behavior, the idea of deterrence cannot be achieved, because the perpetrator of the crime did not have the intention to commit the crime. Therefore, many countries prosecute the perpetrators of environmental violations through tort law regulated by the civil law and compensation.⁵³⁸

E. Difficulty with providing evidence of environmental crime.

⁵³⁷ Harmen van der Wilt, Joint Criminal Enterprise: Possibilities and Limitations, 5 J. Int'l Crim. Just. 91, 91 (2007). System criminality refers to forms of crime that are committed thanks to the acts of many individuals, generally as a result of state sanction and in pursuance of a policy.

⁵³⁸ Allison Marston Danner & Jenny S. Martinez, Guilty Associations: Joint Criminal Enterprise, Command Responsibility, and the Development of International Criminal Law, 93 Calif. L. Rev. 75 (2005); George P. Fletcher & Jens David Ohlin, Reclaiming Fundamental Principles of Criminal Law in the Darfur Case, 3 J. Int'l Crim. Just. 539 (2005); Darryl Robinson, The Identity Crisis of International Criminal Law, 21 Leiden J. Int'l L. 925 (2008). Command responsibility refers to the responsibility of commanders, especially but not only military commanders, for the criminal acts of their subordinates that they ordered or, having learned about them, failed to punish.

The difficulty of providing evidence of the occurrence of environmental crime and the way such a process takes place reduce the opportunities to establish an international criminal law to protect the environment. Proving the occurrence of environmental crimes requires extensive time and effort and help from many scientific laboratories that may not be available in many countries as compared with conventional crimes that are easier to prove.⁵³⁹

⁵³⁹Charles J. Babbitt, Dennis C. Cory & Beth L. Kruchek, Discretion and the Criminalization of Environmental Law, 15 Duke Envtl. L. & Pol'y F. 1, 43-45 (2004).

Chapter Eight: Difficulties Facing Enforcement of the Kuwait Environment Law

Kuwait's concern for environmental protection arose earlier than in other countries of the Middle East; Kuwait started enacting laws protecting the environment in the 1960s. However, the Kuwaiti environment in general and the marine environment in particular still suffer from increased levels of pollution compared with other GCC countries, whose concern for the environment arose later.⁵⁴⁰

The main reason for the increased levels and cases of pollution in the State of Kuwait is the poor manner in which the Environmental Public Authority has enforced the law protecting the environment. Moreover, the marine environment in the State of Kuwait suffers from many sources of pollution, the largest of which is oil pollution arising from the process of exploring for and refining oil. This chapter will discuss the obstacles that hinder the appropriate enforcement of the law protecting the environment to combat the different sources of pollution.⁵⁴¹

I. Poor Performance of Most Governmental Authorities Responsible for Environment Protection

The poor performance of government environmental administrations is one of the biggest obstacles to the proper enforcement of environmental laws in the State of Kuwait. Poor administrative procedures of the governmental authorities responsible for protecting the environment and combating pollution leads to increased levels of pollution.⁵⁴² The main reason behind poor administrative procedures in this regard is conflicting administrative duties and responsibilities among the different environmental

⁵⁴⁰ http://www.beatona.net/CMS/index.php?option=com_content&view=article&id=597&Itemid=84&menuid=&lang=ar (last visited Jan. 12, 2016)

⁵⁴¹ <http://www.greenline.com.kw/ArticleDetails.aspx?tp=492> (last visited Jan. 12, 2016)

⁵⁴² <http://www.mohamoon-kw.com/default.aspx?Action=DisplayNews&ID=5728> (last visited Jan. 12, 2016)

administrative agencies. This leads to the failure of these administrative agencies to assume and execute their legal duties and responsibilities.⁵⁴³

As an example of this lack of clarity of environmental responsibilities and competencies, the Law of Environment Protection states that the Environmental Public Authority has authority over all issues relating to environmental protection and combating pollution. However, in reality, the Ministry of Communications is the authority charged with protecting the marine environment and combating the pollution of such environment. It started applying the 1964 law preventing oil pollution from occurring in navigable waters.⁵⁴⁴ Pursuant to the law establishing it in 1977, the Municipality of Kuwait assumed the responsibility of executing the regulations relating to the cleaning of streets and districts and combating the pollution thereof. It continues to be the proper authority for combating pollution from roads. The Ministry of Agriculture, pursuant to the law establishing it, is charged with the conservation of natural resources and combating pollution that would harm them. The Ministry of Oil is charged with combating the pollution arising out of the activities of extracting, refining, and exporting oil carried out by the Ministry itself or any of the companies owned by it whether on ground or sea, although combating the marine pollution also is one of the responsibilities of the Ministry of Communications.⁵⁴⁵

