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Marine Pollution by State-Owned Companies in Offshore Areas Reviewed Based on the 1982 UNCLOS (Case Study: Oil Spill by PT Pertamina in Offshore Area of North Karawang)

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Abstract
On July 12 2019, there was a pipe leak and a gas bubble oil spill belonging to PT Pertamina. PT Pertamina's pipeline leak in Karawang waters which has an impact from the oil spill threatens the ecosystem and the people around Karawang waters. Marine pollution cannot be seen only as a problem that occurs in the sea, because the oceans and land are an ecosystem unit that cannot be separated and are affected by one another. As a result of this incident, a problem arose regarding PT Pertamina's legal liability due to a pipe leak that caused marine pollution in Karawang waters. This research uses the normative juridical method. The purpose of this research is to find out the regulation of marine pollution actions carried out by PT Pertamina in the offshore area and to analyze the form of accountability. The results of the study can be concluded, firstly, that the regulation of marine pollution actions based on UNCLOS 1982 is contained in Articles 192, 194, 195, 196 and Law Number 32 of 2009 concerning Environmental Protection and Management. Secondly, in the form of liability for marine environmental pollution as a result of PT Pertamina's oil spill, there are three legal responsibilities (administrative liability, civil liability, and criminal liability).

Keywords: Marine Pollution, Oil Spills, Accountability, UNCLOS 1982.

Abstrak
Pada tanggal 12 Juli 2019, terjadi kebocoran pipa dan tumpahan minyak berupa gelembung gas milik PT Pertamina. Kebocoran pipa PT Pertamina di perairan Karawang yang berdampak pada tumpahan minyak tersebut mengancam ekosistem dan masyarakat di sekitar perairan Karawang. Pencemaran laut tidak dapat dilihat hanya sebagai masalah yang terjadi di laut saja, karena lautan dan daratan merupakan satu kesatuan ekosistem yang tidak dapat dipisahkan dan saling mempengaruhi satu sama lain. Akibat dari kejadian tersebut, timbul permasalahan mengenai tanggung jawab hukum PT Pertamina akibat kebocoran pipa yang menyebabkan pencemaran laut di perairan Karawang. Penelitian ini menggunakan metode yuridis normatif. Tujuan dari penelitian ini adalah untuk mengetahui pengaturan tindakan pencemaran laut yang dilakukan oleh PT Pertamina di wilayah lepas pantai dan menganalisis bentuk pertanggungjawabannya. Hasil penelitian dapat disimpulkan, pertama, pengaturan tindakan pencemaran laut berdasarkan UNCLOS 1982 terdapat pada Pasal 192, 194, 195, 196 dan Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup. Kedua, bentuk pertanggungjawaban pencemaran lingkungan laut akibat tumpahan minyak PT Pertamina terdapat tiga tanggung jawab hukum (tanggung jawab administratif, tanggung jawab perdata, dan tanggung jawab pidana).

Kata kunci: *Polusi Laut, Tumpahan Minyak, Akuntabilitas, UNCLOS 1982.*

Introduction

According to Mochtar Kusumaatmadja, marine pollution is a change in the marine environment that occurs due to the inclusion of energy materials by humans directly or indirectly into the marine environment (including river mouths), which will cause harm to biological wealth, danger to biological wealth, danger to human health, disruption to activities at sea including fishing,

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deterioration of sea air quality and reduction of quiet and recreational areas (Kusumaatmadja, 2013).

If one of the natural balances is disturbed or damaged, it will also affect human life (Lestari, 2017). Marine pollution cannot be seen only as a problem that occurs in the sea. Oceans and land are ecosystem units that cannot be separated and are affected by one another. The damage to the marine environment is caused by the rapid development of science and technology in the field of exploration and exploitation in the mineral sector of oil mining. Oil is a general term for all organic liquids that are insoluble/miscible in water (hydrophobic) but soluble in organic solvents. In a narrow sense, the word 'oil' usually refers to petroleum or its processed products, namely hydrocarbons (crude oil). Crude oil comes from fossilized plants and animals that have been dead for millions of years which makes it a non-renewable natural resource.

Existence of petroleum is obtained in two areas commonly referred to as offshore and onshore. For offshore areas, petroleum that has been produced to the surface will be distributed via tankers/barges or pipes buried on the seabed (subsea). This is why the process of processing petroleum from the upstream to the downstream sector is very crucial and has a management flow that is quite complicated and must be considered in detail so as not to experience losses and accidents in the economy, security, and environment (Ahyadi et al., 2021).

In exploiting petroleum for its uses, it is necessary to pay attention to the impact on the environment so the problem of marine pollution can be anticipated. Not only in the oceans, but oil has also begun to enter densely populated areas and conservation areas. The impact felt is not only from an ecological perspective but also from a social impact (Pratama, 2020). In 1972, a conference on the environment, known as the Stockholm Conference, was initiated. Furthermore, regarding settlement, accountability and compensation for pollution, it has been regulated in international conventions, namely in the United Nations Convention on The Law of The Sea 1982 (UNCLOS 1982). The problem of protecting the marine environment, especially regarding pollution due to oil spills, has been regulated since the "1958 Geneva Convention" concerning the high seas regime. Article 24 states that every country is obliged to enact regulations to prevent marine pollution caused by oil originating from ships or sea pipelines or caused by exploration and exploitation of the seabed and subsoil by taking into account the provisions of existing international agreements regarding this matter.

Article 192 of UNCLOS 1982 regulates general obligations about the protection of the marine environment, in which all countries are burdened with the responsibility to protect and conserve the marine environment. It has also been explained in Article 1 paragraph (10) of Law Number 32 of 2014 concerning Maritime. The protection of the marine environment is an effort made to preserve marine resources and prevent pollution and/or damage to the marine environment which includes marine conservation, marine pollution control, marine disaster management, pollution prevention and management, and disaster damage.

