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VALIDITY OF REVOCATION OF REGIONAL REGULATION APPENDICES THROUGH MAYORAL REGULATIONS IN TERMS OF THE HIERARCHY OF LAWS AND REGULATIONS

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Abstract

This study aims to examine the legal validity and legal consequences of revoking attachments to Regional Regulations through Mayoral Regulations based on the hierarchy of legislation. Using normative legal research methods, the findings indicate that such revocation is legally invalid because attachments constitute an inseparable part of Regional Regulations and have the same legal standing as their main provisions. Therefore, any amendment or revocation must be conducted through an equivalent Regional Regulation, not a Mayoral Regulation. Based on Hans Kelsen's Stufenbau Theory, Adolf Merkl's Das Doppelte Rechtsantlitz Theory, and the theories of legal regulation formation developed by A. Hamid S. Attamimi and Maria Farida Indrati, a lower-level regulation cannot amend or revoke a higher-level regulation. Such revocation violates the principles of *lex superior derogat legi inferiori*, *contrarius actus*, legality, and conformity between the types, hierarchies, and contents of legislation, as stipulated in Law Number 12 of 2011, as amended by Law Number 13 of 2022. The legal consequences are that the attachment to the Regional Regulation remains legally binding until it is revoked through an equivalent Regional Regulation or a judicial review by the Supreme Court. Meanwhile, the Mayoral Regulation containing the revocation provision may be considered unlawful because it exceeds the authority of its issuing official (*ultra vires*). This situation may create conflicting legal norms, legal uncertainty, inconsistencies in regional governance, and obstacles to effective public services. Therefore, amendments or revocations of attachments to Regional Regulations must follow the proper legislative procedures to ensure legal certainty, regulatory harmonization, and consistency within the national legal system.

Keywords: Validity, Revocation, Regional Regulations

INTRODUCTION

The Indonesian state which has been independent since August 17, 1945 in the fourth paragraph of the Preamble to the Constitution stipulates that the state's objectives are to form an Indonesian state government that protects all Indonesian people and all Indonesian blood, to advance public welfare, to educate the nation's life, and to implement world order based on freedom, eternal peace and social justice. so that to achieve this very noble goal, the Indonesian nation has been carrying out development in a planned and continuous manner as an effort by the Indonesian nation to fill independence, through development in all fields, both political, economic, social, cultural and defense and security. Furthermore, Emil Salim (1983), an expert in development economics, stated that the essence of development also aims to create diversity and diversification in the economic activities of society, such as the development of the agricultural, industrial, mining, service sectors, and others. The more diverse the economic sectors, the greater the ability of the country's economy to grow rapidly and stably. This means that the development we implement focuses more on the economic sector, referring to the country's goals, namely to advance the general welfare.

Furthermore, the 1945 Constitution of the Republic of Indonesia also requires that the existing environment be used for the greatest prosperity of the people. This is stated in Article 33 paragraph (3) that: the earth and water and the natural resources contained therein are controlled by the state and used for the greatest prosperity of the people. This prosperity of the people must be enjoyed not only by the current generation, but also by future generations in a sustainable manner. Based on this article, the fourth target set by the government in the 2004-2009 National Medium-Long Term Development Plan (RPJMN) is to improve the quality of the environment and the management of natural resources that lead to the mainstreaming of sustainable development principles in all sectors and areas of development.

The environment as a gift from God Almighty to the Indonesian people must be preserved so that it can continue to be a source and support for the life of the Indonesian people for the continuity and improvement of the quality of life of the Indonesian people themselves. In an effort to achieve public prosperity, the government is implementing sustainable development. This development is a conscious effort to cultivate and utilize natural resources to improve the physical and spiritual well-being of the people. In its implementation, the use of natural resources must be in harmony, compatible, and balanced with environmental functions (Handoyo, 2026).

The concept of the scope of the ecosystem and sustainable development of course then has a very close correlation with Article 33 paragraph (4) of the 1945 Constitution of the Republic of Indonesia and the concept of the environment. In Article 33 paragraph (4) of the 1945 Constitution of the Republic of Indonesia it is stated that: The national economy is organized based on economic democracy with the principles of togetherness, efficiency with justice, sustainability, environmental awareness, independence, and by maintaining the balance of progress and unity of the national economy. Based on the formulation of Article 33 paragraph (4), there are two concepts related to the idea of an ecosystem, namely that a national economy based on economic democracy must contain the following aims: (1) sustainable, (2) environmentally aware.

