



RESEARCH PAPER

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A proposed “special area” to protect the marine environment from the ships pollution in Indonesia

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Article published on November 22, 2017

Key words: Protection, Marine territory, New regulations, Environment, Ship transportation.

Abstract

Pollution protection over the maritime environment of Indonesian from the ships presently is an important issue among the environmentalists, academicians and law makers as well as government. This research paper focuses on the protection law of maritime area of Indonesia due to high frequency of national and international ship transportations in Indonesian territory. Proposing a “Special Area” to protect the marine environment that followed by laws and regulations is a new path. This idea has been introduced in the International Maritime Organization (IMO), but it should take a new creation in Indonesian context. For this purpose, legal approach, non judicial perspective and Special Area seem give a new way of overcome the pollution problem of Indonesian maritime territory. Indonesia still does not pass the laws and regulations which prevent and protect her waters from any kind of pollution of ship transportations. It is fruitful to protect the maritime territory with environmental laws and other related regulations to support a Special Area.

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Introduction

The pollution of maritime territory of Indonesia takes the attention of environmentalists, academicians and law makers to pass the regulations to protect the massive destructive coastal areas from national and international ship transportations. It is indispensable to make the maritime environmental laws by adopting international agreements and creating a comprehensive protection. Additionally, Indonesia approves the rights for ships to pass through her territorial waters corresponding to UNCLOS Innocent passage. If the marine environment pollution problems tend to higher, Indonesia has no regulations and procedures to solve the marine pollution issues.

The Republic of Indonesia is an archipelagic state with the unique geographical contour right under the equator. It is located in the cross position between two continents (Asia and Australia) and two oceans (Indian and Pacific) (Lubis, 1992). In fact, Indonesia has marine territory of 3.166.080 km² which is far wider than its dry land territory of 2.027.170 km², totaling in 5.193.250 km² (Muhjiddin, 1993). The United Nations Convention on the Law of the Sea (UNCLOS) 1982 was implemented in Indonesia at November 16th 1994 (United Nations Press Release, 1993). Indonesia territory has been widened to 8.193.163 km² which consist of 2.027.087 km² of dry land and 6.166.163 km² of water. In terms of the marine zone, Indonesia has 0,3 million km² of territorial waters, 2,8 million km² of Contiguous zone, and 2,7 km² of Exclusive economic zone (Romimohtarto, 1990). Those data show that the vast Indonesian maritime territory in a very danger without any specific laws and regulations in term of protection.

As a maritime country, Indonesia needs to consider the importance of measurable instruments to protect and preserve her marine territory. Some regulations have been needed to ensure the availability of the resources to be extracted from ocean which pass the standard of quality and quantity. In addition, sea as resources area is the home to many creatures, lane for ships transportation, recreation locations, and many

other utility which back up the importance of protection and prevention regulations against pollution caused by the ship traffics. Marine laws and regulations are indeed to preserve resources and environment for the current and future exploitations in a sustainable manner (Kusumaatmadja, 1992).

It notes that many examples of the prevention against pollution of the marine environment; the International Community such as IMO (IMO Conventions, 1988) through a variety of efforts, including establishing international provisions, such as provisions concerning the prevention of marine pollution (Harald, 1994) and the provisions about compensation liability regarding damages caused. Unfortunately, pollution caused by ships is not yet avoided completely, especially the leaks of oil tanker ships (Boston, 1994). The cases of the incident of Torrey Canyon (1967), Showa Maru (1975) (Kantaatmadja, 1982), Exxon Valdez (1989), Nagasaki Spirit (1992), Erika (1999) give us the crucial situation of sea environment.

Regarding the vast Indonesian maritime territory that needs the protection with specific laws and regulations, this paper explored the possibility of determined "Specific Area". More polluted surrounding marine environment is caused by the ship traffics. It motivated us to regulate environment of Indonesia's waters through the marine laws and regulations to preserve resources and environment.

Legal approach

Legal approach to seek the marine territory environmental issue shows the lack of regulations in Indonesia. It is believed that legal approach to waters protection concerning to many rules and international conventions. Thus, MARPOL 73/78 is a good example model of a regulation in reducing marine pollution incidents. Even though MARPOL 73/78 is considered to be good, it should be noted that regulations have shortcomings, such as the regulations regarding *segregate ballast tanks* (SBT) which is only applied to the participating country.

This regulation is also limited to new ships which ignore the possibilities of pollution caused by old ships. MARPOL provisions have helped tremendously against marine pollution since it entered into force. Nevertheless, it should bear in mind that the standards of water quality, of damage level, and of marine status have not been yet perfectly defined in MARPOL. As a result, those conditions give a possibility of marine pollution. As an example, a certain ships path located at Sea plot of Indonesian Islands (Alur Laut Kepulauan Indonesia- ALKI) which has been crowded in the sea transportation traffics.

