



Juridical Analysis of Criminal Acts Against Marine Pollution by Ships

Teriyanti Teriyanti¹, Iksan Saifudin¹, Fajar Sutopo¹

¹ Politeknik Pelayaran, Minahasa, Sulawesi Utara, Indonesia

Abstract. The crime of marine pollution by ships is a crucial issue in the current era of globalization and is one of the problems faced by many countries in the world. Marine pollution can be defined as any act that results in the entry of substances or energy into the environment to result in pollution that has the potential to have harmful effects. As an archipelagic country with a very large area of water, Indonesia only has a law that regulates marine affairs, namely Law Number 32 of 2014. The law is used to control and supervise all types of activities in Indonesian waters. Environmental management and protection, especially in the marine sector, is very crucial. This research aims to analyze the juridical aspects of marine pollution crimes, with a focus on regulation by using a qualitative approach from various legal sources to provide a comprehensive picture.

Keywords: Crime, Marine Environmental Pollution, Law

1. Introduction

Geographically, Indonesia is classified as a maritime nation, encompassing a marine territory of approximately 5.8 million square kilometers. According to data from the Ministry of Environment and Forestry (MoEF), more than 60% of marine pollution in Indonesia is caused by waste from ships, oil pollution spilled into the sea, hazardous waste and plastic waste as well as other maritime industry activities that can damage marine habitats and threaten the sustainability of marine species. Statistics from the Ministry of Maritime Affairs and Fisheries show that cases of marine pollution due to ship activities are increasing every year. In 2021, more than 300 cases of marine pollution were recorded, with most of them caused by tankers. These cases often involve large companies that have the resources to evade sanctions, thus adding to the challenges in law enforcement. The next problem that arises is the government's supervision of pollution itself which has not been effective so pollution and marine damage increase. In the legal context, Indonesia has various regulations that regulate marine pollution, both at the national and international levels. One of the relevant legal instruments is Law No. 32 of 2009 concerning Environmental Protection and Management. However,

despite strict regulations, the practice of marine pollution still occurs frequently. This shows that there is a gap between the law and implementation in the field.

This research will discuss more deeply the juridical aspects of marine pollution crimes by ships, including applicable regulations, and sanctions applied. Thus, it is hoped that this research can contribute to efforts to protect the marine environment in Indonesia.

2. Research Methods

The research method employed to address the aforementioned issues is descriptive-analytical in nature, aiming to explore and articulate various challenges related to marine pollution within Indonesia's legal framework. This study adopts a normative juridical approach, which involves a conceptual analysis of the principles and objectives embedded in national legal provisions concerning marine pollution. These legal instruments include Law No. 32 of 2009 on Environmental Protection and Management, Law No. 32 of 2014 on Maritime Affairs, and Government Regulation No. 19 of 1999 on the Control of Marine Pollution and/or Damage.

2.1. Problem Statement

Based on the above background, the research problem addressed in this study can be formulated as follows:

- a. What are the regulations governing marine pollution by ships in Indonesia?
- b. What are the obstacles faced in law enforcement against marine pollution perpetrators by ships?
- c. What are the impacts of marine pollution on ecosystems and communities?

2.2. Research Objectives

- a. To find out the regulations that regulate marine pollution by ships in Indonesia?
- b. To find out the obstacles faced by law enforcement against marine pollution perpetrators by ships.

- c. To find out the impact of marine pollution on ecosystems and communities.

3. Discussion

Based on Law No. 32 of 2009 concerning Environmental Protection and Management, Article 1 number 14 states: "The criminal act of marine pollution includes all forms of activities that result in marine pollution and harm the environment". This criminal act can be committed by an individual or a company.

In the legal context, marine pollution can be categorized as a criminal act based on its nature and impact. This is in line with the "polluter pays principle" which states that the party causing pollution is responsible for bearing the cost of environmental remediation (OECD, 2019). This action not only violates environmental laws, but can also lead to criminal sanctions, fines, or other administrative actions.