UNCLOS 1982 adopted the marine environment protection system adhered to by the 1972 Stockholm Declaration that recognized country sovereignty

(territorial sovereignty) over the natural resources in its territory. On the other hand, UNCLOS 1982 also requires countries to protect (protect and conserve) the environment and natural resources from exploitation that is not environmentally friendly. Thus, UNCLOS 1982 has reflected the principles of environmental law (*sic utere tuo ut alienum laedas*) and sustainable development. As evidence, UNCLOS 1982 provides general arrangements as a legal basis for exploiting natural resources but also regulates primary obligations to protect and conserve natural resources in the sea or on the seabed (Husin, 2016).

It can be concluded that marine pollution is a form of marine environmental damage in the sense that there is destruction, disruption, and transformation that causes the marine environment to not function properly (Sodik, 2016). The functions of the sea provide an impetus for the control and use of the sea by every country or kingdom based on a legal conception. The emergence of the concept of international law of the sea cannot be separated from the history of the growth of international law of the sea which recognizes the struggle between the two conceptions, there are:

a. *Res Communis*, which states that the sea is the public property of the world community. Therefore, it cannot be taken or owned by each country;
b. *Res Nulius*, which states that no one owns the sea. Therefore, it can be taken and owned by each country.

In the last few decades, environmental problems have become bigger, more widespread, and more serious. The problem is not only at the local or trans-local level, but regional, national, transnational and global. This was then responded to in international environmental law by starting to adopt the concept of the polluter pays principle, which is one of the principles in international environmental law. In about 1960, the cost of economic growth introduced the principle of polluter pays as a principle for polluters that should be avoided.

This principle was adopted and introduced by member nations of the Organization for Economic Co-operation and Development (OECD). It is also contained in the provisions of the European Communities Law of 1972 (Muhdar, 2009). The principle of paying for pollution first appeared in a document prepared by the International Organization for Economic Cooperation and Development (OECD), namely environmental economics. The polluter pays principle is related to Plato's classic statement which states:

> *"If anyone intentionally spoils the water of another... let him not only pay for damages, but purify the stream or cistern that contains the water"* (Wijoyo & Efendi, 2017).

The 16th principle of the Rio Declaration is the product of the UN Conference on environment and development. In its development, several agreements after the Rio Declaration oblige the parties to the agreement to apply the polluter pays principle (Paripurno, 2018). This principle also only appears in a few limited agreements, namely on pollution of international waterways, marine pollution, cross-border industrial accidents, and energy (Paripurno, 2018). The implementation of this principle most often carried out by countries is internalization through taxes or fines, as well as rules regarding accountability

through civil and public law. Apart from being a deterrent effect for polluters, this principle can also revoke polluter licenses, fines, criminal penalties, compensation payments, and environmental restoration which can complement the fulfilment of the precautionary principle.

One of the conventions that regulate responsibility for marine pollution is the 1969 International Convention on Civil Liability for Oil Damage (CLC 1969). CLC 1969 is a convention held in Brussels, on 29 November 1969. This convention specifically regulates civil liability for oil pollution at sea (Heryandi, 2015). The polluter pays principle itself does not exist specifically in national environmental law, but in Article 34 Paragraph (1) of Law Number 32 of 2009 concerning Environmental Protection there is a definition that is almost similar to this principle which reads that every act that violates the law is in the form of pollution and/or environmental damage that causes harm to other people or the environment, obliging those responsible for a business and/or activity to pay compensation and/or take certain actions.

Even though regulations on marine protection have existed for a long time, pollution of the marine environment still occurs. Such as the environmental case which occurred again on July 12 2019. PT Pertamina's oil spill and gas bubble spread in the North Sea of Java, at the offshore drilling site owned by PT Pertamina Karawang, West Java. The cumulative oil spill amounted to 39,685 barrels offshore. PT Pertamina's oil spill disaster is not the first time. Until now, the impact of the leak has occurred in Karawang, extending to Bekasi, and even to the Thousand Islands. Based on data from the People's Coalition for Fisheries Justice (Kiara), there are nine villages close to the oil spill. They are Camara Village, Cibuaya District; Sungai Buntu Village, Pedes District; Petok Mati Village, Cilebar District. Then, Sedari Village, Pusaka Jaya District; Pakis Beach, Batu Jaya District; Cimalaya Village; Pasir Putih, Cikalong District; Ciparage, Tempuran and Tambak Sumur Districts, Tirtajaya District. People are affected by hives and acute respiratory infections. The environment has been badly affected. There are 89.19 hectares of mangroves and 9.54 hectares damaged due to contamination by PT Pertamina's oil. Hence, the impact of pollution is not only felt by the environment but also on the people's economy. The mangrove ecosystem in Karawang waters is basically vulnerable and increasingly vulnerable since it is polluted by PT Pertamina's oil (Rikardi et al., 2021).

The appearance of a layer of oil (oil sheen) on the sea surface around the gas bubbles was seen on July 16 2019. The initial appearance of the gas bubbles was thought to only be a pressure anomaly during draw well reactivation. Oil spills due to leakage of offshore platforms by PT Pertamina which pollute the north coast of Karawang have harmed fishermen because they cannot go to sea. In addition, this oil pollution also causes losses to salt and shrimp farmers. Even residents, especially children, have had their health disrupted due to the smell of waste oil. The incident of an oil spill caused by exploitation activities by PT Pertamina gave rise to a legal responsibility to provide recovery for all affected victims based on the principles of prompt, adequate and effective. The oil spill in 2021 again disrupted the health and economy of the people. Based on internet searches, there

are no mass media that reports that PT Pertamina for the incident in 2021 took special action to restore the environment and resulted in the condition of Karawang waters getting worse (Firdaus, 2022).

