

# Building a new regulation on prevention from marine environmental pollution caused by ship-source pollution

Nguyen Van Truong<sup>1</sup>\*

1. Law school, Dalian Maritime University, No.1 Linghai road, High\_tech Zone District, Dalian city, Liaoning province, China

#### **Abstract**

Over the past years, Vietnam has been aware of the deterioration of the marine environment due to impacts from ship-source pollution. In order to prevent and control this pollution, Vietnam has made efforts to issue a number of national technical standards and legal documents related to the marine environment protection from the effects of ship-source pollution, particularly caused by ship's garbage. However, there is still a lack of several basis legal documents to ensure that Vietnam can be prevented and tightly controlled due to pollution from ship-source. Thus, in addition to concluding international conventions, studying and learning law-making experiences of progressive countries in the region, reviewing and improving the legal system in this field, building and issuing a special regulation on the marine environment control and prevention from ship-source pollution are essential tasks. In the scope of an article, the author provides an analysis of the importance of building a new regulation in this field and suggests a new regulation on the marine environment control and prevention from pollution, caused by ship-source, as well as by garbage (herein after call new regulation). It is expected that in the near future, the Vietnam laws on the prevention from marine environmental pollution due to the impacts from ship-source pollution will be more completed and effective.

Keywords: Ship's garbage, Vietnam law, prevention, marine pollution, new regulation

#### 1. Introduction

Although Vietnam was very interested in building and improving the legal system on marine environmental protection, prevention and control from ships pollution, however, the laws on prevention and control of marine environmental pollution due to the impacts from ship's garbage has only a few documents, which is scattered in many documents. Inconsistency and low norms of these laws lead to many limitations and difficulties in practice. In general, Vietnam existing legal system on this field is insufficient and does not meet the requirements of reality. Moreover, Vietnam does also not have a specific regulation on this field. Therefore, studying and building a new regulation on this field are what Vietnam should do in the current period.

# 2. The necessity of building a new regulation

Initially, Vietnam is aware of the importance of the marine environment protection due to marine economic and political values. The Vietnamese government has taken the initiative to issue a raft of legal documents on the marine environment protection and the sea strategy. Besides, resolution No.48NQ/TW was published by the Politburo on the Strategy for the Development and Improvement of the Vietnamese Legal System to 2010, with orientations to 2020¹, which stipulates the necessity to improve the laws on natural resources and continue joining international treaties on marine environmental protection. At the same time, to enhance the review, amendment, supplement or promulgation of legal documents in this field conformity with international practices and treaties to which Vietnam is a member. In addition, the Prime Minister of the Socialist Republic of Vietnam has announced other important decisions to implement two parallel objectives; developing the marine economy and protecting the marine environment. Moreover, the Decision No.166/QD-TTg the implementation plan of national environmental protection to 2020, with orientations to 2030 and Decision No.855/QD-TTg approving the project on environmental pollution control in the field of transportation³ are demonstrated the determination of Vietnam to protect the marine environment.

Typically, in 2015, Vietnam officially became a member of annex III, IV, V, VI of Marpol 73/78, as well as two annexes I and II. Vietnam has fully taken part in six annexes, controlling all sources from ships that could pollute the marine environment. Moreover, in 2016 Vietnam quickly issued the guidance for the implementation of Annex V, as well as the Annex III, IV and VI of Marpol 73/78<sup>4</sup>, which is prerequisite and indispensable to improve the Vietnam laws on marine environmental protection caused by ship's garbage, as well as the other agents from ships.

Additionally, Vietnam laws only include few special regulations in this field, lack of regulations on receiving and



treating garbage from ships. Other existing laws are quite general, not detailed, not consistent with reality, lack of uniformity, so it is difficult to apply in reality. Backwardness of the Vietnam laws in the field of marine control and marine preservation from pollution, caused by ship-source, as well as ships'garbage. Even some legal documents are not up to date, and there is no change according to the actual situation<sup>5</sup>. Besides, the Vietnam Maritime Code 2015, which is the main legal document in the maritime field, only consists of some general provisions mentioned in chapter II section 5<sup>6</sup>. It is necessary to add a separate chapter on the marine environment protection from ship-sources pollutants, as well as caused by ship's garbage. The other legal document on this field is Law on Environmental Protection 2014. In the chapter V of this law have some general regulations for the control, treatment and protection of the marine environment and island<sup>7</sup>. However, there are not enough clear regulations on the marine environment protection from the impact of ship-source pollutions. Especially, after officially be coming a member of the main international conventions on this field such as; Marpol 73/78 of six Annexes, Unclos 1982, it is important to make more detailed regulations on this field, in order to strengthen and improve national legal document on marine environment protection, as well as demonstrate the effectiveness of the implementation of international conventions.