⁵⁴³ <http://www.mohamoon-kw.com/default.aspx?action=DisplayNews&ID=2728&ParentID=45&Type=5> (last visited Jan. 12, 2016)

⁵⁴⁴ The first article of the Environment Protection Act (2014) and the second article of the Prevention of Pollution of Navigable Waters Act (1964). http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=005585&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL (last visited Jan. 12, 2016)

⁵⁴⁵ The Prevention of Navigable Water Pollution With Oil (1964), Safety and Protection of Public Facilities and Resources of Public Health Act (Decree No. 18 of 1978), <https://www.baladia.gov.kw/main-web/strategy/safetylaw.htm> (last visited Jan. 12, 2016)

This blurring of authority and responsibility among these various agencies has led to their failure to assume and execute their duties. An example of this obstacle is the Kuwaiti government's failure to deal with the issue of the red tide that occurs on the shores of Kuwait and continues to kill thousands of fish. The government has not determined the real cause of the death of fish due to the lack of advanced systems that would help identify the causes and sources of pollution in the Kuwaiti marine environment.

In addition, the majority of employees working in the Environmental Public Authority lack experience in environmental issues, because the law establishing the Environmental Public Authority does not require such experience as a condition of employment by the Authority. Although the Law of Environment Protection states that the Authority should have a general manager who should have specialization and experience in the fields relating to the environment, the majority of general managers of the Authority do not have either specialization or experience in environmental issues.⁵⁴⁶

Furthermore, the environmental authorities do not have advanced environmental laboratories. This leads to the failure of such authorities to be able to identify causes and sources of pollution and hence to identify the most effective ways to combat pollution. Since most authorities concerned with the environment in Kuwait lack advanced environmental laboratories, they resort to much less advanced laboratories of private environmental companies to identify the sources of pollution, which leads to obtaining contradictory results about the causes and sources of pollution. In this way,

⁵⁴⁶ <https://www.google.com.kw/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#safe=active&q=%D8%A7%D9%84%D9%85%D8%AF+%D8%A7%D9%84%D8%A7%D8%AD%D9%85%D8%BI+%D9%81%D9%8A+%D8%A7%D9%84%D9%83%D9%88%D9%8A%D8%AA>, (last visited Jan. 12, 2016) <https://www.youtube.com/watch?v=6obJxj9SvoQ> (last visited Jan. 12, 2016)

the perpetrators of environmental crimes go unpunished. In addition, the governmental authorities do not have early warning devices for combating environmental disasters.⁵⁴⁷

II. Most Oil Companies Involved in Marine Environment Pollution Enjoy Judicial Immunity

With an area equivalent to the area of the State of New Jersey, Kuwait is deemed the tenth biggest producer of oil and gas in the world.⁵⁴⁸ Kuwait exports three million barrels of oil daily, and this amount is increased from time to time to control global oil prices or to compensate for the shortage in global production, as occurred during the Iraq Liberation War and the Libyan Revolution.⁵⁴⁹

Since 2013, Kuwait has sought to increase its production capacity to four million barrels daily by 2020 by developing its oil facilities. All of these millions of oil barrels are exported only via the sea through a single means of transportation — massive oil tankers, most of which are owned by the state-owned Kuwait Oil Tanker Company. To facilitate the process of oil exportation, the State of Kuwait established oil tanks and refineries onshore and offshore. However, this process causes much pollution to the Kuwait marine environment in addition to the pollution arising out of the operations of discharging the ballast water carried by the oil tankers into the sea during the process of filling their tanks with oil. These operations, which cause