In the context of this legal responsibility, the government is also held responsible because PT Pertamina is a State-Owned Enterprise (SOE or *Badan Usaha Milik Negara* (BUMN)). The implementation of economic activities through SOEs brings together public duties and private obligations. In other words, the legal duties of the state merge with the governance responsibilities of private organizations. Previously, there had been previous studies (State of the Art) which were used as references in this study. State of The Art also explains the differences between previous research and future research that discusses marine pollution.

For example, the research of Ni Putu Intan Purnami and Putu Tuni Cakabawa Landra which has been published in a journal entitled A Review of International Law of the Sea Concerning Responsibility Regarding Environmental Pollution Due to Oil Spills in the Overlapping Exclusive Economic Zone Areas between Indonesia and Malaysia Located in the Malacca Strait Waters. The journal deals with analyzing the responsibility of ship owners who spill oil which can result in pollution of the marine environment in the overlapping area between Indonesia and Malaysia in the Malacca Strait. In this case, if a ship accident occurs, it will cause the responsibility of the ship owner to the country whose territorial waters are polluted. This can happen because the state is harmed by oil pollution spilt from ships.

In addition, Ahmad Syofyan's research has been published in a journal entitled Responsibility in Marine Pollution Caused by Oil According to International Law. The journal is concerned with analyzing the classification of marine pollution according to UNCLOS 1982, as contained in Section 5 concerning International Regulations.

Research Problems

First, how is the regulation of marine pollution actions carried out by PT Pertamina in the North Karawang offshore area reviewed based on UNCLOS 1982? and second, what is the form of responsibility PT Pertamina for actions that cause sea pollution in the offshore area of North Karawang?

Research Methods

The method used in research on the preparation of legal writing is Normative Juridical research, legal research with a normative doctrinal approach, or normative juridical legal research which is an activity that will examine aspects (to resolve the problems that exist) (Benuf & Azhar, 2020). This type of normative legal research is carried out by examining library materials or secondary data consisting of primary legal materials and secondary legal materials obtained from the results of research, articles, and opinions of international law experts. This research will be structured using a normative juridical research type. This research examines the application of the principles or norms in positive law. This legal research seeks the truth of coherence whether there are legal rules following legal principles, whether norms are under legal principles, and whether actions are under legal principles

(Marzuki, 2017). Problem-solving to provide perceptions or legal issues raised (Susanti & Efendi, 2014).

Discussion

1. Regulations for Sea Pollution Actions Carried Out by PT Pertamina in the North Karawang Offshore Area Reviewed Based on UNCLOS 1982

In particular, the protection of the marine environment to prevent and control pollution of the marine environment caused by all sources is required by the provisions in UNCLOS 1982. Article 194 UNCLOS 1982 states that each country must take the necessary actions in such a way that these actions do not cause damage to other countries and their environment. So, the pollution arising from the actions and activities under their jurisdiction or control does not spread through the areas that are under the exercise of their sovereign rights.

UNCLOS 1982 has combined the limits on broader marine pollution and mentions sources of pollution from all aspects, such as land activities, seabed activities (offshore activities), activities in the area (activities on the ocean floor), dumping (waste disposal), vessels (ships), and activities in the air (atmosphere). UNCLOS 1982 regulates the protection of the marine environment and the preservation of the marine environment in Chapter XII consisting of Articles 192-237 (Israfin, 2019).

In Article 193 of UNCLOS 1982, there is a general provision that states have sovereign rights to exploit natural resources in harmony with marine environmental policies and follow the obligations of each country to protect and preserve the marine environment. Chapter XII also regulates actions to prevent, reduce and control pollution of the marine environment including global and regional cooperation in formulating and explaining provisions, standards, recommended practices and procedures for global protection of the preservation of the marine environment by taking into account distinctive regional features. The 1982 UNCLOS also adopted the principle of common but differentiated responsibility, with special treatment for developing countries in terms of technical assistance. This is regulated in Article 203 of UNCLOS 1982 which states that developing countries are given special treatment by international organizations in terms of the allocation of funds and the use of special services of the organization.

As contained in Part 5 regarding International Rules and National Legislation to Prevent, Reduce, and Control Pollution of the Marine Environment, the classification of marine pollution is contained in Articles 207-212 UNCLOS 1982, namely:

a. Marine pollution from land sources,
b. Marine pollution from seabed activities is subject to national jurisdiction,
c. Marine pollution from activities in the area,
d. Marine pollution due to dumping,
e. Marine pollution from water vehicles,
f. Marine pollution from or through the air.

All efforts have been made by sovereign countries to protect the sustainability of their sea areas. Strict action has been taken by existing regulations. However, it

does not rule out the possibility of accidents or negligence that pollute the environment. In 1948, the United Nations Conference established an agency focused on maritime affairs called the International Maritime Organization (IMO) (Kelley, 2020). In its development, IMO has produced several conventions that specifically regulate pollution and compensation for marine pollution by oil originating from ships such as Maritime Pollution 1978 (MARPOL), International Convention on Civil Liability for Oil Damage 1969 (CLC 1969), and International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (Fund Convention 1971) (Rajan, 2018).

