

## MARITIME LEGAL POLITICS IN PREVENTING MARINE POLLUTION DUE TO SHIP TRAFFIC

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### **Abstract**

*The high volume of global ship traffic, including in Indonesia, poses significant risks to the marine environment due to pollution from oil spills, liquid waste, and plastic waste. This study aims to analyze Indonesia's maritime legal policies in preventing marine pollution, with a focus on the challenges in enforcing international conventions. This study uses a doctrinal approach method. Indonesia's maritime legal policy in preventing marine pollution due to ship traffic has developed, driven by international regulations such as the MARPOL Convention and UNCLOS. National law about Environmental Protection and Management, play an important role in regulating and enforcing pollution prevention policies. However, the implementation of the law still faces various challenges, such as weak law enforcement, less than optimal coordination between institutions, and limited technology and supporting facilities. Efforts to strengthen law enforcement and the application of international standards are needed to protect the marine environment from pollution due to ship activities.*

**Keyword:** legal Politics, Maritime law, Ship traffic

### **A. INTRODUCTION**

The sea has a very important role in global trade, because the majority of goods traded between countries are transported by sea.<sup>1</sup> As the most economical transportation route, shipping goods by ship is much more efficient than other modes of transportation such as planes or trains, especially for large quantities of commodities.<sup>2</sup> According to the United Nations Conference on Trade and Development, around 90% of global trade is carried out by sea, including important commodities such as oil, natural gas, agricultural products, and manufactured goods. Major sea trade routes, such as the Strait of Malacca, the Suez Canal, and the Panama Canal, connect countries on various continents, accelerating and facilitating the distribution of goods globally.<sup>3</sup>

The sea also provides freedom of navigation under the United Nations Convention on the Law of the Sea, which allows ships from various countries to move freely on the high seas without significant obstacles, thus

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1 Jesse M. Lane and Michael Pretes., Maritime Dependency and Economic Prosperity: Why Access to Oceanic Trade Matters, *Marine Policy* Vol.121, 2020, page.1810

2 Jean-Paul Rodrigue., *The Geography of Transport Systems*, Routledge, 2020

3 International Maritime Rescue Federation (IMRF), <https://www.international-maritime-rescue.org/>

facilitating the flow of international trade.<sup>4</sup> In addition, modern ships have a large capacity to carry thousands of containers at once, thereby increasing the efficiency of shipping goods and reducing transportation costs. The world's major ports, such as those in Rotterdam, Singapore, and Shanghai, are centers of economic activity that drive the logistics, manufacturing, and service industries.<sup>5</sup>

However, the high volume of ship traffic also has negative impacts on the marine environment, especially through pollution from oil leaks, waste disposal, and ecosystem damage. Therefore, effective maritime legal regulation is essential to maintain a balance between the economic benefits of maritime trade and environmental protection.<sup>6</sup> Heavy ship traffic has a significant negative impact on the marine environment. One of the main problems is pollution caused by oil leaks and hazardous waste discharges from ships. Oil spills from ships can cause severe damage to marine ecosystems, killing marine organisms such as fish, birds and marine mammals, and polluting beaches and coastal areas.<sup>7</sup> In addition to oil, ships also produce hazardous chemical pollutants and solid waste that can pollute seawater and damage the food chain in marine ecosystems.<sup>8</sup>

Air pollution is also a serious problem resulting from ship traffic. Emissions of sulfur oxides and nitrogen oxides from ship fuels contribute to air pollution, which has adverse effects on human health and the environment.<sup>9</sup> In addition, noise from ships can disrupt the communication and migration patterns of marine animals, such as whales and dolphins, which rely heavily on sound for navigation and foraging.<sup>10</sup>

Another impact is physical damage to marine ecosystems, especially coral reefs and the seabed, which often occurs due to ship anchors or ship collisions with underwater structures. This results in the degradation of marine habitats that are essential for the survival of various species.<sup>11</sup> Overall, ship traffic places significant pressure on marine ecosystems, and stricter regulations are needed to mitigate these environmental impacts.

