

Petroleum and Sustainable Development: The Role of International Conventions

Tumaini Gurumo¹, Han Lixin²

¹ Dalian Maritime University, School of Law, Dalian, China

² Dalian Maritime University, School of Law, Dalian, China

Abstract. Of recent, a number of scholars have written on the subject of petroleum and sustainable development. Petroleum industry has contributed a great deal to the world development. Nevertheless, development brought by petroleum industry has been accompanied by considerable environmental adversity. Internationally there are a number of international legislation governing not only preservation and protection of environment but also rights of the victims of oil pollution. The conventions could play a greater role in governing behavior of actors in petroleum industry for a sustainable development but there is a setback to the application of international conventions in State parties. Although most of the States have ratified relevant conventions, there are challenges hindering effective application of the conventions. This paper highlighted environmental concerns posed by petroleum industry; examined the importance of international conventions and challenges facing convention application. At the end, the paper analyzed possible ways to deal with the challenges. Among other things the authors considered change of behavior on the part of all actors in the petroleum industry as a means to conduct business in a manner that promote sustainable development.

Keywords: Petroleum, environment, international convention, sustainable development

1. Introduction

Petroleum has contributed and is still contributing to the development of the world economy. There is something important that must be considered on this development; is it negative or positive development? This paper is inspired by the special connection existing between petroleum industry and pollution of marine environment by oil. In particular, the paper will look at petroleum, petroleum industry and sustainable development. Thereafter, it will examine the role of international conventions in the protection of marine environment. Particular interest will be on civil liability and compensation. Special consideration will be put on persons and industries both ashore and at sea that in one way or another are touched by practices of petroleum industry throughout the journey to sustainable development. Despite the adaptation and coming into force of a number of international conventions directly dealing with right of the users of the sea and its amenities against oil pollution at sea, there is a difficulty in the application of these conventions in individual states. Challenges facing application of international conventions will be discussed in this paper. What can be done to improve this state of affair in order to achieve a meaningful co-existence between petroleum industry and environmental sustainability?

2. Petroleum and Development

2.1. Importance of Petroleum, the Industry and sustainable Development

¹ PhD. Candidate of Maritime Law, School of Law, Dalian Maritime University, CHINA. Tel. : +86 15609865686; Fax: + 86 411 8472 8505

Email address: tgurumo@yahoo.com

² Dr. Professor of Maritime Law, Director of Maritime Law Department and Institute of International Maritime Law, Dalian Maritime University, CHINA.

Petroleum industry involves exploration, extraction, refining, transportation, marketing etc. Importance of petroleum and its products to the development of the world cannot be overemphasized. Petroleum plays a great role in the production of energy throughout the world. In point of fact, it is the world's primary energy source [1]. Both technological and economic development has been contributed much by petroleum. On the other hand, petroleum industry has contributed to the loss of other industries like fisheries and tourism, as also degradation of marine environment through oil pollution at sea. It is worthy to note that sustainable development has been interpreted in a numerous different ways. On top of that, its applicability is still facing criticism. Nevertheless, this subject is equally important in as far as development is concerned. Landmark definition of sustainable development is one that meets the needs of the present without compromising the ability of future generations to meet their own needs [2]. Environmental sustainability and economic sustainability are essential parts of sustainable development. Therefore, Petroleum industry activities must focus on both environmental sustainability and economic sustainability throughout the journey to sustainable development.

2.2. Environmental concerns

Petroleum and marine environment are directly connected. Petroleum contributes to the damage of marine environment and its amenities. Exploitation and exploration of sea-bed for oil and gas, off-shore oil installations and transportation of oil through the sea may not be the most polluting activities in as far as petroleum industry is concerned, but once a major spill of crude oil occurs at sea it is indeed disastrous. The world witnessed the first biggest oil spill through the Torrey Canyon in 1967. Furthermore, to name but a few, the Exxon Valdez (that ground in Prince William Sound, Alaska, spilled approximately 40,000 tons of crude oil), the Erika (spilled approximately 30,884 tons of fuel oil and polluted over 400 kilometres French coast), the Prestige (broke in two and sunk west of Vigo –Spain. Approximately 63,000 tons of heavy fuel oil was spilled) [3]. On top of that, there is the Deepwater Horizon Oil Spill of 2010 which is so far considered the largest oil spill of all times. In the named oil spill incidents, the adverse effects of hydrocarbons has been demonstrated evidently; the damage to shoreline, marine ecosystem, fisheries and coastal amenities are remarkable. Such damage corresponds to financial, commercial, and other related losses [4]. Preventive measures, clean-up operations and restoration, property damage have all proved to cost to a great extent both resources and time. Besides, the cost of damage done to the environment can neither be quantified nor fully recovered.