Protection of the marine environment is very closely related to environmental issues in general and the marine environment in particular in matters in the area. Article 145 UNCLOS 1982 mandates each authority to take the necessary actions regarding activities in the area based on the convention to ensure the effective protection of the marine environment from all adverse actions (Parthiana, 2014). Article 145 UNCLOS 1982 states that for this purpose, the authority must make and establish appropriate regulations, provisions and procedures, including the following:

a. Prevention, reduction and control of pollution and other hazards to the marine environment including coastlines and disturbance to the marine ecological balance, with special attention to the negative effects of activities in the area, such as drilling, dredging, excavation, waste disposal, construction, and operation or maintenance of pipeline installations, and other equipment related to all these activities;
b. Protection and conservation of resources or wealth from the area as well as prevention of damage to the flora and fauna of the marine environment.

Judging from the potential for pollution that occurs, the number of ships that pass and have accidents resulting in oil spills into the sea makes special attention to the protection and preservation of the marine environment. It is inseparable from the attention of international law, namely UNCLOS 1982 which regulates the settlement of disputes and the protection of the marine environment. So, countries must take all necessary actions following the provisions in the convention both individually and collectively in their implications to reduce and control pollution of the marine environment caused by all sources. Further confirmation of what types of environmental pollution exist in Article 194 paragraph (3) UNCLOS 1982, consisting:

a. Release of toxic, harmful or disturbing materials;
b. Pollution from vessels;
c. Pollution from installations and equipment used in the exploitation of the natural wealth of the seabed;
d. Pollution from other installations and equipment operated in the sea.

Article 193 UNCLOS 1982 confirms the granting of sovereign rights to countries to exploit their natural wealth. Countries have the sovereign right to exploit their natural resources following their environmental policies and their obligations to protect and preserve the marine environment. Therefore, UNCLOS 1982 obliges every country to prevent, reduce and control pollution of the marine

environment. Some of the results of the analysis related to important aspects regarding the protection and preservation of the marine environment regulated in Chapter XII UNCLOS 1982, namely:

a. Pollution of the Marine Environment

   Article 194 states that countries must take all necessary measures to prevent, reduce, and control pollution of the marine environment from any source. Each country must do so in such a way as not to transfer the damage or hazard from one area to another, or change from one type of pollution to another. Article 196 provides an obligation for each country to take all measures to prevent, reduce, and control pollution of the marine environment caused by the use of technology under its jurisdiction or control. Article 204 explains that this can be done, for example, by regulating, assessing and analyzing based on scientific methods regarding the risks or consequences of pollution of the marine environment.

b. Efforts to Protect and Preserve the Marine Environment

   Articles 197 to 201 UNCLOS 1982 provide an obligation for each country to cooperate both regionally and globally to protect and preserve the marine environment. As emphasized in the article, cooperation can take the form of notification of pollution of the marine environment, joint response to the dangers of marine pollution, establishment of emergency response, studies, research programs, exchange of information and data, and establishing scientific criteria to regulate procedures and practices for prevention, reduction and control of pollution of the marine environment.

c. Technical Support

   Article 202 stipulates that developed countries must provide technical assistance to developing countries in the context of efforts to protect and preserve the marine environment. Then, Article 203 explains that to prevent, reduce and controlling the marine environment, developing countries must be given special treatment by international organizations in the allocation of funds and technical assistance and their utilization.

d. Regulation and National Law Enforcement

   UNCLOS 1982 requires every country to make laws and regulations regarding the prevention and pollution control of the marine environment from all sources. Such as pollution from land sources, activities that are subject to national jurisdiction, activities in the area, dumping, vessels, and also pollution originating from or through the air. This provision is contained in Articles 207 to 212.

e. Liability and Indemnity

   Each country is responsible for fulfilling obligations related to the protection and preservation of the marine environment. In addition, the country must guarantee the existence of a system of legislation related to how to obtain compensation related to the damage that has occurred. Article 235 concerning Responsibility and Obligation of Compensation states that countries are responsible for fulfilling obligations related to the protection and preservation of the marine environment. In addition, countries must also ensure the

availability of efforts to sue the statutory system to obtain such compensation and to guarantee prompt compensation. Each country must cooperate in implementing applicable international law for the development of international law regarding responsibilities and obligations for compensation and settlement of disputes that arise.

f. Classification of Immunity

The provisions regarding the protection and preservation of the marine environment contained in UNCLOS 1982 do not apply to warships, aid ships, and others, but their operations must be appropriate. Besides, this Convention also emphasizes that any special obligations received by each country based on special conventions relating to the protection and preservation of the marine environment must be carried out consistently as stipulated in Articles 236 and 237. Thus, UNCLOS 1982 has clearly explained the provisions related to efforts to prevent, reduce and control pollution such as regulation and enforcement of national laws up to responsibility and compensation, and other hazards to the marine environment.

UNCLOS 1982 also provides an appeal to countries to provide technical assistance in the context of protecting the marine environment. Countries within the framework of international organizations also have an important role in the preservation of the marine environment. Global and regional organizations can form an agreement that regulates international provisions, standards and practices into a procedure to protect and preserve the marine environment. However, it does not forget the specific aspects of the regional area regarding the formation of policies and arrangements for the protection and preservation of the marine environment itself. For example, Indonesia, Malaysia, and Singapore as countries directly bordering the Malacca Strait under Article 197 UNCLOS 1982 countries must form cooperation in the management and protection of the marine environment.

International organizations through countries must take preventive and settlement actions in advance of their marine environment and notify countries and other international organizations if there is an urgent situation resulting from pollution. Pollution that occurs in affected countries is required to cooperate with international organizations that are competent in tackling pollution of the marine environment. International organizations play an important role in conducting assessments and implementing research programs to prevent and deal with pollution of the marine environment that occurs (Mangku, 2020).