Law Number 32 of 2009 on Environmental Protection and Management also addresses criminal violations related to marine pollution. Article 99, paragraph (1), stipulates that any individual who, through negligence, causes seawater quality standards or environmental damage criteria to be exceeded, is subject to a prison sentence ranging from a minimum of one (1) year to a maximum of three (3) years, and a fine of no less than IDR 1,000,000,000 (one billion rupiah) and up to IDR 3,000,000,000 (three billion rupiah). Various forms of marine pollution—such as oil spills, marine debris, and dumping—are included within the scope of these offenses. Although the law does not explicitly focus on marine pollution, criminal provisions addressing such environmental violations are embedded within the broader framework of Law Number 32 of 2009. However, the criminal provisions written in the Law on Environmental Protection and Management are intended for wherever environmental pollution occurs which is regulated in Chapter XV where there are several criminal provisions including:

1. Article 98, paragraph (1) of the law stipulates that any individual who intentionally engages in actions leading to the exceedance of ambient air quality standards, water quality standards, seawater quality standards, or environmental damage thresholds shall be subject to a prison sentence ranging from a minimum of three (3) years to a maximum of ten (10) years, along with a fine of no less than IDR 3,000,000,000 (three billion rupiah) and up to IDR 10,000,000,000 (ten billion rupiah).

2. Article 99, paragraph (1) provides that individuals whose negligent actions result in the surpassing of ambient air, water, or seawater quality standards, or the established criteria for environmental damage, are liable to imprisonment for a minimum of one (1) year and a maximum of three (3) years, and a monetary penalty ranging from IDR 1,000,000,000 (one billion rupiah) to IDR 3,000,000,000 (three billion rupiah).

3. Article 100 paragraph (1) regulates violations of wastewater quality standards, emission quality standards, or disturbance quality standards in the criminal penalty with a maximum prison sentence of 3 (three) years and a maximum fine of Rp.3,000,000,000,- (three billion rupiah).

Furthermore, the criminal provisions under the Law on Environmental Protection and Management extend up to Article 118. In article 119 of this law, business entities may be subject to additional criminal penalties or disciplinary actions in the form of a. Deprivation of profits obtained from criminal acts; b. Prosecution of all or part of the place of business and/or activities; c. restoration of environmental conditions resulting from the offense; d. the obligation to carry out neglected duties; and/or e. Placement of the company under the supervision of a maximum of 3 (three) years. B. Law Enforcement Regarding Marine Pollution According to Law Number 32 of 2009 concerning Environmental Protection and Management. Marine pollution is regulated in article 1 point 11 of Law Number 32 of 2014 concerning Marine Affairs, which reads "Environmental pollution is the entry or introduction of

living things, substances, energy and/or components into the environment by human activities so that they exceed the environmental quality standards that have been set".

Definition of Law Enforcement

In law enforcement, there are 3 (three) important elements, namely: a. Legal certainty (*rechtssicherheit*); b. Justice (*gerechtigkeits*); and c. Ability (*zweckmassigkeit*).

In terms of the legality of law enforcement at sea, institutions that have the authority to investigate certain criminal acts at sea include the Indonesian Navy, the National Police, the Ministry of Transportation, the Ministry of Maritime Affairs and Fisheries, the Ministry of Finance, the Ministry of Law and Human Rights, the Judiciary, the Ministry of Energy and Mineral Resources (ESDM), the Ministry of Environment and Forestry and *stakeholders* Other. The flow of the legal process includes an investigation process which will then be submitted to the prosecutor's office and then the case is resolved through a trial in the general court.

The basis of investigators in law enforcement at sea is attributive authority, namely authority attached to a position. In the review of constitutional law, this attributive authority is intended to grant authority to government agencies and/or officials by the 1945 Constitution or the Law. This attribution refers to the authority based on the constitution or laws and regulations that apply to officials of the Unitary State of the Republic of Indonesia. By the duties and authorities of law enforcement at sea, the responsibility based on the law is by the explanation above to maintain security and order at sea.

Law enforcement at sea is more special, in the sense that a process of activities carried out in the settlement of a case that arises as a result of a violation of the law has occurred both in terms of national law and international law.

The International Convention on the Prevention of Pollution from Ships (MARPOL) is one of the most important international legal instruments in regulating marine pollution. MARPOL was adopted in 1973 and has undergone several amendments to respond

to new developments and challenges in the prevention of marine pollution. The convention covers a wide range of aspects, including oil pollution, waste, and other harmful substances that can damage marine ecosystems. According to data from the International Maritime Organization (IMO), about 90% of the world's total trade is carried out by sea, so it is important to have strict regulations to protect the marine environment from pollution caused by ship activities (IMO, 2020). The United Nations Convention on the Law of the Sea (UNCLOS) is an international legal instrument that regulates various aspects of ocean use, including the prevention of marine pollution. Adopted in 1982, UNCLOS provides a framework for states to regulate their rights and obligations at sea, including the responsibility to protect the marine environment. Articles 192 to 196 of UNCLOS specifically regulate the obligation of states to protect and protect the marine environment from pollution (United Nations, 1982). UNCLOS also gives countries the right to take action against ships that pollute their waters. In this case, coastal states have the right to conduct inspections and law enforcement against vessels suspected of committing violations. However, the exercise of this right often faces various obstacles, including jurisdictional issues and limited international cooperation (Koh, 2016). Overall, UNCLOS provides a comprehensive legal framework to protect the ocean from pollution, but its implementation requires strong cooperation between countries around the world to achieve effective results.