⁵⁴⁷ Article (4) Environmental Protection Act states that "The Enforcement Higher Council shall be formed under the chairmanship of the Prime Minister or the First Deputy Prime Minister and the membership of a number of ministers to be selected by the Chairman of the Enforcement Higher Council. The EPA's Director General shall be a member of the Enforcement Higher Council and he shall act as a reporter of the Council, The Enforcement Higher Council shall include in its membership three persons who shall be duly competent and experienced in the environment protection field whose appointment shall be made by virtue of a decree for four years renewable energy or another similar qualification, and such decree shall decide their remuneration. The Council shall issue the internal regulations that regulate the working procedures therein and the manner of adopting its decisions. The Enforcement Higher Council shall, within the general policy of the government, take all necessary measures that protect the territorial areas against pollution, of whatever source, and achieve the objectives provided for in this law"

⁵⁴⁸ <http://money.cnn.com/interactive/news/economy/worlds-biggest-oil-producers/> (last visited Jan. 13, 2016)

⁵⁴⁹ https://en.wikipedia.org/wiki/Petroleum_industry_in_Kuwait (last visited Jan. 13, 2016)

pollution to the Kuwaiti marine environment, are carried out deliberately and necessitate legal accountability from the Environmental Public Authority that is the appropriate public authority pursuant to the law protecting the environment.⁵⁵⁰

Nevertheless, the law in Kuwait does not allow any entity to litigate against the government, any of its administrative agencies, or any of the state-owned companies, because they have judicial immunity. Although individuals and societies concerned with environmental protection are not able to litigate against governmental administrations when any environmental pollution occurs, such societies often draw the government's attention to environmental violations committed by governmental administrations or companies and ask them to end such violations. For example, the Green Line Environmental Group asked the government to investigate the Kuwait Oil Company's leakage of hazardous chemical substances into the sea in Shuaiba. Although there was evidence that the company was involved, the company denied the claim and brought a libel lawsuit against the Green Line Environmental Group. The company alleged that the claim caused it moral damage. However, the judge acquitted the Green Line Environmental Group. Nevertheless, the Kuwait Oil Company went unpunished, as it enjoyed judicial immunity.

Article 172 of the Environment Protection Law states that “no citizen or society concerned with environment protection may resort to the administrative systems with the purpose of enforcing the provisions of the Environment Protection Law”.⁵⁵¹ This means that, in the State of Kuwait, individuals or societies concerned with environmental protection cannot bring a lawsuit directly against any government

⁵⁵⁰ <http://www.aljarida.com/news/index/2012781074> (last visited Jan. 13, 2016)

⁵⁵¹ Article (172) of the Environment Protection Law

administrative agency. Consequently, they can seek relief only by asking the government to disclose the details of the violation of environmental law. The Environmental Public Authority can bring a lawsuit against the a violating entity provided that this entity is a private company that is not controlled or owned by the government as occurred in the Mishref crisis described herein.⁵⁵²

In the Mishref situation,⁵⁵³ the Environmental Public Authority did not bring a criminal prosecution against those who had caused the damage that occurred to the environment. Instead, it brought a lawsuit against the company that was operating the Mishref plant for its alleged breach of its contractual obligations. The Environmental Public Authority did not bring a lawsuit against the official employees who were involved in the destruction of the plant because of their carelessness, because they committed crimes against the environment but because they intentionally damaged a public facility owned by the state.⁵⁵⁴

III. Lack of Clear Provisions in the Environment Protection Law

On 26 June 2014, a new Environment Protection Law was issued, which consisted of 181 articles regulating the objective, procedure, and crimes relating to the environment. The new law contained a complete chapter with 31 articles that regulate criminal penalties imposed for environmental violations. In contrast, the former Environment Protection Law, which was enacted in 1995, consisted of 15 articles, only

⁵⁵² <http://news.kuwaittimes.net/environmental-disasters-kuwaiti-beaches-hospital-area/> (last visited Jan. 13, 2016)

⁵⁵³ Id. Mentioned at page 117

⁵⁵⁴ <http://www.aljarida.com/news/index/2012740412> (last visited Jan. 13, 2016)

one of which imposed criminal penalties. The new Environment Protection Law regulates all the objective and procedural issues relating to the environment.⁵⁵⁵

Despite the large number of articles contained in the new Environment Protection Law, all governmental authorities responsible for the enforcement of its articles always have questions about the meaning of its phrases and terms and also about the nature of their environmental requirements as stated by this law. In part because of the large number of articles contained in this law, a contradiction between its articles may be found especially when the law is implemented. The ambiguity of some of the phrases in its provisions leads to the inability to enforce them in the way the legislature intended. This may be attributed to the hasty enactment of the law in addition to the fact that the legal phrases of the law were formed by people who were not specialists in the field of the environment. In the majority of the articles of the law, an authority creates a responsibility for complying with certain obligations, but such obligations are not determined or defined, which leads either to the failure to comply with such obligations or to enforcement of the law in a way differently than intended by the legislature.