Finally, marine environment pollution, especially marine pollution caused by ship-source (oil, garbage, waste gas...) is considered to be increasingly serious. According to the analysis by Paul V.Horsman<sup>8</sup>, every day each person afloat dumps between 3.2 and 6.2 metal, between 0.2 and 0.3 glass, and 0.3 plastic containers in the sea. According to European Maritime Safety Agency (EMSA) statistics "The world merchant fleet in 2016 Statistics from Equasis", there are about 1 270 284 ships in the principal fleets of the world. Assuming 30 people per ship, then 121 947 metal, 7 622 glass and 11 433 plastic containers are disposed of daily. All 1 270 284 ships are not afloating at the same time, but there are many ships are not mentioned in the statistic of EMSA, for instance, naval ships which carry a large number of people, in addition, 30 people per ship is a conservative number, in fact the passenger ships and the number of 'conventional' ships still operating with old-style large number of crew."

Moreover, according to the analysis by To Ngoc Thang<sup>10</sup>, waste was divided into three main categories: food waste, plastics and persistent garbage, and hazardous waste. Comparing with other type of garbage, food waste is easier to decompose in the environment. While, these other types of garbage are difficult to biodegrade, taking between 100-450 years that can be seen as long-term effects pollutants. Plastics and micro plastics (less than 5 mm in diameter) bring the most hazadous impact to the marine environment. Micro plastic debris provides a pathway facilitating the transport of harmful and toxic chemicals to organisms. The bioaccumulation of plastics through food chains is also big problem. Moreover, through food chains, human health also can be affected because of using and eating seafood. Plastics and other persistent debris are being implicated in the contamination of some habitats by nonindigenous invasive species.

During maintaining and operating processes, some kind of solid wastes that include hazardous substances. Most concerned substance is solid waste combined with oil. Oil pollution at sea is a serious problem because of high ability of expansion to wide areas, as well as long term effects on wild life and habitats. In addition, the number of collisions and shipwrecks not only caused large-scale oil spills, but also discharged significant amounts of waste and a large number of cargo on these ships. So far, there is no accurate statistic on the amount of waste that spills into the sea from collision and sinking. There are only studies focused on marine pollution caused by the oil spill.

With the above-mentioned analysis, it can be clearly seen that with the approximate number of 200 vessels crossing the sea of Vietnam each day, the amount of waste from these ships discharged into the sea and drifted to the coast of Vietnam is very large.

In addition, Vietnam is a country with a coastline of more than 3260 km and the sea area is wider than land area three times. According to the statistics of the Transport Ministry of Vietnam, Vietnam has 49 seaports, of which 245 large and small harbors from north to south. Besides, the Vietnam's fleet has approximately 1849 ships of all kinds with the total tonnage is nearly 7.3 DWT and ranked the 4<sup>th</sup> in Southeast Asia, the 28<sup>th</sup> of 192 IMO countries member. However, according to the Vietnam Maritime Bureau, in 2016, the average age of a Vietnamese ship was 17 years-old ship age<sup>11</sup>. Therefore, technical equipment is often backward, which does not meet the requirements of safety and environmental protection.

## 3. Position, subject and application scope of the new regulation

The position of new Regulation in the Vietnam legal system



The new regulation should be independent of other legal documents in Vietnam legal system, and have its own adjustable objects, application scope and specific principles.

The subject of new Regulation

The new regulation should intend to regulate social relations and state management in the field related to marine activities in Vietnam.

The application scope of new Regulation

The purpose of this regulation is to protect the health and property of the people through the marine environment protection by the legislation on garbage disposal and the toxic substances produced during the operation of ships, garbage generated during the life of the crew to the sea. Specifies the liability of the ship owner in the event of marine environmental pollution caused by garbage from ship, as well as other agents from ship-source pollution or does not meet the inspection requirements of the competent authority and establishing a legal framework to ensure the full implementation of this regulation in the waters of Vietnam.

The principle of applying law

There is a difference between the provisions of this regulation and the provisions of other laws on the prevention and control of the marine environmental pollution caused by garbage from ships as well as other ship-source pollution in Vietnam waters, the provisions of this Regulation shall apply.