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- 4 United Nations Convention on the Law of the Sea, 1982, Rights of Navigation in International Waters, <https://www.un.org/>
  - 5 H. E. Haralambides., Containerization and the Port Industry, *International encyclopedia of transportation*, 2021, page.545–56.
  - 6 Anastasia Christodoulou and Jonatan Echebarria Fernández., *Maritime Governance and International Maritime Organization Instruments Focused on Sustainability in the Light of United Nations' Sustainable Development Goals*, in *Sustainability in the Maritime Domain*, ed. Angela Carpenter, Tafsir M. Johansson, and Jon A. Skinner, Strategies for Sustainability, Cham, Springer International Publishing, 2021, page.415–461
  - 7 Ankita Thakur and Bhupendra Koul., Impact of Oil Exploration and Spillage on Marine Environments, in *Advances in Oil-Water Separation*, Elsevier, 2022, page. 115–135
  - 8 World Maritime Theme 2022, <https://www.imo.org/>
  - 9 Jiaojun Deng et al., A Review of NOx and SOx Emission Reduction Technologies for Marine Diesel Engines and the Potential Evaluation of Liquefied Natural Gas Fuelled Vessels, *Science of the Total Environment*, Vol.766, 2021, page.144319.
  - 10 Stuart T. Johnston and Kevin J. Painter., Avoidance, Confusion or Solitude? Modelling How Noise Pollution Affects Whale Migration, *Movement Ecology*, Vol.12, No.1, February 19, 2024, page. 17.
  - 11 Peter T. Harris., Anthropogenic Threats to Benthic Habitats, in *Seafloor Geomorphology as Benthic Habitat*, Elsevier, 2020, page.35–61

Legal policy has a very important role in regulating maritime affairs in order to maintain marine sustainability. Legal policy in the maritime sector includes the creation of policies, laws, and law enforcement aimed at protecting the marine environment from damage caused by human activities, including ship traffic. According to Satjipto Rahardjo legal policy is a basic policy that determines the direction of the formation and implementation of laws in a country. In the maritime context, legal policy functions to create regulations that prevent marine pollution, protect marine biodiversity, and ensure the sustainability of marine resources.<sup>12</sup>

International regulations, such as the United Nations Convention on the Law of the Sea, have become an important basis for countries in regulating the use of the sea, including controlling marine pollution from ship activities.<sup>13</sup> In addition, regulations such as the MARPOL Convention provide international guidelines for countries to reduce pollution from ships.<sup>14</sup> In Indonesia, the government has adopted various policies and legal regulations to maintain marine sustainability, such as Law Number 32 of 2009 concerning Environmental Protection and Management and Law Number 17 of 2008 concerning Shipping. This policy shows the importance of the state's role in protecting the marine environment from damage caused by maritime activities.<sup>15</sup>

Research on maritime law has been conducted by Damar Tangguh Rabani, stating that marine pollution by shipping activities in Indonesia is a critical issue that affects the sustainability of the maritime environment. To ensure compliance with regulations, the community, law enforcement, and government must work together. Raising awareness, education, adequate resources, regional and international cooperation, effective supervision, strict sanctions, and community participation are the keys to overcoming marine pollution problems and ensuring sustainable protection of the maritime environment in Indonesia.<sup>16</sup> research with a similar theme has also been conducted by Zainuansyah Prasta Regi stating that the existence or existence of a national legal regulation in regulating the problem of marine environmental pollution originating from shipping activities already exists and is adequate, in regulating marine pollution originating from shipping activities.<sup>17</sup>

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12 Sarjito Rahardjo., *Law and Society*, Yogyakarta, Genta Publishing, 2009.

13 Nazar Hussain, Asif Khan, and Rashid Wassan., UNCLoS 1982: Comparative Analysis of Marine Pollution Prevention by Ships, *Annals of Human and Social Sciences*, Vol.4, No.2, 2023, page. 295–308.