3. Selected International Conventions

3.1. Relevant international legal regime for oil pollution liability and compensation

There are public and regulatory international conventions addressing marine oil pollution. The United Nations Convention on the Law of the Sea 1982 (addresses protection and preservation of marine environment); International Convention for the Prevention of Pollution from Ships 73/78 (emphasizes on the prevention of pollution from ships including oil pollution); International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969 (addresses issues of intervention by coastal states in case of oil pollution in the high seas); International Convention on Oil Spill Preparedness, Response and Co-operation 1990 (provides for guidelines on the establishment of measures for effectively dealing with oil pollution incidents). Although all these conventions provides among other things for the protection and preservation of marine environment from oil pollution, none of them provide for protection of the rights of users of the sea and its amenities from oil spills. It is noteworthy that oil pollution incidents have contributed to going down of other businesses especially in the fishing industry, thereby contributing to backward development for such victims.

After the Torrey Canyon incident, the world community appreciated the need for specific convention addressing issues of liability and compensation for pollution caused by oil spills [5]. Under the auspices of the International Maritime Organization (IMO) there have been adopted several conventions addressing civil liability for oil pollution damage. The following forms the current international legal regime for oil pollution liability and compensation:-

- International Convention on Civil Liability for Oil Pollution Damage of 29 November 1969

(CLC 1969)

- International Maritime Organization Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage of 29 November 1969 (CLC 1992)
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 18 December 1971 (ceased to be in force in 2002)
- International Maritime Organization Protocol of 1992 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 18 December 1971 (Fund 1992)
- Protocol of 2003 to amend the International Convention on the Establishment of an International Fund Compensation for Oil Pollution Damage 1992 (Supplementary Fund 2003)
- International Convention on Civil Liability for Bunker Oil Pollution Damage of 21 March 2001 (Bunker 2001)

3.2. Role of international conventions in protecting victims of oil pollution damage

CLC 1969 was the first liability convention on oil pollution by persistent hydrocarbons. The rationale for the convention was to establish uniform international rules and procedure for determining liability; and to ensure adequate compensation for victims of escape or discharge of oil from ships. The convention limited itself to pollution from ships carrying oil in bulk as cargo; liability is channelled to the ship-owner; basis of liability is strict liability, which means there is no need to prove fault or negligence by the victims; and provides for compulsory insurance on the part of the ship-owner. In 1992 there was a major amendment of the CLC 1969. The amendment was in form of a stand-alone protocol (i.e. CLC 1992). The establishment of CLC 1992 considered the importance of maintaining viability of the international oil pollution liability and compensation system. Among other things it provides for a wider scope of application of the convention (referring to changes made on the meaning of ship, pollution damage, incident and geographical scope of application of the convention) and enhanced compensation.

Fund 1992 provides for compensation where the ship-owner is not liable under the CLC 1992 or incapable of fully meeting his financial liability as provided under CLC 1992, while Complimentary Fund 2003 complement where Fund 1992 could not fully provide compensation. The idea is not to put the entire burden onto the shoulders of the ship-owners but rather share with cargo owners which in this case are oil importers. Therefore, oil importers contribute to the Fund 1992. There are set criteria for a claim to qualify compensation. Therefore not all claims are compensable under CLC 1992 and Fund 1992. It is worthy to note that there are difficulties in proper assessment and quantification of damage to environment as marine environment does not have a quantifiable market value [6].

Bunker 2001 provides principles of liability and compensation for oil pollution damage originating from the bunkers of the ship. Although it has some different features (especially in relation to responsible person), this convention is fundamentally built on the firm foundation of the CLC regime (especially on issues of strict liability and compulsory insurance). It is considered to fill the gap left by CLC regime [7] as it regulates oil pollution from ships other than those carrying oil as cargo.

The international legal regime for oil pollution liability and compensation is playing a great role in governing discharge of oil into the sea in consideration to other users of the sea and its amenities by ensuring liability for polluters and compensation for victims of pollution. Compensation for clean-up costs and preventive measures as well as for environmental damage have been offered to affected countries, while compensation for property damage, consequential loss as well as pure economic loss has been offered to affected individuals in fish, fishing and tourism industries[8]. The incentive offered by this regime have contributed much to the protection of marine environment, even the number of oil pollution incidents over decades from the establishment of the regime has been decreasing dramatically [9]. Nevertheless, the application of these conventions has been facing some difficulties.