In cases of these provision of this law are different from provisions of international conventions, in which the Socialist Republic of Vietnam is member state, the provisions of such international conventions shall apply.

# 4. The suggestion to make a draft of regulation on prevention and control of the marine environmental pollution caused by garbage from ships as well as other ship-source pollution

With the experience gained from the legal system of the countries in the region, the author proposes a draft of new regulation on the prevention and control of marine environmental pollution caused by garbage from ships. However, Vietnam does not have a specific regulation on marine environmental protection due to impact of shipsource pollution. Therefore, author suggests building a new regulation that covers all sources of pollution from ships as defined by Marpol 73/78. The problem that author studying is discussed in chapter 6 of this regulation. In this chapter, specific and detailed regulations on the prevention and control of marine environmental pollution from ship's garbage, appropriate penalties for violations of regulations. The new regulation consists of nine specific chapters:

## "Regulation on prevention and control of ship-source pollution to marine environment"

Chapter 1: General provisions

- 1. Preliminary
- 2. Object of part
- 3. Application of part
- 4. Overall purpose

Chapter 2: Prevention of pollution by oil

- **Chapter 3:** Prevention of pollution by noxious liquid substances in bulk
- Chapter 4: Prevention of pollution by packaged harmful substances

**Chapter 5:** Prevention of pollution by sewage

**Chapter 6:** Prevention of pollution by garbage

Section 1. Purpose of chapter

The purpose of this part is to give effect to relevant provisions of Annex V to Marpol.

Section 2. Definitions

Definition of garbage and classification of garbage according to the Annex V of Marpol 73/78

Section 3. Application

Apply to all ships of Vietnam as well as foreign operating in waters under the jurisdiction and sovereignty of Vietnam.

Section 4. Prohibition of discharge of garbage into the sea



This section will provide regulations prohibiting discharge of garbage, prohibited areas for discharge of garbage, ships must comply with regulations on discharge of garbage from ships to the marine environment.

If any violation occurs, the master, ship owner or crews member of such ship shall be fully responsible for such breach.

If there is any act of waste disposal, it must be honestly recorded in the garbage record book or any act of disposal of garbage into the waters under the jurisdiction and sovereignty of Vietnam which beyond the prescribed limits will be punished according to regulations.

# Section 5. Exceptions

This section will cope with the disposal made for the purpose of securing the safety of the ship and people on the ship or saving life at sea; the disposal happened because of damage to the ship or its equipment and all reasonable precautions taken before and after the damage happened to prevent or minimize the disposal; the disposal was the accidental loss at sea of a synthetic fishing net, or synthetic material used in the repair of a synthetic fishing net, and all reasonable precautions were taken to prevent the loss or discharge of food wastes outside or in a special area or the ship is proceeding en route and is as far as practicable from the nearest land or garbage is food waste or food waste that have been passed through a comminuter or grinder.

Section 6. Shipboard garbage management plan

This section will provide regulations on all type of ships, including ships of Vietnam and foreign ships. All ships must have a garbage management plan. This section will also offer of regulations on the collection, classification, storage and treatment of waste prior to discharge.

If a ship does not have a garbage management plan, it will be fined.

In addition, the regulations on equipment on board of a ship must to meet the requirement of garbage management plan are also set out in this section. If any ship does not meet the equipment requirements, it will be fined.

Furthermore, the regulations on placards on board a ship are also set out in this section.

Section 7. Garbage record book

This section will set out regulations that ships must have a garbage record book, an entry in ship's garbage record book. A garbage record book must be retained in a ship and a signature of the responsible person for the management of garbage record book is required.

If any of ships without a garbage record book or garbage record book is not recorded fully and honestly; not kept or carried on a ship, a fine will be imposed.

Section 8. Discharge and reception of ships pollutants

Providing regulations on the discharge and receiving of garbage from the ship to the garbage receiving facilities, as well as the procedures and paperwork that must be provided and maintained after completion of the garbage collection process at the seaports.

**Chapter 7:** Prevention of air pollution

**Chapter 8:** Supervision implementation

**Chapter 9:** Supplementary provisions

#### 5. Conclusion

Currently, Vietnam laws in the maritime field devotes much attention to the pollution of the marine environment caused by oil pollution, meanwhile other sources of pollutants from the ship are always potential sources of marine environment pollution. However, the legal system of Vietnam on marine pollution prevention and control due to impacts from ship-source pollution is still lacking and inadequate. In addition, the participation, implementation and incorporation of international treaties related to this field into the national legal system are still limited and ineffective. It leads to the difficulty in dealing with a violation. With the above analysis and suggestions, the development of a new regulation for Vietnam on prevention and control of marine environmental pollution caused by ship's garbage, as well as other agents from ships, is essential and accordanced with the requirements of the government of Vietnam in the current period. Moreover, author wishes this contribution will help the law of Vietnam in this field more completed and effective.