In the following articles, the “relevant authority” responsible for the activities to be regulated is unclear and ambiguous. With multiple authorities’ responsibilities often overlapping, it is impossible to hold any authority responsible or liable for compliance failures.

1. Article 23: The consent of “the relevant authority” should be secured upon the import or export of hazardous and chemical materials. Also issuing

⁵⁵⁵ <http://www.epa.org.kw/uploads/Law%20No%2042%20of%202014%20-%20english.pdf> (last visited Jan. 13, 2016)

permission in this regard is conditional on the testing, compliance and verification procedures completed by the designated authorities or qualified companies for this purpose. The executive provision of this law shall determine the governing procedures and requirements in this regard as well as the required recourse and the responsibilities of competent authorities towards the same.⁵⁵⁶

2. Article 30: Solid municipal wastes should be disposed of pursuant to environmental conditions and criteria determined by the provisions of this law. "The relevant authorities" shall complete the infrastructure necessary for recycling the solid municipal wastes within five years maximum from the issue date of this law.⁵⁵⁷

3. Article 37: "The relevant authorities" shall, within five years from the date of issuance of this law, carry out a complete survey of the types, quantities and sites where asbestos waste exists in the country. Also they shall dispose of these hazardous wastes in qualified sites for this purpose, and the government shall bear the financial obligations resulting from the collection, transport and disposal of these wastes from private residences and governmental facilities areas.⁵⁵⁸

4. Article 38: "The relevant authorities" that are concerned with the construction of sewage networks and storm water networks shall obtain the necessary environmental approvals prior to the construction of the same. Also they shall maintain and control the same in order to ensure the safety of the marine

⁵⁵⁶ Article (23) of the Environment Protection Law

⁵⁵⁷ Id, Article (30)

⁵⁵⁸ Id, Article (37)

environment as well as the quality and efficiency of the work in treatment plants.⁵⁵⁹

5. Article 39: "The relevant authorities" shall set the necessary standard specifications for all recycled materials, their type, nature and utilization mechanisms, in such a manner as shall ensure the safety and purpose of such utilization. The State shall grant recycled water in the territorial lands of the State, which lands are compliant with the standard specifications and the priority and preference in their projects as a support for the recycling industries.⁵⁶⁰

6. Article 57: "The relevant authority" shall prepare, develop, implement and update the national plan for disposal of ozone depleting materials and they shall supervise the implementation of the same in cooperation with the concerned authorities including regional and international organizations.⁵⁶¹

7. Article 86: "The relevant authority" shall notify the Ministry of Foreign Affairs so as to inform the diplomatic and consular representatives of the State to which the pollution source belongs and that caused the pollution incident, the supporting evidence and the actions taken by that State to eliminate the pollution. The relevant authority shall advise the neighboring countries as well as the regional and international organizations of this incident. The provisions of this law shall determine the concerned authority and the responsibilities of other authorities in the country towards the incident.⁵⁶²

⁵⁵⁹ Id, Article (38)

⁵⁶⁰ Id, Article (39)

⁵⁶¹ Id, Article (57)

⁵⁶² Id, Article (86)

8. Article 107: "The relevant authority" shall determine the pasturing capacity in land areas based on the pasturing ability in the State. "The relevant authority" shall update the pasturing sites every ten years maximum. In all cases, all types of pasture in the islands and protected areas are prohibited. Also "the relevant authority" shall provide the necessary monitoring abilities in this regard, and the provisions of this law shall determine the liabilities of each party and the mechanism for issuing an annual follow-up report.⁵⁶³