3.3. Challenges facing application of conventions

Application of international conventions involves implementation in state parties. State parties are legally bound to implement relevant provisions of the conventions. Although it has been very functional in

predicting the law and procedure that is common throughout the world, the application of international convention has not been smooth in some circumstances.

Among the difficulties in the application of the convention lies on compulsory insurance. Although the importance of compulsory insurance to ensure compensation for oil pollution victims cannot be over-emphasized, the coming into force of the Bunker 2001 in November 2008 brought some difficulties especially in the issuance of Certificates as it involves more ships comparing to the CLC regime [10].

With more conventions on oil pollution damage, it has proved complicated in some circumstances to determine which convention should be applied in a certain incident. Specifically, under the Article 4.1 of the Bunker 2001 it is provided that the convention does not apply to pollution damage as defined in the CLC 1992 whether or not compensation is payable in respect of it under that convention. This means in certain circumstances oil pollution would occur and neither CLC 1992 nor Bunker 2001 will be applicable [11].

On the other hand, there are parts of petroleum industry that are not covered by international conventions. Victims of oil pollution from off-shore installations are not protected by the international legal regime for oil pollution damage as there is no specific convention into force addressing liability for spills from off-shore installations.

Moreover, there are different legal systems applicable in different member states. This has been a great challenge in the application of international conventions. Besides, different courts even in the same state may interpret conventions in different ways. As a result there emerge issues including the holding liable of party other than the ship-owner in as far as CLC 1992 is concerned as it happened in the Erika incident.

Furthermore, as the conventions increase in number so could be time and energy consuming paper works for not only regulators but also operators of the petroleum industry. There is therefore an impending need to seek for ways to eliminate (if not to mitigate) such challenges facing application of international conventions. On the other hand, petroleum industry actors must focus and make effort on the protection and preservation of marine environment for sustainable development.

4. Measures to be taken by petroleum industry

Petroleum industry has an important role to play in the global environment protection endeavors. The first role is that of effectively adhering to the guidelines and requirements of conventions already in force. On the other hand, the industry must be self initiating in the issues of environment preservation and protection. Considering the fact that the industry has done very well in the economic development of the world, being conscious of marine environment should be a big step towards sustainable development. There is a need for a clear focus on preventing oil pollution from happening [12]. In that way, the industry will ensure and promote not only safety to its existence but also to its productive co-existence with other industries for a sustained development.

It is high time for the operators of the petroleum industry together with the industry stakeholder to consider a change of behavior for a long-term achievement. It involves inculcating culture of genuinely putting environmental sustainability at the centre of issues in realization of economic sustainability in the petroleum industry. By use of relevant expertise together with innovative technology petroleum industry could achieve its goals without hindering other industries from achieving their respective goals in the furtherance of universal civilization.

5. Conclusion

Petroleum industry is among important industries for the world development. However, activities of the industry have been involved in the pollution of the sea. Protection of marine environment forms part of ingredients of sustainable development. Achieving sustainable development needs not only sustainable economy, but also environmental sustainability.

International conventions provide for uniform rules and procedures. Conventions play a great role in the protection and preservation of marine environment. Legal regime for liability and compensation for oil pollution damage have contributed to the best practices of petroleum industry and even in the reduction of the number of oil pollution incidents globally. International conventions are a product of deliberations of

States. A successful international convention is not only the one that obtains enough ratification to enter into force, but also one capable of being afforded proper application in and by relevant State Parties. Ratified international conventions that are not properly applied are self denying. As the law is flexible in character, so are conventions. There is room for amendment where and when need arise.

On the other hand, it is high time for the petroleum industry and the world community to examine whether there is or not need for a liability convention to govern sea-bed exploration and exploitation as well as off-shore installations related to oil and gas.

In addition to international conventions, change of behavior could contribute much throughout the journey to sustainable development. Petroleum industry together with all stakeholders should take time and reflect on the importance of both economic sustainability and environmental sustainability. It is worthy that everyone and in every decision remembers that it is important to act in a manner that does not endanger the world that we all live in presently and the indefinite future. It is, therefore, high time for petroleum industry and stakeholders to reason together to find a way to conduct business in a sustainable way, not only economically but also environmentally.

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