According to Jimly Asshiddiqie (2009), the entire ecosystem as referred to in Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia, as interpreted extensively and creatively by various laws in the environmental sector, must be managed for the benefit of development based on sustainable and environmentally aware principles as regulated and determined by Article 33 paragraph (4) of the 1945 Constitution of the Republic of Indonesia. The change in the development and environmental paradigm in the 1945 Constitution of the Republic of Indonesia and other laws and regulations is a phenomenon of adjustment to universal values that continues to develop in relation to national development and the environment.

As a milestone to ensure that development in various sectors remains environmentally conscious and is implemented sustainably, the government enacted Law Number 4 of 1982 concerning Basic Environmental Provisions. This law was then amended and replaced on September 19, 1997, with the issuance of Law Number 23 of 1997 concerning Environmental Management, hereinafter

abbreviated as UUPLH (Rangkuti, 2005). This UUPLH was actually enacted for the following reasons (Djajaningrat, 2001):

1. That the environment is a space for life in all its aspects and dimensions in accordance with the Indonesian archipelago perspective.
2. That in order to utilize natural resources to advance public welfare in accordance with the mandate of the 1945 Constitution, sustainable development must have an environmental perspective.
3. That environmental management is necessary to preserve and develop its capabilities in a harmonious, balanced and balanced manner.
4. That environmental management within the framework of sustainable development must be implemented based on legal norms and taking into account the legal awareness of the community, both nationally and internationally.

The UUPLH emphasizes that the definition of the environment is a spatial unity with all objects, forces, conditions and living creatures, including humans and their behavior, which affect the continuity of life and the well-being of humans and other living creatures. Therefore, environmental management is an integrated effort to preserve the function of the environment which includes policies on the arrangement, utilization, development, maintenance, restoration, supervision, and control of the environment (Supriadi, 2006).

Furthermore, it is necessary to know that based on Article 33 of the 1945 Constitution, exploration and exploitation are inseparable from the state's right to control the earth, water and natural resources contained therein for the greatest prosperity of the people. This is further regulated by Law Number 22 of 2001 concerning Oil and Natural Gas in conjunction with Government Regulation Number 42 of 2002 concerning the Executive Agency for Upstream Oil and Natural Gas Business Activities, as well as other related laws and regulations.

Extractive industries, including the upstream oil and gas (oil and gas) industry, are often accused of damaging the environment. Environmental protection is indeed a major concern in the upstream oil and gas industry. Poor governance in the exploration and production process not only causes financial losses but also damages the surrounding environment. Fortunately, the upstream oil and gas sector is fully controlled by the state. All environmental management activities in the upstream oil and gas business are supervised by the Special Task Force for Upstream Oil and Gas Business Activities (SKK Migas) from the exploration stage to production. From the preparation of the work program and budget (WP&B) to the field implementation stage, SKK Migas continuously supervises cooperation contract contractors (PSC contractors). SKK Migas also requires PSC contractors to conduct an initial assessment before operating a work area through the preparation of an Environmental Baseline Assessment (EBA). The EBA study will inform the carrying capacity of the surface environment for oil and gas exploration and production activities. Meanwhile, in managing operational and production waste, SKK Migas encourages PSC contractors to implement the 5RTD principles: reduce, reuse, recycle, replace, return to supplier, treatment, and disposal.

Since 2002, the upstream oil and gas industry has participated in the Company Performance Rating Program in Environmental Management (PROPER). This program, run by the Ministry of Environment and Forestry, involves monitoring and coaching those responsible for businesses and activities related to pollution control and environmental damage, as well as hazardous and toxic waste (B3) management. Each year, the Ministry of Environment and Forestry awards the PROPER award to encourage companies to comply with environmental regulations and achieve environmental excellence. PSC contractors are also required to carry out site restoration. Areas previously involved in upstream oil and gas operations must be returned to their original condition before exploration activities began. PSC contractors are required to set aside abandonment and site restoration (ASR) funds when developing their field development plans (plans of development/PODs) for the restoration and rehabilitation of their work areas.

The reserved funds are adjusted to the physical conditions of the oil and gas fields and must be placed in a government-owned national bank and deposited after the POD is approved. The ASR fund reserve not only ensures environmental protection after oil and gas operations but also provides a

multiplier effect for national banks. National banks become healthier because they have a good Capital Adequacy Ratio (CAR) due to the placement of ASR funds. During this phase, SKK Migas is tasked with ensuring that PSC contractors carry out the mine closure and recovery process properly. Going forward, SKK Migas will continue to focus on encouraging creativity in the upstream oil and gas industry in making breakthroughs related to environmental management.