9. Article 111: "The relevant authorities" shall develop clear working strategies within the scope of their work related to the environment and shall be duly connected with time tables, execution mechanisms and the annexed projects thereto. The Environment Higher Council shall determine the authorities concerned with the setting, approval of these strategies and their annual execution follow-up. Also the EPA shall set the general framework for preparing and monitoring these strategies and guarantee the necessary integration between them.⁵⁶⁴

10. Article 123: " The relevant authority " within two years from the issue of this law, shall determine the conditions and standard specifications for all the devices, equipment, systems, machinery and energy consumable materials. The import of any non-compliant materials with the said specifications shall be prevented, and the provisions of this law shall determine the concerned

⁵⁶³ Id, Article (107)

⁵⁶⁴ Id, Article (111)

authorities, with identifying such specifications issuance mechanisms and the warranty of its application.⁵⁶⁵

For the chapter on criminal penalties, paragraph 1 of Article 25 of the Environment Protection Law states that it is prohibited to import, bring, landfill, dump, store, or get rid of nuclear waste in any way anywhere in the territory of Kuwait. The second paragraph states that permitting the passage of marine, air or land means of transportation carrying such waste through the territory of Kuwait is banned in coordination with relevant public authorities.⁵⁶⁶

In Article 130 of the Environment Protection Law, the legislature states that violators of the provisions of Article 25 of the Environment Protection Law shall be sentenced to death or life imprisonment and a fine of not less than five hundred thousand Kuwaiti dinars and no more than one million Kuwaiti dinars. The second paragraph of the same article states that violators of the provisions of Article 25, first paragraph, shall be subject to a sentence of life imprisonment and a fine of no less than two hundred and fifty thousand Kuwaiti dinars and no more than five hundred thousand Kuwaiti dinars.⁵⁶⁷

Another example of legal ambiguity that prevents criminal prosecution relates to the provisions criminalizing the improper disposal of nuclear wastes. Each individual or entity that violates the provision of paragraph 2 of Article 25 is obligated to export the nuclear waste that is the object of the crime at their own expense. By reviewing the provision of Article 25 concerning the ban on bringing nuclear waste or allowing the

⁵⁶⁵ Id, Article (123)

⁵⁶⁶ Id, Article (25)

⁵⁶⁷ Id, Article (130)

passage of such waste through the territory of Kuwait and Article 130 concerning the penalties for violating Article 25, the following points will become clear.⁵⁶⁸

First, it was a good act on the part of the Kuwaiti legislature in paragraph 1 of Article 25 to prevent absolutely and without any exceptions the existence of any nuclear waste inside the territory of Kuwait whether through importing for whatever the reason, whether it is with the aim to dump, store or get rid of it in any way.⁵⁶⁹

Second, in paragraph 1 of Article 25, although the legislature bans the passage of nuclear waste by any means of transport through the territory of Kuwait and in coordination with the relevant government authorities, the legislature sets an exception by making it possible to transport nuclear waste through the territory of Kuwait if the transporter of such waste obtains a permit from the Environmental Public Authority. This exception has rendered the content of the paragraph of such article ineffective, because the goal of preventing the passage of nuclear waste through the territory of Kuwait is not a procedural matter aimed at ensuring that the transporter of waste has obtained a permit to transport such waste through the territory of Kuwait, but rather because the transportation of such waste is hazardous and an accident may happen during the transportation thereof leading to an environmental disaster in the territory of Kuwait.⁵⁷⁰

Third, in the first paragraph of Article 130, the legislature states that violators of the provisions of Article 25 of the Environment Protection Law shall be subject to a sentence of death or life imprisonment and a fine of no less than one hundred thousand Kuwaiti dinars and no more than one million Kuwaiti dinars. In the second paragraph

⁵⁶⁸ Id, Article (30)

⁵⁶⁹ Id, Article (25), paragraph 1

⁵⁷⁰ Id.

of the same article, it states that violators of the provisions of Article 25, first paragraph shall be subject to a sentence of life imprisonment and a fine of no less than two hundred fifty thousand Kuwaiti dinars and no more than five hundred thousand Kuwaiti dinars. This paragraph of Article 25 concerns the prevention of bringing nuclear waste or allowing the passage of such waste through the territory of the State of Kuwait. It is inexplicable that this article contains two penalties for the same crime.⁵⁷¹