In terms of compensation for marine pollution, the principle of compensation adopted is the principle of strict liability. This principle is obligated to provide compensation to the coastal state arising immediately when an oil spill occurs in the sea area of the coastal state and causes loss regardless of the guilt or innocence of the party concerned and with good or evil intentions. This definition of strict liability is considered necessary in modern legal traffic to enable various activities that carry responsibility and are considered too large but seen by the international community to be considered beneficial. Without strict liability, it is considered that it does not protect both the perpetrator and the victim. The

principle of strict liability as stipulated in Article 3 paragraph (1) of the 1969 Brussels Convention concerning Civil Liability for Losses Due to Oil Pollution in the Sea, which reads:

> *"..., the ower a ship at the time incident or where the incident consists of a series of accurances at the time of the first such accurance, shall be liable for any pollution damage by oil which has escaped or been discharged from the ship as a result of the incident."*

In enforcing environmental law, some obstacles result in the ineffectiveness of the supporting factors. Many regulations have been issued by the government, but there are still obstacles encountered in their implementation in the field, as follows:

1. Legal Facilities

   Legal facilities are a factor of constraints and obstacles in enforcing environmental law. The various operational policies issued are often inconsistent with the principles of environmental protection and management in Law Number 32 of 2009 concerning the Protection and Management of the Environment and other laws related to environmental management. In efforts to enforce environmental law, the human factor as its implementation will shape the success of law enforcement more than the legal factor itself.
2. Law Enforcement Officials

   Many environmental cases are constrained because the number of professional law enforcement officers who are capable of dealing with environmental cases is still very limited. Besides, we cannot expect law enforcers to be able to master various aspects of the environment. Because the environment includes very broad and complex aspects relating to various scientific disciplines, limited knowledge and understanding of environmental aspects by law enforcers is a very dominant obstacle in efforts to create a common perception of handling environmental cases.
3. Facilities

   The facility is a tool to achieve environmental law enforcement goals. The absence or limitations of supporting facilities and infrastructure (including funds) will greatly affect the success of environmental law enforcement. Whereas, the reality indicates that enforcing environmental cases will involve a variety of high-tech devices (laboratory equipment), which for operational purposes require experts and are quite expensive.
4. Licensing

   Indeed, it is one of the problems that provide more opportunities for the development of environmental problems than limiting them. Since, Article 36 of Law Number 32 of 2009 concerning Environmental Protection and Management can still be bypassed by entrepreneurs, especially if the permit in question is a permit granted by the Ministry of Industry after a company is ready to produce.
5. Community Legal Awareness of the Environment

   Compliance and adherence to legal (environmental) provisions are indicators of community legal awareness. According to the law on environmental

management, community participation is a major component. The limited legal awareness of the community towards the environment is caused by the public's unfamiliarity with environmental aspects and not knowing the consequences that will arise if they pollute and destroy the environment. Therefore, efforts such as counselling, guidance, role models and community involvement in overcoming environmental problems are needed. The government's efforts in tackling the oil spill were also carried out by the Ministry of Maritime Affairs and Fisheries, the Ministry of Environment, and the Ministry of Energy and Mineral Resources so that problems arising from spilt oil can be resolved quickly (Hadiyati, 2021). Hence, to be guaranteed and responded to efforts from the development, it must fulfil the responsibility, namely environmental management so it remains stable by utilizing existing resources (Astuti, 2021). Communities around the sea, especially those who work as fishermen, are greatly disadvantaged. Not only their income is getting worse due to damage to the marine ecosystem but also it can endanger their safety. Besides, seawater pollution can disrupt and endanger the traffic of sailing ships. Marine pollution is the pollution of the sea by substances that can change the physical condition which results in damage (Rahmayanti, 2006). For this reason, increasing law enforcement activities with educative-persuasive and preventive dimensions need to be increased and further encouraged.

2. PT Pertamina's Responsibility for Actions Causing Marine Pollution in the North Coastal Area of Karawang

The occurrence of environmental pollution regarding the disposal of this oil is due to the lack of productivity of a company in carrying out its mining activities in the sea area resulting in environmental pollution, especially the marine environment which harms both coastal and non-shore countries (Ningtias, 2017).

In this environmental pollution, there are controversies between the community and mining companies, where mining companies have polluted the environment experienced by the surrounding community. There are five types of conflicts that occur between local communities and mining companies; water pollution, air pollution, land damage, delays in compensation and moral damage to local communities due to mining activities.

The effect of water pollution on the population is the dirty water used. The water is dirty for daily needs such as washing, lots of dead fish, and children cannot swim as a result of this pollution due to the lack of intervention or the roles of the government towards mining companies. As democracy develops, regulations for a safe environment, including access to water resources, are needed, so the country develops according to the pattern. Therefore, there is a need for a statutory framework used to regulate mine waste (Salim, 2012).

Criminal sanctions can enforce environmental law and can encourage more environmentally sound business practices. Thus, criminal charges should not only be directed at employees as physical perpetrators in acts of pollution or environmental destruction but also at those who control and determine the course of the company. The threat of punishment will encourage them to make decisions

and lead employees to always pay serious attention to environmental protection efforts. Therefore, it will improve the performance of environmental management of business entities.

It should be emphasized that in compensation for marine pollution, there is a principle called the polluter pays principle. The polluter pays principle gives the obligation to pay compensation to polluted communities around the coast immediately when there is an oil spill at sea and losses occur. An analysis of the implementation of the polluter pays principle in Indonesian laws and regulations is significant to ensure PT Pertamina's legal commitment to implementing the polluter pays principle. The polluter pays principle will be studied first as a principle of international environmental law, an economic perspective, followed by its application in Indonesian laws and regulations.