14 Ward Van Roy et al., Policy Recommendations for International Regulations Addressing Air Pollution from Ships, *Marine Policy*, Vol.159, 2024, page.105913.

15 H Adolf., *Hukum Lingkungan Dan Pengelolaan Sumber Daya Alam*, Jakarta, Gramedia Pustaka Utama, 2020

16 Damar Tangguh Rabani (etc)., Penegakan Hukum Atas Pencemaran Laut Akibat Kegiatan Pelayaran Kapal di Perairan Indonesia dari Perspektif Hukum Lingkungan, *Jurnal Hukum, Politik dan Humaniora*, Vol.1, No.3. September 2024, page.290-298

17 Zainuansyah Prasta Regi (etc)., Analisis Perlindungan Hukum Oleh Dinas Lingkungan Hidup Dari Dampak Pencemaran Yang Bersumber Dari Kapal Di Wilayah Pelabuhan Tanjung Perak Surabaya, *Jurnal Justitia*, Vol.7, No.1, 2024, page.178-189

Law enforcement is also an important aspect in maritime legal policy. Without effective enforcement, regulations will not have a significant impact on marine sustainability. Weak law enforcement, including corruption, lack of oversight capacity, and unclear regulations, are often obstacles to protecting the marine environment.<sup>18</sup> Therefore, a strong commitment from the government and international cooperation are needed to implement policies that are able to maintain marine sustainability amidst the increasing pressure of ship traffic.

The purpose of this study is to analyze Indonesia's maritime legal policy related to the prevention of marine pollution and to identify challenges and solutions in the implementation of maritime legal policy in the ship traffic sector. Thus, this study is expected to contribute to the development of more effective maritime legal policies in preventing marine pollution, as well as providing academic references for further studies in the field of maritime and environmental law.

## **B. RESEARCH METHODS**

This study is doctrinal research, Doctrinal analysis is the overriding and defining characteristics of academic legal research.<sup>19</sup> Doctrinal legal research is concerned with the formulation of legal "doctrines" through the analysis of legal rules<sup>20</sup> doctrinal legal research, namely legal research by examining library materials and secondary materials.<sup>21</sup>

## **C. RESULTS AND DISCUSSION**

### **1. Political Theory of Law Indonesian Maritime Policy**

The definition of legal policy in the maritime context refers to the policy or direction of legal policy set by the state to regulate all aspects related to maritime law, including the prevention of marine pollution, management of marine resources, and regulation of ship traffic. Legal policy in this field plays an important role in determining the applicable regulations, how these regulations are implemented, and how law enforcement is carried out to maintain compliance with maritime legal norms.<sup>22</sup>

In the maritime context, legal politics includes the creation of laws, regulations, and policies that support the protection of the marine environment from various threats, such as pollution due to shipping activities and other maritime industrial activities. Maritime legal politics

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18 Sarjito Rahardjo., *Law and Society*, Yogyakarta, Genta Publishing, 2009.

19 Nasir Majeed (etc)., Doctrinal Research in Law: Meaning, Scope and Methodology, *Bulletin of Business and Economics*, Vol.12, No.4, 2023, page.559-563

20 Rita Abhavan Ngwoke (etc)., A Critical Appraisal Of Doctrinal And Non-Doctrinal Legal Research Methodologies In Contemporary Times, *International Journal of Civil Law and Legal Research*, Vol.3 No.1, page.08-17

21 Andri Winjaya Laksana, Bobur Sobirov., Comparative Study of Criminal Law Enforcement Against Drug Addicts Through Religious Rehabilitation Between Indonesia and Uzbekistan, *Madania*, Vol.28, No.1, Juni 2024, page.159-166

22 Philippe Nonet, Philip Selznick, and Robert A. Kagan., *Law and Society in Transition: Toward Responsive Law*, Routledge, 2017

also involves efforts to balance economic, social, and environmental interests, while still paying attention to national interests and international obligations that must be fulfilled by Indonesia as a member of the global community.<sup>23</sup>