A certain technique might avoid pollution. For example, the Dumping Ballast at a certain amount will not cause any pollution due to natural neutralization process. In contrast, the growth of dumping quantities would dramatically increase the marine environment pollution. Indication of the more polluted surrounding marine environment in fact is overseen due to the high frequency of ship transportations in the sea lanes. Hypothetically there is now a high possibility that Indonesia archipelagic sea lanes passage more polluted.

Legal analysis on the MARPOL conventions shows some points. The first Annex of MARPOL mentions about load on top (LOT) requirement, but the facilities required to implement this Annex cannot be fulfilled yet, especially in developing country such as Indonesia. For instance, each dock must provide leftover oil container facilities for every ship. MARPOL also states that every participant should provide an adequate facility to hold the leftover oil at each oil depot terminal. Without leftover oil facility, ships would just dump those illegally. Thus, it motivates the participants to make an improvement of MARPOL regulation and instrument.

Human capacity to avoid the marine pollution plays an important role. Periodic ship crew trainings in the MARPOL Convention include the malfunctioning ships facilities, lack of prevention and law

enforcement and the violators of MARPOL. It is found that the MARPOL still needs further improvement to cover up its lacking parts before it could truly protect marine environment. The MARPOL Convention, in order to enforce its law, requires every recognized nation to support the content of protocol. The nations which took a part in convention already given the special rights and duty to inspect and certify ships those operate in their countries. They were also given special responsibilities to investigate and punish the violators. Development in various international provisions, such as UNCLOS 1982 and MARPOL requires all the coastal states and those states owning ports to apply their jurisdiction to every ship that violate the rules in their marine territory.

In addition to MARPOL requirements, in anticipation and prevention against marine pollution caused by ships, an extensive cooperation between the recognized states, coastal states and port-having states is required. Cooperation of those sates with IMO especially concerning with (Warren, 2000): Checks on the physical condition of the vessels; Checks on documentation recording the vessels past performance; and Possible improvements in survey and inspection practice.

Non-judicial approach

The second consideration of marine pollution is the Non-Judicial Approach. Indonesian harbors play a significant role in monitoring passing and docking ships; checking whether the ships comply with the relevant standards and fulfilled the requirement stated by IMO. Besides monitoring, it is also necessary to provide sufficient facilities for the implementation of the Convention, such as oil-loading port (Ronald, 1995). Indonesia may adopt other country regulations of environmental managements. For instance, the Australian Maritime Safety Authority (AMSA), a supervisory body in the Australian state ports, implemented the monitoring and inspection programs towards foreign ships that stop at their harbors. Likewise, they applied the same

regulation to their own ships that travel between countries. Every ship that has been feasible in terms of requirement is conferred with a certification or other entities to prove the pass testing of AMSA. Indonesia may follow Australian Maritime Safety Authority to protect her marine territory.

It is found that authority in each country has to check the ships. The MARPOL 73/78 allows port or harbor of a country to act as subject to perform inspections to ships docked on their port or harbor in accordance with the authority granted by the country with the intention to check the fulfillments of ships regarding to the conventions. Any attempt to protect marine environment from pollution caused by ships also requires a laboratory analysis to test the samples of contaminants taken from suspected areas. Conformity with the polluted substances is needed to make sure whether the pollution is caused from certain contaminants transported by certain ship. Aside from applying command and control, like giving incentives to help promote voluntary compliance by states (ICEL, 1999), it is very vital to the harbors authority to make some needed compliments. Voluntary compliance could consist of one or several states, forming a regional cooperation. Over four decades of experience shows that the implementation of the provisions in the maritime field of OILPOL and MARPOL has not been met the requirements completely.

A certain study on the implementation of MARPOL provisions shows that some countries have not applied those international marine provisions. From non judicial approach it is found that international legal experts who stated that international law is "a force which inherent strength of its own" and "consideration of power rather than of law Determine compliance" started to realize its flaw. These false idea starts to fade as each state grows to be aware that they need to safeguard the natural resources found in their marine territory. Every regulation could be applied successfully if all states guarantee its responsibility and participation for complying,

monitoring, or enforcing the provisions (Ronald, 1995). It should be noted that authority's willingness effective factor in controlling marine pollution.

In European countries, it is noted some policies on the protection of marine environment. Examples of successful law enforcement to protect marine environment in the region is shown by European countries. In 1982, fourteen (14) European countries signed "The Memorandum of Understanding on Port State Control" (MOU). That MOU aims to increase the enforcement effectiveness of regional law of the provisions that contained in the MARPOL and other international agreements in the maritime case. Those signed countries thought of the lack of law enforcement that should be avoided in the protection ports.