The polluter pays principle in the 1972 OECD recommendation has the meaning that polluters are obliged to bear the burden of prevention costs with clear benchmarks set by the authorities to ensure an acceptable state for the environment. These costs must be reflected as costs of goods and services that cause pollution and cannot be accompanied by subsidies that cause deviations in international trade (OECD (Organisation for Economic Co-operation and Development), 2022).

The polluter pays principle was reinstated in principle 16 of the Rio Declaration on Environment and Development 1992 (Rio Declaration 1992). Principle 16 of the 1992 Rio Declaration states that polluters are essentially obliged to bear the cost of pollution by taking into account the public interest and without deviating from international trade and investment, based on environmental cost standards that must be developed by authorized officials. Pollution costs are costs of pollution prevention and control. Similar to the 1972 OECD recommendations, principle 16 of the 1992 Rio Declaration is a soft law that does not bind countries, including Indonesia. There are legal developments that change the polluter pays principle to hard law (Sefriani, 2014).

The polluter pays principle is binding in all countries including Indonesia. The polluter pays principle became international customary law (hard law) after it was applied by European Union countries in their pollution problems which were processed in court. The polluter pays principle is applied in several international customary law (hard law).

Basically, every violation committed by the company is the responsibility of the company, including the occurrence of oil spills in sea waters. In this case, PT Pertamina should bear responsibility for the occurrence of an oil spill in Karawang waters. The state can be imposed if it does not comply with the rules set by the authorities and has also carried out supervision by UNCLOS 1982. It has regulated responsibility and compensation in matters of marine pollution, as follows:

1. Article 139 paragraph (2) UNCLOS 1982 explains that a participating country is not obliged to bear losses caused by negligence committed by someone it sponsors (company). Thus, the country is not obliged to bear the losses incurred by PT Pertamina due to the oil spill. Regarding oil spill companies, of course, they will be given sanctions, both compensation and criminal sanctions.

Compensation sanctions can be in the form of recovery and moral or material compensation. In this case, the imposition of criminal sanctions against PT Pertamina is under the decision at the trial of the International Court of Justice later.

2. Article 235 paragraph (1) UNCLOS 1982 stipulates the responsibility of states to fulfil their international obligations regarding the protection and preservation of the marine environment. For this reason, the country must bear compensation following international law. This provision does not apply to the state if indeed the country has carried out its obligations under the provisions or procedures set by UNCLOS 1982 or the Maritime Authority Agency. This is following Article 22 Appendix III concerning Basic Requirements for Prospecting, Exploration and Exploitation of UNCLOS 1982 which states that the contractor/company must be responsible or obliged to pay compensation for any damages arising from their mistakes in carrying out their activities taking into account the errors or omissions.

If the violation of the oil spill contains a criminal element, then following the responsibilities assigned to the state, PT Pertamina as the party responsible for the oil spill may be subject to criminal sanctions that apply to those responsible for the company responsible for the oil spill. This penalty can be imposed on managers, directors, or employees associated with the company when an oil spill occurs. Of course, all of these sanctions will be considered by the International Court of Justice.

In addition to UNCLOS 1982, Indonesia has made regulations regarding liability for marine pollution. PT Pertamina must comply with its national law so PT Pertamina can be held liable in the form of sanctions contained in Article 2 letter j Law Number 32 of 2009 concerning Protection and Environmental Management applies the polluter pays principle. The polluter pays principle in Law no. 32 of 2009 concerning the Protection and Management of the Environment applies as the principle of protection and management of the Indonesian environment.

The polluter pays principle also binds PT Pertamina as an Indonesian legal entity and a polluter in Karawang waters. PT Pertamina in Article 13 of Law No. 32 of 2009 concerning Environmental Protection and Management which explains how to prevent, overcome and restore pollution of Karawang waters.

In this case, PT Pertamina should be able to prevent marine pollution, especially after the oil spill incident in 2019. After failing to prevent marine pollution in Karawang waters, PT Pertamina has returned to polluting the marine environment by causing an oil spill from its business activities in 2021. In resolving environmental disputes, PT Pertamina is obliged to overcome and restore Karawang waters because PT Pertamina as a polluter is bound by the provisions of Article 53-54 of Law Number 32 of 2009 concerning Environmental Protection and Management. Regarding this, PT Pertamina is trying to control the spread of oil spills in events in 2019 and 2021. PT Pertamina has also received approval from the Ministry of Environment and Forestry for the plan to restore Karawang waters.

PT Pertamina took several actions in response to pollution in Karawang waters. As discussed chronologically, PT Pertamina resolved environmental disputes out of court over pollution in Karawang waters. Settlement is done by giving compensation. Article 85 Paragraph (1) of Law Number 32 of 2009 concerning Environmental Protection and Management regulates the objective of resolving environmental disputes outside the court. The objectives are:

1) Agree on the form and amount of compensation,
2) Recovery and/or actions,
3) Actions to prevent negative impact on the environment.

PT Pertamina is a legal business entity and is included in the subject of Law Number 32 of 2009 concerning Environmental Protection and Management. PT Pertamina must bear all actions that cause pollution and/or damage in Karawang waters. Based on Law Number 32 of 2009 concerning Environmental Protection and Management, three types of liability can be imposed on PT Pertamina as the owner of the spilt oil in Karawang waters. Enforcement of environmental law is part of the regulatory cycle of environmental policy planning. Enforcement of environmental law which includes administrative law, civil law and criminal law (Ramadhan, 2018).

The accountability is in the form of as follows:

a. Administrative Law Responsibilities

This administrative legal responsibility relates to country administration officials as issuers of permits in environmental management and utilization activities. The Minister, Governor or Regent/Mayor under their authority must supervise the compliance of those in charge of businesses and/or activities with environmental permits (Seliyana et al., 2019).