Recovery for victims of pollution must also be gender-responsive, given that the roles women must undertake place a double burden on them. Environmental degradation impacts individuals depending on several key factors, including gender. However, because women represent a large proportion of those living in poverty, they are ultimately more severely impacted than men. In general, household burdens increase, as women face threats to security, including food, water, energy, economic, and health security. Women are often the primary users of water for household consumption and ensuring family food security. In many cases, women also play a leading role in educating children and ensuring their and their families' health, including sanitation. Furthermore, environmental degradation has the potential to threaten the development of every child in accordance with their rights, and ultimately, women bear the burden.

The international legal system constructs the problem of marine pollution through two legal regimes: international environmental law and the law of the sea. Both regimes develop the concept of establishing legal liability and compensation mechanisms. The 1982 Law of the Sea Convention, the only international treaty providing a comprehensive framework for marine environmental protection, broadly defines pollution as the release of substances or energy into the marine environment that is likely to produce adverse impacts. From an international environmental law perspective, any pollution resulting from offshore oil exploration creates a legal obligation to provide redress based on the polluter pays principle. The 1992 UN Conference on Environment and Development first established this principle, and it has gained international support as a key environmental policy. The polluter pays principle means that the costs of pollution must be borne by the party causing the pollution, rather than by the victims or society in general (Tanaka, 2015). Under the polluter pays principle, the polluter must pay for the costs of: preventing pollution or reducing it to meet applicable standards and laws; preventing, controlling, reducing, and mitigating environmental damage caused by pollution; repairing the resulting environmental damage, such as cleaning up the pollution and restoring the damaged environment; and making reparations, including compensation and restitution, for irreparable injuries.

By requiring polluters to be responsible for the external costs arising from their pollution, the principle of allocating these costs to polluters requires polluters to internalize these costs as a cost of doing business. Internalization is complete when polluters are responsible for all costs arising from the pollution they cause. The polluter pays principle plays a role in preventing pollution and remediating the effects of pollution that occurs (Baiquni & Susilawardani, 2002). This legal responsibility is reinforced by the precautionary principle, as stated in Principle 15 of the 1992 Rio Declaration on Environment and Development. Specifically, protecting the marine environment from offshore oil and gas activities is not treated from a sectoral perspective, but is part of the application of an ecosystem approach (Liu, 2015). Based on this principle, Pertamina is legally responsible for "compensating" all victims of the oil pollution that contaminated the northern coast of Karawang.

In the context of this legal responsibility, the government is also burdened with responsibility because Pertamina is a State-Owned Enterprise (SOE). The implementation of economic activities through SOEs brings together public and private obligations. In other words, the state's legal duties merge with the governance responsibilities of private organizations. This duality is also evident in the UN Guiding Principles on Business and Human Rights. SOEs are instruments of the state and thus potentially subject to the state's obligation to protect human rights. At the same time, SOEs function as commercial enterprises and are therefore subject to provisions that impose corporate responsibilities to respect human rights. Specifically, UN Guiding Principle 4 states that states should take additional measures to protect against human rights abuses by business enterprises that are State-owned or controlled, or that receive substantial support and services from State bodies such as export credit agencies and official investment insurance or guarantee agencies, including, where appropriate, by requiring human rights due diligence.

The commentary to principle 4 states that if a business enterprise is controlled by the state or its actions are otherwise attributable to the state, a human rights violation by the business enterprise may constitute a violation of the state's own international legal obligations. Furthermore, the closer a business enterprise is to the state, or the more dependent it is on legal authority or taxpayer support, the stronger the rationale for state policy to ensure that it respects human rights. This principle should be interpreted to mean that state-owned enterprises must do more to respect human rights than private enterprises. In other words, state-owned enterprises must lead by example in respecting human rights. This is also evident in Article 1, paragraph 1 of Law Number 19 of 2003 concerning State-Owned Enterprises. State-owned enterprises are business entities whose capital is wholly or substantially owned by the state through direct participation derived from separated state assets. This law also states that the primary purpose of state-owned enterprises is to generate profits by providing goods and services to customers and to stimulate economic growth and national prosperity.