In environmental management, including in the maritime context, there are several legal political theories that are relevant to understanding how legal policies are formed, implemented, and evaluated. Here are some frequently used theories: Responsive Law,<sup>24</sup> Development Law,<sup>25</sup> Environmental Justice,<sup>26</sup> Welfare State, Ecological Law,<sup>27</sup> and Legal Compliance.<sup>28</sup>

The history of maritime legal policy in Indonesia can be traced back to the Dutch colonial era, where maritime law applied at that time was based on Dutch trade law (*Wetboek van Koophandel*). After independence, Indonesia began to develop a national maritime legal system that was more appropriate to the context of its territory as an archipelagic country.

Indonesia's maritime legal policy began to experience significant development when Indonesia ratified the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, which strengthened Indonesia's position in managing its maritime territory. Along with the development of globalization and the increasing threat of marine pollution, Indonesia's maritime policy has increasingly focused on environmental issues, such as through the ratification of the International Convention for the Prevention of Pollution from Ships (MARPOL) in 1973, and the implementation of various national regulations that support efforts to preserve the marine environment.<sup>29</sup>

Maritime regulations in Indonesia are governed by various national laws and international agreements. One of the most relevant international regulations is the United Nations Convention on the Law of the Sea, which was ratified by Indonesia in 1982. UNCLOS regulates the rights and obligations of states in the use of the sea, including policies related to the management of marine resources and the prevention of marine pollution. In addition, the International Convention for the Prevention of Pollution from Ships (MARPOL) is another crucial international regulation, aimed at minimizing marine pollution due to shipping activities. MARPOL covers the prevention of pollution from oil waste, hazardous chemicals, liquid waste, and other pollutants that can

23 A.G Wibisana., *Hukum Lingkungan Indonesia*, Jakarta, Penerbit Universitas Indonesia, 2016

24 Philippe Nonet, Philip Selznick, and Robert A. Kagan., *Law and Society in Transition: Toward Responsive Law*, Routledge, 2017

25 Philipus M. Hadjon., *Pengantar Hukum Administrasi Indonesia*, Yogyakarta, Gadjah Mada University Press, Anggota IKAPI, 2005

26 Robert D. Bullard., *Dumping in Dixie: Race, Class, and Environmental Quality*, Routledge, 2018

27 *Ibid.*

28 Tyler T.R., *Why People Obey the Law*, New Haven, Yale University Press, 1990.

29 Sefriani., *International Maritime Law and Its Regulations in Indonesian National Law* Yogyakarta, Student Library, 2014.

pollute marine ecosystems. Indonesia also has various relevant national laws, such as Law Number 32 of 2009 concerning Environmental Protection and Management, which specifically regulates marine pollution and sanctions for violations of environmental law in the maritime sector.<sup>30</sup>

## 2. Marine Pollution Due to Ship Traffic in the Framework of Environmental Law Approach Theory

Pollution from ship traffic is one of the biggest threats to marine ecosystems. There are several types of pollution resulting from shipping activities. First, oil pollution that occurs due to oil spills from ships, either due to accidents or uncontrolled discharges. This pollution is very damaging to marine life because spilled oil can block sunlight and reduce oxygen in the water.<sup>31</sup> Second, liquid waste pollution, which includes ballast water discharge, domestic wastewater, and waste from the tank washing process. This waste often contains toxic chemicals, heavy metals, and pathogens that are harmful to human health and marine ecosystems.<sup>32</sup> Third, air pollution from ship exhaust emissions, such as sulfur oxides and nitrogen oxides. These emissions contribute to climate change and air pollution in coastal areas, and can cause acid rain that damages marine and terrestrial ecosystems.<sup>33</sup> Fourth, plastic waste pollution resulting from illegal waste disposal by ships. Plastic that is dumped into the sea can harm marine life because it can be swallowed by fish or other marine animals, which ultimately damages the marine food chain.<sup>34</sup>