Furthermore, since 1990 all the states are required to report their enforcement data to MOU governing body. Although only half of the participating countries have been reporting the same information to the IMO governing body, but that system in European countries was succeeded. The states made a daily reporting as mentioned in the provisions. European system is much better that those of IMO practice, because unlike the MOU system, IMO only requires participating country to report annually. This comparative analysis shows that a daily reporting much better in anticipating the pollution in the ports. Something that should be recorded is the MOU practice in term of inspection. While holding an inspection, states could request data from MOU governing body to give necessary information on vessels the entering the port. Such practice would assist states to know whether the ships are previous fell into a violator of the regulation or not; such system has not been listed in the IMO (Ronald, 1995). The fact that this system is effective to protect marine environment means that International communities in developing countries should use this as reference. Violations of marine environment increase in Indonesian Islands. Considering the impact caused by pollution, there is a necessity of the law enforcement

efforts against environmental pollution in Indonesia. Providing the adequate facilities to support the implementation of those provisions, like the availability of facilities to accommodate the containment of waste oil mixture at the terminal is so important. Taking into account that Indonesia also plays a big role in supplying oils, these required facilities will also enable Indonesia to propose "A Special Areas" in some parts of her islands.

Indonesian sea territory requires special area status

Protection of maritime area of Indonesia has many possibilities of creating policy, regulations, and law enforcements. Adopted the provisions of IMO, Indonesia could assign specific area in her islands. A Special Area of free pollution is a best proposal. In that particular area, certain regulations could be implemented in order to prevent, reduce and control the marine pollution caused by travelling foreign ships on the Plot of Indonesia Crossing Island- (Alur Lintas kepulauan Indonesia- ALKI) and the innocent passage rights. Special regulations are not only applied in Territorial waters, but also Contiguous Zone and Exclusive Economic Zone.

Determination of special areas requires in-depth research on Indonesian marine territory. In certain areas of the territory, necessary priority can be assigned (Wahid, 2014) since protecting every part of Indonesian marine environment is impossible feat. For that reason, priorities would be given to certain areas which are vulnerable. Aside from that, there is also shallow sea in the western part of Indonesia which is assumed to be living area, which greatly affects the local fishermen in that region (Setiapermana *et al.*, 1994). Thus, regulations and construction technical is indispensable to nurture Indonesian sea territory.

Indonesia must convince international community that certain part in Indonesian marine territory requires special provisions and in need of the status of Special Area.

Indonesia could appeal to International community about its reasoning such high sailing traffic, marine environment ecological condition (Bishop *et al.*, 1986), including its water geology and water usage. Water usage would be construction of ports, exploration and exploitation of the marine resources, construction of subsea pipelines, the vulnerability of the marine environment, and others. Based on the geographical research, we could determine the priority locations of Indonesian marine territory that fall into the most vulnerable to contaminants. The greater pollution of sea environment makes Indonesia would be more suffer and gets a great loss in her marine environment. Probably it would end up giving the negative impacts to Indonesian islands. Thus, in the longer coastal region of Indonesia, the risk of contamination is higher than those of countries that have short beaches. In fact, the long coastal region has more complex interactions with environmental factors which would hamper the cleaning efforts. Such pollution cases are found in Indonesian maritime territory (IMO Conventions, 1988). Several Indonesian coastal waters possibly have been more vulnerable of the contaminants than those of other places (IMO Conventions, 1988).

The protection of marine territory of Indonesian Islands through legal, non judicial approaches and creating a special area needs the new path by adopting international conventions and others. Protection of pollution of the two-thirds of its territory consisted of waters, is brimming with marine resources both renewable resources like fisheries and non renewable resources like oils and minerals. Thus, Indonesia is well known as a country that has a tremendous biological diversity not only for its dry land ecosystem, but also its marine ecosystem. It is known to have more than 2000 species of fish, 200 species of crustaceans, more than 2500 species of mollusk, and more than 350 species of coral stones. This ecological diversity is distributed into the waters of Indonesia and surrounding areas (Moestadji, 1996).

Nature's blessing given by God to Indonesia could be utilized effectively for the greater good of Indonesian people. Therefore, contamination in the marine environment of Indonesia, such as pollution caused by ships which contaminate and/or damage the marine environment would lower the sustainability of the marine environment. This would both directly or indirectly be detrimental to the nation.

For the sake of national interests in a broad sense, aside from having Regulation No. 32 year 2009 about Protection and management of the environment (UUPPLH) which serve as an umbrella act for others regulation. Considering the marine environment issues is an urgent, it is necessary to establish regulations specialized on protection of marine environment from pollution, including those caused by ships. UUPPLH also includes "protection of the Republic of Indonesia territories against the impact of business and/or activities outside of the territory of the state which pollute and/or damages the environment".

Conclusion

It was found that the massive destructions of marine territory of Indonesia grows due to the ship transportations, such as leaks of oil, the government of Indonesia needs to take account seriously such as: Making laws and regulations of maritime environment by adopting IMO and Europe MOU conventions. The sea environment destruction increases of shipping activities that affected human life in coastal areas. There is a need to create the policies help officials and guards to check and to enforce in the marine zones and ports. It recommends the "Special Area" for the high frequency sea lanes of Indonesian Islands to protect the maritime zone from pollution, such as leaks of oil, and to prepare a periodic training for officials who manage the ports, requirements of ship feasibility and protection of marine environment.

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