For Indonesia, this document will serve as a reference in the concrete implementation of national development plans, including the 2014-2019 National Medium-Term Development Plan and the 2005-2025 National Long-Term Development Plan. Therefore, the Ministry of Environment, relevant government agencies, and all stakeholders will formulate more concrete follow-up steps for the implementation of these policies. Sustainable development is the only option for Indonesia, if it desires a balance between prosperity and a good and sustainable environment, as a country blessed with high natural conditions, rich in biodiversity and abundant natural resources. This wealth needs to be protected and managed well in an integrated and integrated environmental protection and management system, both by the government and by the community, between the marine environment, the terrestrial environment, and the air based on the Archipelago Insight. Therefore, Indonesia's environment must be protected and managed properly, based on the principles of state responsibility, sustainability, and justice. Furthermore, environmental management must provide economic, social, and cultural benefits based on the principles of prudence, environmental democracy, decentralization, and recognition and respect for local wisdom and environmental wisdom. Environmental protection and management require the development of an integrated system in the form of a national policy for environmental protection and management, which must be implemented in a principled and consistent manner from the central government down to the regions, both by the government and the community.

Law Number 32 of 2009 concerning Environmental Protection and Management emphasizes the importance of environmental protection and management in relation to sustainable development. The general explanation states that the use of natural resources must be in harmony, compatible, and balanced with environmental functions. Consequently, development policies, plans, and/or programs must be imbued with the obligation to preserve environmental functions and achieve sustainable development goals. One of the instruments developed in Law Number 32 of 2009 in relation to environmental protection and management is Environmental Restoration. Environmental restoration regulations are regulated in Part Four of Law Number 32 of 2009 Article 54 paragraph (1) which requires that anyone who pollutes and/or damages the environment is obliged to restore environmental functions.

As a law that covers all state policies related to environmental management and natural resources for development purposes, Law Number 32 of 2009 will serve as a reference for other laws, including Law Number 20 of 2007 concerning Investment, Law Number 40 of 2007 concerning Limited Liability Companies, and Law Number 4 of 2009 concerning Mineral and Coal Mining. In other words, in terms of mining management, there must be harmonization between the Law on Environmental Protection and Management with the Law on Investment, and the Law on Limited Liability Companies, with the Law on Mineral and Coal Mining. Environmental recovery from pollution and destruction of environmental functions is closely related to investment and mining activities, because every mining investment activity (Mining Business Permit) requires an environmental licensing instrument that requires those responsible for mining investment businesses to carry out environmental recovery activities in said mining investment activities.

Development, as part of the state's policy to improve the people's well-being, is carried out through the continuous utilization of natural resources. Meanwhile, available natural resources are very limited and unevenly distributed in both quantity and quality, while demand for natural resources continues to increase as a result of increased development to meet the needs of a growing population. Such development activities carry the risk of pollution and environmental damage (Siahaan, 2004). The reality is that Indonesia's development, which is concentrated in the industrial and mining sectors, uses various types of chemicals and radioactive substances, and damages natural resources.

In addition to producing products that are beneficial to people's lives, industrial and mining development in Indonesia also produces hazardous and toxic waste materials that, if disposed of in the environment, can threaten the health and survival of humans and other living things. The scale of pragmatism, as well as the approach and objectives dominated by positivist methodology regarding the essence of the environment, have become toxic to the scale of damage and the inherent impacts of the environment (KLH, 2007). In fact, the essence of the environment is life that encompasses the order and values of life within it.

The rules and values that maintain the sustainability of the environment and natural resources and social justice for human life regarding the right to the environment for current and future generations (WALHI, 2006). Similarly, what needs to be emphasized is that the environment must be viewed and treated as a subject, managed for sustainable life, not merely for development growth. The environment as a system is certainly subject to a system of natural laws that are destined for it. This system can operate in balance if the quality of its components remains stable. As a living system, the environment is a life consisting of past life, present life, and future life. That is the essence of the sources of life (WALHI, 2005). Indonesia is one of the countries with the most biological diversity in the world, with tropical forests that play a vital role in the global climate.

The country's resources are under pressure, and numerous challenges arise related to the implementation of natural resource management schemes. Environmental damage in Indonesia is becoming increasingly alarming. In fact, it has endangered the lives of every living creature in and around it, including the lives of future generations (Kompas, 2007). This has also resulted in an imbalance in nature that has a negative impact on human life and, of course, environmental disasters. Examples include flooding, landslides, acid rain, soil pollution, river and sea pollution, forest destruction, increasing global temperatures due to the greenhouse effect that can lead to global warming, and various diseases that can affect humans, such as shortness of breath, cancer, lung disease, skin diseases, and various other ailments.