Fourth, the wording of the second paragraph of Article 25 focuses on those who allow the passage of nuclear waste rather than those who transport such waste. The paragraph requests that those who granted permission for the passage of means of transportation (the authority responsible for the administration of land, marine and air ports) not allow any means of transport carrying nuclear waste to pass through the territory of Kuwait without a license from the Environmental Public Authority. The paragraph states that, without a prior license from the Authority, no marine, air or land ports can get permission to carry any nuclear waste through the territory of Kuwait.⁵⁷²

Fifth, although the crime of transporting nuclear waste without permission through the territory of Kuwait consists of an original perpetrator, who transports such nuclear waste, and a partner, who allows, without permission, the transportation of nuclear waste through the territory of Kuwait, the legislature states in the second paragraph of Article 25 that it is prohibited to permit the transportation of nuclear waste by any means of transportation through the territory of Kuwait. In other words, the

⁵⁷¹ Id. The legislature should have set gradual penalties. The penalty for violating the first paragraph of Article 25 should have been the death penalty or life imprisonment and a fine of no less than five hundred thousand Kuwaiti dinars and no more than one million Kuwaiti dinars and the penalty for violating the second paragraph of this article should have been life imprisonment and a fine of no less than two hundred fifty thousand Kuwaiti dinars and no more than five hundred thousand Kuwaiti dinars. All violators of the provision of Article (25) have to transport the nuclear waste outside the country at their own expense

⁵⁷² Id.

legislature restricts criminalizes the process of permitting the transportation of nuclear waste without a license rather than criminalizing the very process of transporting such waste without permission.⁵⁷³

Sixth, the wording of the second paragraph of Article 25 is ambiguous, because the legislature focuses on addressing the administrative authority that allows the passage of nuclear waste through the territory of the State of Kuwait. This paragraph should be reworded as follows: “The passage of marine, land, or air means of transportation carrying such nuclear waste through the territory of Kuwait is prohibited if it is done without obtaining a prior license from the Environmental Public Authority in coordination with the relevant state authorities. In this case the incrimination will include the transporter of nuclear waste without a license, being deemed the original perpetrator and those who allow the passage of nuclear waste through the territory of Kuwait without a license, despite their knowledge of its hazardous nature. Those who allow transport deserve the same penalty as is applicable to the original perpetrator pursuant to the provisions of Articles 52 and 53 of the Kuwaiti Criminal Law.⁵⁷⁴

⁵⁷³ Id.

⁵⁷⁴ Articles (52) and (53) of the Kuwaiti Criminal Law.

Conclusions:

This thesis has discussed protection of the marine environment under the international law and Kuwaiti criminal law. Although most of it has discussed the inadequacies of Kuwait laws to deal with criminal prosecutions of environmental laws, the Kuwait environmental law finds its roots in obligations under international conventions. It has explained how the problem of pollution afflicting the marine environment is fought under such laws. The focus has been to explore solutions for the main obstacles that hinder efforts to combat the pollution of the marine environment in the state of Kuwait.

It has been obvious through the discussion included in the eight chapters of the thesis that such obstacles are the main cause of the continuing increase in the levels of pollution and the rate of environmental crimes committed, especially against the marine environment. These obstacles also lead to the ineffectiveness of both the 1978 Kuwait convention and Kuwaiti environmental law.

The main obstacle that hinders efforts aimed at combating pollution of the marine environment is that the 1978 Kuwait Convention does not effectively achieve its assumed role in the field of protecting the marine environment and fighting crimes against the environment. This obstacle may be overcome by adopting measures similar to those found in Resolution No. 7, which was issued in 1987 by the Council of the European Community. Adapting such effective measures would enable the members of the 1978 Kuwait convention to locally include penalties against environment violations such as fines. The fines collected would be used to establish a special environmental

programs for the benefit of the members of the Kuwait convention. Such strong measures include extreme additional penalties such as shutdown of the facilities involved in pollution and the cancellation of the licenses granted to companies that have committed environment violations in the waters of the Arabian Gulf. Moreover, these measures should be reviewed annually in order to assess their effectiveness.