#### References

- [1] Resolution No.48 "On the strategy of building and improving the Vietnamese legal system up to 2010 with orientation to 2020". [Online] Available: https://thuvienphapluat.vn/van-ban/Bo-may-hanh-chinh/Nghi-quyet-48-NQ-TW-chien-luoc-xay-dung-va-hoan-thien-he-thong-phap-luat-Viet-Nam-den-nam-2010-dinh-huong-den-nam-2020-54373.aspx (Jan 10, 2018)
- [2] Decision No.166/De-Prime Minister "Issue the plan for implementation of national environmental protection strategy by 2020, with a vision to 2030". [Online] Available: https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Quyet-dinh-166-QD-TTg-2014-Chien-luoc-bao-ve-moi-truong-quoc-gia-den-nam-2020-219922.aspx (Jan 10, 2018)
- [3] Decision No.855/De-Prime Minister "Decision approving the scheme on control of environmental pollution in transportation activities". [Online] Available: https://thuvienphapluat.vn/van-ban/Thue-Phi-Le-Phi/Quyet-dinh-855-QD-TTg-phe-duyet-de-an-kiem-soat-o-nhiem-moi-truong-125247.aspx (Jan 10, 2018)
- [4] Decision No.795/De-Prime Minister "Approval of the plan for Implementing Annexes III,IV,V and VI of the International Convention on the Prevention of Pollution from Ships 73/78". [Online] Available: https://thuvienphapluat.vn/van-ban/Giao-thong-Van-tai/Quyet-dinh-795-QD-TTg-thuc-hien-Phu-luc-III-IV-V-VI-Cong-uoc-quoc-te-ngan-ngua-o-nhiem-tau-gay-ra-2016-311371.aspx (Jan 10, 2018)
- [5] Decree No. 30/De-Governent "On regulation for foreign vessels to operate on sea areas of the socialist republic of Vietnam", Hanoi, 29 Jan 1980. [Online] Available: https://thuvienphapluat.vn/van-ban/Giao-thong-Van-tai/Nghi-dinh-30-CP-quy-che-cho-tau-thuyen-nuoc-ngoai-hoat-dong-tren-cac-vung-bien-cua-nuoc-Cong-hoa-xa-hoi-chu-nghia-Viet-Nam-44136.aspx (May 22, 2018)
- [6] Vietnam Maritime Code 2015. [Online] Available: https://thuvienphapluat.vn/van-ban/Giao-thong-Van-tai/Bo-luat-hang-hai-Viet-Nam-2015-298374.aspx (April 10, 2018)
- [7] Law on Environmental Protection 2014. [Online] Available: https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Luat-bao-ve-moi-truong-2014-238636.aspx (April 10, 2018)
- [8] Paul V. Horsman. "The amount of garbage from merchant ships", Marine Pollution Bulletin, Vol. 13, No. 5, pp.167-169, Printed in Great Britain, 1982.
- [9] http://www.emsa.europa.eu/equasis-statistics/items.html?cid=95&id=472 (April 5, 2018)
- [10] To Ngoc Thang. "Environmental Protection at Port Area: A study on ship-generated garbage management system in Haiphong port, Vietnam". Kitakyushu, September 2015.
- [11] "The report of Vietnam Maritime Administration on the Maritime Management of Marine Sector", The Transportation Administration, Hanoi, May 2016.
- [12] "The law of Promulgation of legal documents 2008" [Online] Available: http://www.moj.gov.vn/vbpq/lists/vn%20bn%20php%20lut/view\_detail.aspx?itemid=12817 (April 5, 2018)

## Acknowledgement

I would like to express my deepest gratitude to my supervisor Prof. ChubeiPing-Dean of Law School-Dalian Maritime University (DMU), who encouraged and provided insight and expertise that greatly assisted the research. Moreover, I would like to take this opportunity to show my gratitude and sincere thanks to the Government of the People's Republic of China for financial support. I also thank the Government of the Socialist Republic of Vietnam, Vietnam Maritime University and Dalian Maritime University, as well as officers and staffs of Law School-DMU for giving me the good opportunity and favorable conditions during the course of this research.