RESEARCH METHODS

The research method used in this study is normative legal research, namely research oriented towards the study of legal norms contained in laws and regulations, doctrines, and decisions related to responsibility for environmental restoration due to exploration by oil and gas companies based on laws and regulations. This research is prescriptive because it aims to provide legal arguments, find concepts, principles, and legal norms as a basis for resolving the problems studied.

The approaches used include a statutory approach to examine various legal provisions governing environmental protection and restoration, as well as an analytical approach to analyze the meaning, concept, and application of legal norms related to corporate responsibility in oil and gas exploration activities.

The data sources in this study are entirely secondary data, consisting of primary legal materials in the form of relevant laws and court decisions; secondary legal materials in the form of books, scientific journals, research results, and expert opinions; and tertiary legal materials in the form of legal dictionaries, encyclopedias, and other reference materials that support the interpretation of primary and secondary legal materials.

The data collection technique was conducted through library research, which involved searching, inventorying, and reviewing various literature and legal documents related to the research object. All legal materials were then analyzed descriptively and qualitatively, systematically outlining and interpreting legal provisions without the use of statistical analysis, to obtain a comprehensive picture of the research problem. Furthermore, conclusions are drawn using the deductive method,

which involves drawing conclusions from general legal provisions to resolve specific legal issues. This method is expected to yield systematic, logical legal arguments capable of providing answers to issues concerning the responsibility for environmental restoration resulting from oil and gas company exploration activities based on applicable laws and regulations.

RESULT AND DISCUSSION

A. Responsibility for Environmental Recovery Due to Exploration by Oil and Gas Companies Based on Statutory Regulations

Oil and gas exploration is a strategic activity in the utilization of natural resources, aimed at discovering economically valuable oil and gas reserves. Although commercial production has not yet begun during the exploration phase, various activities such as seismic surveys, road openings, drilling exploratory wells, constructing drilling sites (well pads), using chemicals, and managing drilling waste still have the potential to cause environmental damage. Therefore, Indonesian environmental law places oil and gas companies as legal entities responsible for any environmental impacts arising from the commencement of business activities until their termination.

The concept of responsibility for environmental restoration is essentially an implementation of the polluter pays principle, which states that any party causing environmental pollution or damage is obligated to bear the full costs of environmental restoration. This principle has been part of international environmental law since the 1992 Rio de Janeiro Declaration and was later adopted into various Indonesian environmental laws. Thus, oil and gas companies are not only obligated to prevent pollution but also to restore environmental functions if damage occurs as a result of their exploration activities (Rahmadi, 2023). Constitutionally, the responsibility for environmental restoration has a very strong foundation in Article 28H paragraph (1) of the 1945 Constitution of the Republic of Indonesia which states that everyone has the right to a good and healthy environment. Furthermore, Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia emphasizes that the earth, water and natural resources contained therein are controlled by the state and used as much as possible for the prosperity of the people. This state control has the consequence that the state is obliged to regulate the use of natural resources so as not to cause environmental damage that eliminates the community's right to a healthy environment (Asshiddiqie, 2019).

Started on August 17, 1945 with the proclamation statement by Bung Karno and Bung Hatta. All rules made in order to create prosperity and justice for the people must be based on the source of all legal sources, namely Pancasila and the highest source of legal order, the 1945 Constitution. Environmental management policy in Indonesia is concerned with the question of "what is to be achieved, how and by what means, by what means environmental management is implemented (Rangkuti, 2005). The ongoing global political and legal situation significantly influenced the formation of Law No. 4 of 1982 on Environmental Protection and Management. At the time, the Indonesian government was actively promoting investment opportunities for foreign investors, while the concept of the environment within the global environmental framework was being discussed. Therefore, Indonesia proposed an environmentally conscious development concept, one that aligns development with environmental management.

Development may continue despite all its dynamics and problems, but it must not damage the environmental carrying capacity for future generations. We do not need to put the environment and development at odds. The MPR Decree No. II/MPR/1993 concerning the State Guidelines for the Development of Natural Resources (GBHN) stipulates, among other things, the utilization of natural resources for improving people's welfare. This has been pursued comprehensively and in an integrated manner, paying attention to the balance and harmony of environmental functions and always paying attention to the principles of sustainable development for the benefit of future generations. This represents a political commitment from the authorities regarding how we address environmental issues. This implies that all development activities must provide assurance that they will not damage the environment, and thus, the development undertaken must be environmentally conscious.