This pollution is mostly caused by ship operational activities, accidents, and violations of international regulations such as the MARPOL Convention, which aims to reduce pollution from ship waste. Ineffective implementation of these regulations often exacerbates the problem of marine pollution due to ship traffic.<sup>35</sup> Marine pollution due to ship activities has a significant impact on marine ecosystems and human life. Impacts on marine ecosystems include damage to marine habitats, decreased water quality, and the death of marine organisms. Oil pollution, for example, can coat the water's surface, blocking sunlight from entering, which disrupts the photosynthesis process of plankton and marine plants. This impact can also cause mass deaths of marine

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30 A.G Wibisana., *Hukum Lingkungan Indonesia*, Jakarta, Penerbit Universitas Indonesia, 2016.

31 Charles H. Peterson et al., Long-Term Ecosystem Response to the Exxon Valdez Oil Spill, *Science*, Vol.302, No.5653, December 19, 2003, page. 2082–2086.

32 Angela Carpenter., Oil Pollution in the North Sea: The Impact of Governance Measures on Oil Pollution over Several Decades, *Hydrobiologia*, Vol.845, No.1, November 2019, page. 109–127.

33 James J. Corbett and Paul Fischbeck., Emissions from Ships, *Science* Vol.278, No.5339, October 31, 1997, page.823–824.

34 David K. A. Barnes et al., Accumulation and Fragmentation of Plastic Debris in Global Environments, *Philosophical Transactions of the Royal Society B: Biological Sciences*, Vol.364, No.1526, July 27, 2009, page. 1985–1998.

35 A.G Wibisana., *Hukum Lingkungan Indonesia*, Jakarta, Penerbit Universitas Indonesia, 2016

animals, such as fish, seabirds, and marine mammals exposed to oil.<sup>36</sup> In addition, toxic waste from ships such as polluted ballast water can carry invasive species that disrupt the balance of local ecosystems.<sup>37</sup>

The impact on humans is also very serious. Marine pollution can contaminate the food chain, as toxic chemicals from oil spills or hazardous waste can accumulate in the tissues of marine organisms such as fish and shellfish, which are then consumed by humans. Consumption of contaminated seafood can cause serious health problems, including food poisoning, nervous system disorders, and other chronic diseases.<sup>38</sup> In addition, marine pollution also has an impact on the economic sector, especially fisheries and tourism. Polluted waters reduce fishermen's catches and reduce the attractiveness of coastal tourism areas, which in turn harms the economy of coastal communities.<sup>39</sup>

Furthermore, exhaust emissions from ships contribute to climate change through the release of greenhouse gases such as carbon dioxide (CO<sub>2</sub>) and sulfur oxides (SO<sub>x</sub>). These gases cause global warming and changes in weather patterns, affecting life on land and at sea.<sup>40</sup> The combination of air and marine pollution accelerates environmental degradation and increases risks to human health and the sustainability of marine ecosystems.

The precautionary principle is an important concept in international environmental law that states that precautionary measures should be taken even when there is insufficient scientific evidence to support the potential harmful effects of an activity. This principle emphasizes that scientific uncertainty should not be a reason to postpone preventive measures against pollution or environmental damage. In the maritime context, the precautionary principle is applied to avoid marine pollution from shipping or other maritime industries. If there is a possibility that ship activities could pollute the sea, then precautionary measures should be taken even before the impact of pollution is definitely.<sup>41</sup> This principle is reflected in various international legal instruments, including the United Nations Convention on the Law of the Sea (UNCLOS) and the MARPOL Convention, which encourage countries to implement preventive measures to preserve the marine

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36 Charles H. Peterson et al., Long-Term Ecosystem Response to the Exxon Valdez Oil Spill, *Science*, Vol.302, No.5653, December 19, 2003, page. 2082–2086

37 Gregory M. Ruiz et al., Global Invasions of Marine and Estuarine Habitats by Non-Indigenous Species: Mechanisms, Extent, and Consequences, *American zoologist*, Vol.37, No.6, 1997, page. 621–632.