Thus, one of the most important reasons that make it necessary for the State of Kuwait to adopt the recommendations included in this thesis is that the country has often taken the initiative in the field of environmental protection in the GCC region. The State of Kuwait's keenness on environment began in the early 1960s. The Holy Qur'an orders us to conserve water and to utilize the resources on earth in a way that does not cause damage to the elements of the environment. In addition, Kuwait is deemed one of the Middle East countries that faced the most environmental disasters.

Recommendations:

Aside from the Kuwaiti Convention's vague language and its negative impact on national legislations in member states, the case of Kuwait faces difficulties in its environmental laws that render them ineffective, but can be avoided through the unilateral implementation of the following policies:

1. A law abolishing judicial immunity enjoyed by the wholly or partially state-owned companies should be enacted. Under such law, these companies could be litigated against by the Environment Public Authority or individuals when such companies commit environmental violations stated in the environmental law. Depriving such companies of judicial immunity will lead to anybody's ability to litigate them directly by giving standing to private citizens and NGOs. This, of course, will make such companies reconsider their actions before committing any environmental crimes. It will also enable the Environment Public Authority to litigate such companies and enforce criminal penalties against them. Needless to say, such measures would have the effect of reducing corruption within the legal process concerning environmental crimes by putting citizens and corporations face to face in an interest-driven undertaking. It will also spread public awareness of the nature of environmental crime and its long-term effect on public health and wellbeing.
2. Individuals should be enabled to sue any facility whether state-owned or private because individuals have the right to live in a clean, pollution-free environment, and because any behavior on part of such companies against the environment is deemed an attack on such right.

3. The ambiguous articles of the Kuwaiti law of environment should be rephrased to be clear and applicable in a precise manner.
4. The administrative and professional authority of the Environment Public Authority's employees should be enhanced through training courses and through their participation in conferences on environment. Being the entity responsible for fighting pollution and environmental crimes, the Environment Public Authority should perform its role more attentively.
5. Competent environmental courts should be established to consider environmental cases, and judges experienced in environmental issues and environment law should be appointed in such courts.
6. To achieve the principle of deterring the perpetrators of crimes against the environment, Kuwaiti authorities should enforce the provisions of the criminal law if the penalty stipulated pursuant to it is tougher than the penalties of environmental law. An example of this is the environmental disaster of Mishref power plant. In this case, Article No.141 of Environmental law provides that the penalty of causing Marine environment's pollution intentionally does not exceed six months. Concerning the Mishref disaster, Kuwaiti authorities could have demanded the application of the criminal law with its Article No. 250 which states that the penalty of intentionally causing any damage of public utility which provides main services to citizens can be exceeded to reach a sentence to life imprisonment.

7. Article No.144 of Environmental Law related to the possibility of conciliation and settlement in the prosecution of environmental crimes should be abolished because it renders the law useless. It also allows room for corruption and selective application of the law.
8. “The Public Environment Authority” agency should be dissolved, and an independent ministry specializing in environmental affairs should be established. This will illuminate the heavy responsibility of management of the environment, and the magnitude of the issue. It will also show that the Kuwaiti government is serious about dealing with environmental issues.
9. Penalties stipulated pursuant to environmental law should suit the severity of the crime and judges should be granted the discretion to apply these penalties according to the consequences of the crime on the environment. It is not effective to apply a mere six-month jail term as penalty to destroying the marine environment.
10. A special department to manage the environmental crises and disasters should be established to set plans and create constructive ideas about how to deal with environmental disasters. These plans should be implemented in relevant governmental authorities.
11. Kuwaiti authorities should establish a special environmental prosecution and investigation department to investigate environmental crimes and follow up environmental lawsuits. The prosecutors and investigators working in such department should have sufficient experience in environmental issues.

12. Oil pollution in the State of Kuwait should be combated by enacting criminal provisions stated under the law of environment protection to penalize the oil companies and facilities that commit environmental violations. The penalties in this regard should include the temporary or permanent shutdown of the company or the facility involved in pollution.

13. Precautionary measures should be implemented to ensure that pollution is combated before it exacerbates. This can be achieved through introducing and assessing early warning systems of environmental disasters.

With adoption of reforms such as these, Kuwait could resolve its marine pollution

Problems and set an example for countries around the world that are experiencing

marine pollution problems.