During the monitoring activity, if a violation of the environmental permit is found, the Minister, Governor, Regent/Mayor can apply administrative sanctions to the person in charge of the business. As regulated in Article 76 paragraph (2) of Law Number 32 of 2009 concerning the Protection and Management of the Environment, there are 4 (four) forms of administrative responsibility:

1) Written warning;
2) Government coercion;
3) Suspension of environmental license; or
4) Revocation of environmental license.

Seeing the impact caused by environmental pollution due to PT Pertamina's pipe leak in Karawang waters, the Ministry of Environment and Forestry has prepared administrative sanctions in the form of coercion from the government. It can be imposed without prior warning if the violations committed cause:

1) A serious threat to humans and the environment;
2) A bigger and wider impact if the pollution and/or destruction is not stopped immediately; and/or
3) Greater losses for the environment if pollution and/or damage is not stopped immediately.

The administrative sanction points must be carried out by PT Pertamina. Based on the Decree of the Minister of Environment and Forestry, including:

1) Restoring the environment affected by the oil spill in Karawang waters and the surrounding areas;

   The beginning recovery carried out by PT Pertamina was to clean up the oil in Karawang waters using an oil boom. Carry out activities to clean up oil spills manually with various parties from the Government, the local community, and related agencies. The focus of the oil cleanup is on areas where there are still oil spills. The restoration carried out is already at the improved stage of preparing a plan for restoring environmental functions, in which the location is estimated to be contaminated by the Directorate General of Garbage, Waste and B3 Management, Ministry of Environment and Forestry.

2) Changing environmental permits;

   It is considered that the environmental permit for the utilization and management of natural resources carried out by PT Pertamina does not yet fully include matters that may have an impact on the environment. Therefore, it was made through requests for directions to the Directorate of Environmental Impact Prevention for Businesses and Activities. Several things need to be included in the permit change related to:

   a) Impact of single point mooring (SPM) operations on general shipping lane disturbances;
   b) The impact of disruption of public shipping lanes in Karawang waters on the security of underwater oil distribution pipelines;
   c) Maintenance of oil distribution pipelines on land and sea.

3) Conducting environmental audits of all operational activities of PT Pertamina by including a risk analysis on the security of all oil shipments, refineries and production processes.

   Environmental audits are carried out on all crude oil and natural gas processing activities through requests for environmental audit directions to the Directorate of Complaints, Supervision, and Administrative Sanctions with a copy to the Directorate of Prevention of Environmental Impacts on Businesses and Activities. The implementation itself is still awaiting further direction regarding the determination of the type of environmental audit to the Directorate of Complaints, Supervision and Administrative Sanctions, Ministry of Environment and Forestry.

4) Making an early warning system based on Standard Operating Procedures (SOP) for handling oil spills.

   The process involves making changes to organizational work procedures related to handling oil spills on land and at sea by adjusting plans to implement a Leak Detection System (LDS) as an early warning system for abnormal conditions in oil transfer operations in underwater pipelines. The process of making an early warning system has now been completed by making changes to organizational work procedures and incorporating the

implementation of a Leak Detection System (LDS) as an early warning system for abnormal conditions in oil transfer operations in subsea pipelines.

b. Civil Law Responsibilities

The pollutant material in the oil spill in Karawang waters is B3, and the oil spill is included in the category of heavy oil which is close to the Marine Fuel Oil 380 spec. Article 88 of Law Number 32 of 2009 concerning Environmental Protection and Management states that every person whose actions, business, and/or activities consist B3, produce and/or provoke a serious threat to the environment is responsible for the losses that occur without the need to prove elements of error.

In other words, civil liability in Law Number 32 of 2009 concerning Environmental Protection and Management recognizes absolute responsibility. Thus, absolute liability is associated with the damage caused. One of the main features of absolute liability is the absence of any requirement of guilt. The plaintiff does not need to prove the defendant's guilt, but the defendant must prove it (Salim & Nurbani, 2014).

Judging from the provisions of this article, PT Pertamina, which pollutes the Karawang area, is responsible for damage and pollution in Karawang waters. The form of civil liability in Article 87 of Law Number 32 of 2009 concerning Environmental Protection and Management, namely by making compensation and taking certain actions. As explained in the law, the specific actions referred to are as follows:

1) Installing or repairing waste treatment units so that they comply with environmental quality standards;
2) Recovering environmental functions; and/or
3) Eliminating or destroying the causes of environmental pollution and/or damage.

A civil lawsuit is the only possible way to hold the accountable for the pollution that occurred in this incident. This way is to maintain and ask for compensation for environmental sustainability that is harmed by the incident. Law Number 32 of 2009 concerning Environmental Protection and Management states that government agencies and local governments responsible for the environment have the authority to file claims for compensation and certain actions against businesses and/or activities that cause pollution and/or damage.

Environmental losses can refer to the Minister of Environment Regulation No. 7 of 2014 concerning Environmental Losses. In this case, the impact of the oil well leak that occurred in Karawang is that there are nine villages close to the oil spill. The villages are Camara Village, Cibuaya District; Sungai Buntu Village, Pedes District; Petok Mati Village, Cilebar District; Sedari Village, Pusaka Jaya District; Pakis Beach, Batu Jaya District; Cimalaya Village; Pasir Putih, Cikalong District; Ciparage, Tempuran and Tambak Sumur Districts, and Tirtajaya District which were most affected. As a result of this oil spill, fishermen in the affected areas cannot go out to sea to find fish. Before the oil leak, one traditional fishing boat brought home 5-10 kilograms of fish. The result is

divided equally between 2-3 people after cutting the fuel. So, usually, the fishermen can get profit RP. 200,000-Rp. 300,000.