38 Angela Carpenter., Oil Pollution in the North Sea: The Impact of Governance Measures on Oil Pollution over Several Decades, *Hydrobiologia*, Vol.845, No.1, November 2019, page. 109–127

39 U. Rashid Sumaila et al., Global Fisheries Subsidies: An Updated Estimate, *Marine Policy*, Vol.69, 2016, page. 189–193.

40 James J. Corbett and Paul Fischbeck., Emissions from Ships, *Science* Vol.278, No.5339, October 31, 1997, page.823–824

41 James Cameron and Juli Abouchar., The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment, *BC Int'l & Comp. L. Rev.* Vol.14, 1991, page.1.

environment.

The principle of state and corporate responsibility in preventing marine pollution states that both states and business entities have a responsibility to prevent, control and reduce marine pollution. States are obliged to regulate activities that have the potential to pollute the sea, and to ensure that the maritime industry, including shipping companies, comply with applicable regulations. This principle is stated in the United Nations Convention on the Law of the Sea and the MARPOL Convention, which stipulate that coastal states must take steps to prevent pollution from ships sailing in their waters.<sup>42</sup>

Shipping companies, as industry players, also bear the responsibility to ensure that their operational activities do not pollute the sea. The company's responsibility includes the application of environmentally friendly technology, good ship maintenance, and waste disposal in accordance with international regulations. In cases of marine pollution caused by shipping activities, both the state and the company can be held legally responsible, including the obligation to clean up the pollution and provide compensation for the damage caused.<sup>43</sup> This principle of responsibility is reinforced by the existence of international and national monitoring mechanisms to ensure company compliance with environmental standards.

Legal politics in maritime policy-making includes the process of making laws, regulations, and policies related to the management of the sea and maritime resources. Legal politics analysis looks at how economic, social, and environmental interests influence the formulation of these policies, as well as how state actors, the private sector, and civil society are involved in the process of making them. In the maritime context, policies are often driven by the need to balance economic growth through the shipping and fisheries industries with the protection of the marine environment from pollution and damage. Domestic political factors, such as pressure from the maritime industry, and international commitments, such as obligations arising from international agreements, greatly influence policy decision-making.<sup>44</sup>

Legal political analysis also considers how global dynamics, including climate change and trade globalization, force countries to adopt more responsive maritime policies. Countries with strong maritime interests, such as Indonesia, are often in a position to balance national interests with international obligations, while maintaining their maritime sovereignty. This is reflected in Indonesia's maritime policy which is continuously updated to maintain a balance between marine-based

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42 Patricia Birnie, Alan Boyle, and Catherine Redgwell., *International Law & the Environment*, 2009

43 A.G Wibisana., *Hukum Lingkungan Indonesia*, Jakarta, Penerbit Universitas Indonesia, 2016

44 Sefriani., *International Maritime Law and Its Regulations in Indonesian National Law* Yogyakarta, Student Library, 2014 *Maritime Law and Its Regulations in Indonesian National Law*.



economic development and marine ecosystem protection.<sup>45</sup>

The state plays a central role in regulation and law enforcement in the maritime sector. As the main actor in maritime legal politics, the state is responsible for formulating policies that regulate activities at sea, such as marine resource management, pollution prevention, and ship traffic regulation. The state also acts as a law enforcer that ensures that the established rules are complied with by maritime industry players. In Indonesia, maritime regulations are regulated by various national laws, such as Law Number 17 of 2008 concerning Shipping, which regulates shipping safety, prevention of pollution from ships, and the state's responsibility in supervising shipping activities.<sup>46</sup>