The application of criminal law traditionally serves as an *ultimum remedium*, or a last resort, in cases of environmental pollution or degradation, particularly when the offender's culpability is considered minor, the impact of the offense is limited, or the act does not lead to public concern. However, when the offender's degree of fault is substantial, the environmental harm caused is significant, or the act results in public unrest, the role

of criminal law shifts from being a secondary measure to a *primum remedium*, or primary means of enforcement. Based on the law enforcement process, it can only be carried out by investigators and investigators, about the law enforcement of certain criminal acts at sea by the mandate of the law and the authority to carry out the legal process, it consists of investigative institutions, namely the Indonesian Navy, the National Police, collecting evidence that with that evidence sheds light on the criminal acts that occurred and to find the suspects". By referring to the explanation of article 6 of the Criminal Procedure Code, which refers to civil servant officials who are specifically appointed according to certain laws who are authorized to conduct investigations, are those appointed by administrative legislation that are subject to criminal sanctions, namely:

a. Customs and Excise Office; b. Immigration; c. Era; d. Fisheries; e. Traffic and Road Transportation; f. Naval officers are authorized to investigate violations in exclusive economic zones. Repressive law enforcement is carried out in the event of acts that violate regulations. Criminal enforcement generally always follows a violation of the rules and usually cannot negate the consequences of the violation. To avoid repeated criminal prosecution, the perpetrator or polluter must stop the act. Administrative sanctions are mainly aimed at the protection of interests protected by the violated provisions. Some types of administrative law enforcement are a. Harmonization of regulations (*harmonizing*); b. Coercive action (*bestuursdwang*); c. Forced money (*publiekrechtelijke*); d. Closure of business premises (*sluiting van een inrichting*); Furthermore, paragraph (3) explains that in the context of law enforcement in the waters and jurisdictional areas, especially in carrying out security and safety patrols in the waters and jurisdictional areas of Indonesia, the Maritime Security Agency is assisted. Environmental law enforcers (Police, Prosecutors, Judges, PPNS, Legal Advisors) can carry out environmental law enforcement in a preventive and repressive manner by e. Cessation of the com-

pany's machinery activities (*buitengebruikstelling van een toestel*); f. Revocation of permits through the process of reprimands, police coercion, closure, and forced money. In the 2009 Law on Environmental Protection and Management, it is classified that those included in formal offenses are regulated in articles 100 to 111, and articles 113 to 115. Meanwhile, material offenses are regulated in Article 98, article 99, and Article 112. Criminal law enforcement in the environment pays attention to the principle of subsidiarity, this means that criminal law enforcement is solely to support administrative law enforcement and/or civil law enforcement both in court and outside court.

Law number 8 of 1981 concerning the Criminal Procedure Code (KUHP) defines an investigator as an official of the National Police, this is regulated in Article 4 of the Criminal Procedure Code while an investigation based on Article 1 number 5 of the Criminal Procedure Code is "A series of actions of investigators to search for and find an event suspected of being a criminal act to determine whether or not an investigation can be carried out according to this law". Article 1 number 2 of the Criminal Procedure Code explains that an investigation is "A series of actions of investigators in terms and by the manner regulated in this law to investigate as well as efforts to prevent and overcome marine environmental pollution sourced from activities related to shipping. Marine disasters can be carried out through 1. Development of disaster mitigation systems; 2. Development of an early warning system 3. Development of national planning for emergency response to oil spills at sea; 4. Development of marine pollution control systems and marine ecosystem damage; and 5. Control of the impact of building debris in the sea and activities in the sea. Based on Government Regulation Number 19 of 1999 concerning the Control of Marine Pollution and/or Damage in Chapter V article 15 explains that "Every person or person in charge of business and/or destruction of the sea is obliged to carry out countermeasures against pollution and/or destruction of the sea resulting from their activities". In the article, many are accidents/collisions with tankers.

Therefore, there needs to be a countermeasure for this incident. In article 1 point 10 of Law Number 32 of 2014 concerning Marine Affairs, it is explained that protection. I, which includes material on the roles and responsibilities of administrators or managers, causes and impacts of oil and/or other material pollution, policies and countermeasures strategies, emergency response plans, structures, responsibilities, duties, functions, and work procedures of operational organizations, national regulations and international conventions as well as international cooperation, crisis management.