In 2018, revenue from the fisheries sector in this 84.23-kilometre area reached Rp. 179 billion. One year after the incident of this oil spill, the impact is still being felt by the fishermen. The catches of crabs and fish obtained have decreased drastically. In civil liability, which requires PT Pertamina to be charged for responsibility for all damage or loss affected by marine pollution, compensation is Rp. 18.45 billion for initial stage compensation for 14,721 affected Karawang residents. The distribution of compensation for each person affected gets an allotment of Rp 900.000 per month. PT Pertamina has budgeted a compensation fund for two months according to how long the oil spill lasted. Meanwhile, for compensation for the entire impact of the oil spill, PT Pertamina is still waiting for the final calculation results from the government. One of the variables in the calculation is the length of the oil spill.

c. Criminal Law Responsibility

Criminal liability to the company does not rule out the possibility of being granted, especially in environmental cases. In the case of environmental pollution in Karawang waters, it is necessary to consider applying the polluter pays principle. Environmental crime is a crime that applies the concept of paying compensation as the meaning of this principle. This principle looks more at the element of action, in this incident, it is PT Pertamina as a company in the field of B3 management.

B3 management activities have an impact that can cause harm to other people. Law Number 32 of 2009 concerning Environmental Protection and Management, directly confirms the application of absolute criminal liability given to PT Pertamina. If you look at the events that occurred and refer to statutory provisions, it is a prison sentence and a fine.

Criminal responsibility must pay attention that criminal law must be used to create a just and materially prosperous society. In addition, the use of criminal law facilities with negative sanctions must pay attention to costs and the ability of the workforce of the relevant institute so there is no overload in carrying out the task. It has been mentioned previously that in terms of law enforcement for perpetrators of environmental pollution, especially pollution of the marine environment, criminal law exists as a last resort for last means (*ultimum remedium*). *Ultimum remedium* can be seen in the provisions of the Environmental Protection and Management Act. Although the provision does not explain explicitly the definition of the principle of *ultimum remedium*. It is contained in Article 100 of Law Number 32 of 2009 concerning Environmental Protection and Management which states:

(1) Any person violating the wastewater quality standards, emission quality standards, or nuisance quality standards shall be punished with imprisonment for a maximum of 3 (three) years and a fine of a maximum Rp. 3,000,000.00 (three billion rupiah).

(2) Criminal acts as referred to in paragraph (1) can only be imposed if the administrative sanctions that have been imposed are not obeyed or the violation is committed more than once.

Based on the provisions of Article 100 paragraph (2) of Law Number 32 of 2009 concerning Environmental Protection and Management, it can be seen that there is punishment in Article 100 paragraph (1) of Law Number 32 of 2009 concerning Environmental Protection and Management can be imposed if administrative sanctions that have been decided by business owners and activities that use the environment. In addition, the law contains a general explanation that states that environmental criminal law enforcement will continue to pay attention to the principle that requires the application of criminal law enforcement as a last resort after the implementation of administrative law enforcement is deemed unsuccessful.

The settlement of unfinished administrative sanctions is still under the time limit. If the implementation requires a longer time limit, then based on the considerations and conditions it will be submitted to the Directorate General of Environmental and Forestry Law Enforcement, PT. Pertamina provides compensation. However, not all of the compensation was agreed upon in PT. Pertamina's dispute resolution.

Several mass media reported that there was an agreement on compensation due to pollution in 2019 between PT Pertamina, the community and other stakeholders. Pollution of the Karawang waters that occurred in 2021, there is no mass media from internet sources that report the same agreement between PT Pertamina and the affected communities and other stakeholders. It is not specific that PT Pertamina will complete the settlement of sea pollution that will occur in 2021 by agreeing and providing compensation.

The legal basis used by PT Pertamina in resolving environmental disputes over pollution in Karawang waters cannot be ascertained. PT Pertamina can be declared not serious in resolving oil spill disputes that occurred in 2019. It is proven by the return of oil spills from PT Pertamina in 2021. Out-of-court dispute resolution does not make PT Pertamina behave better in preventing oil spills.

Conclusion

Based on the results of research on marine pollution actions carried out by state-owned companies in the offshore area reviewed based on UNCLOS 1982 (Study of the case of oil spills by PT Pertamina in the offshore area of North Karawang), it can be concluded, as follows:

a. Arrangements for marine pollution actions carried out by PT Pertamina are regulated in Articles 192, 194, 195, and 196 UNCLOS 1982 in Chapter XII which emphasizes that every country must protect and preserve its marine environment. In addition, regulation of marine pollution according to national law is contained in Law Number 32 of 2009 concerning the Protection and Management of the Environment, Law Number 1 of 1973 concerning the Indonesian Continental Shelf and Law Number 5 of 1983 concerning the Indonesian Exclusive Economic Zone.

b. Legal responsibility for actors who pollute the marine environment in Indonesia is contained in Article 139 paragraph (2) and Article 235 paragraph (1) UNCLOS 1982. In Law Number 32 of 2009 concerning the Protection and Management of the Marine Environment. There are three forms of Legal accountability for perpetrators of marine environmental pollution, namely: administrative responsibility, civil law responsibility, criminal law responsibility.

Suggestion

Based on the conclusions obtained, several suggestions can be put forward. Legal arrangements must be considered by the government so the management of oil in international sea waters can be more socialized. Thus, it can minimize violations when managing oil in international sea waters. Also, legal responsibility for perpetrators of environmental pollution in Indonesia, both individually and for legal entities, must be more efficient and emphasized. This is because administrative, civil, and criminal responsibilities still do not explicitly regulate the qualifications for more specific acts of marine pollution.

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