Law enforcement in the maritime sector involves state institutions such as the Indonesian Navy, the Indonesian National Police, and the Ministry of Transportation, which are responsible for conducting sea patrols, ship inspections, and handling cases of violations of maritime law. The state also cooperates with international organizations in law enforcement, such as following standards set by the International Maritime Organization (IMO) and enforcing international provisions such as UNCLOS and MARPOL. The role of the state in law enforcement is very important to ensure that the policies made are not just regulations on paper, but are actually implemented to protect the sea from damage and pollution.<sup>47</sup>

In conclusion, while Indonesia's national policies on marine pollution are well-aligned with international standards and demonstrate a strong legal foundation, their effectiveness is hindered by enforcement difficulties, limited infrastructure, and resource constraints. To fully realize the potential of these laws, greater investment in monitoring technologies, inter-agency coordination, and the strengthening of enforcement mechanisms are essential. Without addressing these challenges, the impact of these laws on reducing marine pollution from ships will remain limited.

### **3. The Role of Government in Ship Traffic in Indonesia**

The role of government in regulating and supervising ship traffic is very important to maintain the sustainability of the marine environment and prevent pollution caused by maritime activities. Some of the main roles of government include the Formation of Regulations and Policies. The government is responsible for formulating laws and regulations governing ship traffic and protection of the marine environment. In Indonesia, some of the main regulations involved are: Law Number 17 of 2008 concerning Shipping: Regulates shipping safety, prevention of

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45 A.G Wibisana., *Hukum Lingkungan Indonesia*, Jakarta, Penerbit Universitas Indonesia, 2016

46 Sefriani., *International Maritime Law and Its Regulations in Indonesian National Law* Yogyakarta, Student Library, 2014

47 Patricia Birnie, Alan Boyle, and Catherine Redgwell., *International Law & the Environment*, 2009

pollution from ships, and obligations of shipping companies. Law Number 32 of 2009 concerning Environmental Protection and Management: Regulates general environmental protection, including protection of marine ecosystems from pollution caused by ships. Furthermore, Supervision and Law Enforcement The government through institutions such as the Indonesian Navy, Ministry of Transportation, and the Water Police supervises the operations of ships crossing Indonesian waters. The government is also responsible for enforcing the law for violators of regulations, such as illegal waste disposal, oil spills, or violations of safety standards. the existence of the government then implements the Implementation of International Standards Indonesia as an archipelagic country that is active in international trade must follow international standards and provisions, such as the MARPOL Convention which aims to prevent marine pollution from ships, the United Nations Convention on the Law of the Sea regulates the state's responsibility in maintaining the cleanliness of the sea and regulating the use of marine resources, Infrastructure and Technology Development.

The government also plays a role in providing infrastructure that supports pollution monitoring and control, such as adequate port facilities for processing ship waste. In addition, the government is encouraged to adopt environmentally friendly technology to minimize the negative impact of the maritime industry on the environment and International Cooperation

The government is involved in cooperation with other countries and international organizations to monitor ship traffic and combat marine pollution. This cooperation includes the exchange of information, increasing technical capacity, and strengthening cross-country regulations, the government can ensure that shipping activities in Indonesian waters are safe and environmentally friendly, while still supporting marine-based economic growth.

the Indonesian government has established a comprehensive framework for preventing marine pollution from ships, significant challenges remain in the areas of enforcement, infrastructure, and international cooperation. To fully realize its goals of sustainable and environmentally friendly shipping activities, Indonesia must focus on improving law enforcement, upgrading port infrastructure, and fostering stronger international partnerships. Without addressing these gaps, the country's policies will struggle to achieve their intended impact.

#### **D. CONCLUSION**

Indonesia's maritime legal policy in preventing marine pollution due to ship traffic has developed, driven by international regulations such as the MARPOL Convention and UNCLOS. National laws, such as Law No. 32 of 2009 concerning Environmental Protection and Management, play an important role in regulating and enforcing pollution prevention policies. However, the implementation of the law still faces various challenges, such as weak law enforcement, less than optimal coordination between

institutions, and limited technology and supporting facilities. Efforts to strengthen law enforcement and the application of international standards are needed to protect the marine environment from pollution due to ship activities.

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