In the analysis of court decisions related to marine pollution cases, several things need to be considered. First, the court must consider the available evidence, including reports from relevant agencies, eyewitnesses, and the results of laboratory examinations of contaminated seawater samples. In some cases, courts tend to give lenient sentences to offenders, which are often disproportionate to the losses incurred. In addition, there are also obstacles in the application of multi-sectoral laws. Marine pollution cases often involve a variety of parties, including ministries, agencies, and local governments, which can lead to confusion in law enforcement. Therefore, there is a need for regulatory harmonization and coordination between institutions to increase the effectiveness of law enforcement against marine pollution crimes. In this context, it is important to re-evaluate the sanctions applied and consider the addition of more severe administrative sanctions for violators. This is expected to encourage companies to be more responsible in their operational activities and comply with existing regulations.

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Overall, the existence of clear and firm legal documents is crucial in efforts to prevent and deal with marine pollution by ships. However, the challenge faced is the implementation and enforcement of the law, which is often still weak, so there is a need for evaluation and improvement in the existing legal system.

The government needs to strengthen cooperation with international institutions to increase the capacity of monitoring and law enforcement related to marine pollution. For example, the increased use of satellite technology to monitor vessel activity can be an effective solution for detecting violations in real time. Third, another implication is the need to revise and strengthen existing regulations. Laws regulating marine pollution must be more responsive to technological developments and maritime industry practices. In this context, revisions to laws governing marine pollution in Indonesia, such as Law No. 32 of 2009 on Environmental Protection and Management, need to be done to include stricter sanctions for violators.

Existing regulations have significant implications for the handling of marine pollution crimes. In the context of criminal law, marine pollution by ships can be subject to sanctions that vary, ranging from fines to imprisonment. Law No. 32 of 2009 provides a clear legal framework regarding sanctions for violators, but its implementation is often hampered by various factors. One of the main implications is the need for coordination between government agencies in handling marine pollution cases

lack of coordination between the Ministry of Maritime Affairs and Fisheries, the Ministry of Environment and Forestry, and other law enforcement officials. This causes law enforcement to be ineffective and violators feel unthreatened.

The law is often hampered by bureaucracy and a lack of strong evidence.

already exists, but the lack of strict supervision and enforcement is a major obstacle. In addition, in practice, it is often difficult to prove an element of intention or omission, especially if the vessel involved is a foreign vessel

3.1. Economic and Social Impacts of Marine Pollution

The economic impact of marine pollution cannot be ignored either. Declining water quality can reduce fish catches, which has a direct impact on fishermen's livelihoods. Data from FAO shows that marine pollution can cause economic losses of up to \$13 billion per year for the fisheries sector (FAO, 2021). This poses a challenge for coastal communities that depend on marine resources for their daily lives. In addition, marine pollution also has an impact on human health. Hazardous materials that enter the food chain through marine life can pose serious health risks to consumers. Research shows that the consumption of contaminated fish can lead to a variety of diseases, including food poisoning and nervous system disorders (WHO, 2021). Therefore, it is important to maintain the quality of the ocean to protect public health. The social impact of marine pollution also needs to be considered. The communities that live around the coast are often the most affected by pollution. The loss of marine resources can lead to social conflicts and economic instability in coastal communities. According to a report from the United Nations, marine pollution can worsen the social and economic conditions of already vulnerable communities (UN, 2020). Therefore, handling marine pollution must involve a holistic and sustainable approach.

4. Conclusion

4.1. Conclusion

Based on the descriptions that have been put forward earlier, the following conclusions are drawn: 1. Environmental pollution is a form of environmental damage that occurs due to human activities or activities naturally, in addition to soil and air pollution,

seawater pollution is also one of the problems faced by many countries in the world. Marine pollution occurs usually due to oil pollution that spills into the sea and also government supervision of the pollution itself which has not been effective so pollution and marine damage increase.

4.2. Suggestion

Based on the findings and implications that have been explained, there are several suggestions for further research. First, further research can be conducted to explore the effectiveness of existing policies in addressing marine pollution. By analyzing policies in other countries that have succeeded in reducing marine pollution, Indonesia can adopt relevant best practices. Second, more in-depth research on the socioeconomic impacts of ocean pollution is also needed. Understanding how marine pollution affects the lives of coastal communities can provide a clearer picture of the urgency of addressing this problem. The study may also include an analysis of the costs and benefits of the proposed intervention. Third, another suggestion is to conduct longitudinal studies that monitor changes in marine environmental conditions in line with the implementation of new policies. Thus, researchers can provide more solid data-driven recommendations for future policy improvements.

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