Conceptually, the basic ideas of UULH Number 4 of 1982 can be described as follows: a. that the environment is a territorial concept. b. insight into the relationship between humans and the environment. These two things give rise to implications and consequences that are outlined in the principles adopted, namely: a. The right to a good and healthy environment. b. Preservation of

environmental capabilities. c. Control of natural resources by the state. d. Integration in the implementation of environmental management. Despite the various problems that have arisen and experienced, UULH Number 4 of 1982 has marked the beginning of the development of legal instruments as a basis for environmental management efforts. In the period since its enactment, there has been an increase in environmental awareness in society, growing community participation, an increasing variety of environmental organizations and an increase in community pioneering in conservation so that the community does not only play a role but is also able to play a real role. Meanwhile, developing legal problems require regulation in the form of law to ensure legal certainty. On the other hand, global environmental developments and international aspirations are increasingly influencing environmental management efforts so that the government sees the need to renew and improve UULH Number 4 of 1982 (Sutrisno, 2011).

Based on this thinking, the Government together with the House of Representatives has replaced the Environmental Law Number 4 of 1982 with Law Number 23 of 1997 concerning Environmental Management and improved by Law Number 32 of 2009 concerning Environmental Protection and Management. This law aims, among others, to protect the territory of the Unitary State of the Republic of Indonesia from environmental pollution and damage, guarantee the safety, health, and life of humans, living creatures and the sustainability of the ecosystem and ensure the fulfillment of justice for present and future generations and control the use of natural resources by realizing sustainable development and anticipating global environmental issues.

From the perspective of Indonesian positive law, regulations regarding environmental restoration responsibilities are primarily contained in Law Number 32 of 2009 concerning Environmental Protection and Management, as amended by Law Number 6 of 2023 concerning the Stipulation of Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation into Law. This law serves as an umbrella act that regulates all business actors' obligations to maintain environmental sustainability, including companies operating in the oil and gas sector. Article 67 of Law Number 32 of 2009 stipulates that everyone is obligated to maintain the sustainability of environmental functions and control environmental pollution and damage. This provision applies not only to individuals but also to business entities, including oil and gas companies. Therefore, all exploration activities must be carried out based on the precautionary principle to minimize the possibility of environmental damage from the planning stage. Article 68 of Law Number 32 of 2009 mandates that every business actor provide accurate information regarding environmental protection, maintain the sustainability of environmental functions, and comply with environmental quality standards and environmental damage criteria. These obligations demonstrate that environmental responsibility arises not only after damage occurs but also from the commencement of business activities.

If exploration activities result in environmental pollution or damage, the company is obliged to carry out restoration as stipulated in Article 54 of Law Number 32 of 2009. This article explains that the restoration of environmental functions is carried out through several stages, namely stopping the source of pollution, remediation, rehabilitation, restoration, and/or other methods in accordance with developments in science and technology. Thus, environmental restoration is not just cleaning up a polluted location, but returning the environmental condition to a condition close to before the damage occurred.

In addition to the obligation to carry out restoration, Law Number 32 of 2009 also regulates the responsibility for compensation through Article 87 which states that every person responsible for a business and/or activity that commits an unlawful act in the form of pollution or destruction of the environment that causes harm to other people or the environment is obliged to pay compensation and/or take certain actions. These certain actions include the obligation to carry out environmental restoration until the ecological function returns to its original state. This provision shows that the payment of compensation does not remove the company's obligation to continue carrying out environmental restoration.

Article 88 of Law Number 32 of 2009 applies the principle of strict liability to activities that use hazardous and toxic materials, produce B3 waste, or pose a serious threat to the environment. In the context of oil and gas exploration activities, this principle is particularly relevant because drilling

activities use various chemicals and produce waste that has the potential to pollute the environment. By applying the principle of strict liability, the public is not burdened with the obligation to prove any element of corporate fault. Simply proving that environmental damage has occurred as a result of the company's activities can hold the company legally accountable. This principle aims to provide more effective legal protection to the public and accelerate the environmental recovery process.

Regulations regarding environmental responsibility in the oil and gas sector are also stipulated in Law Number 22 of 2001 concerning Oil and Gas, as amended by Law Number 6 of 2023. This law emphasizes that the implementation of oil and gas business activities must consider aspects of occupational safety, health, technological mastery, community development, and environmental protection. Thus, environmental protection is one of the main principles in the implementation of upstream oil and gas business activities.

More technical regulations are then outlined in Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management. This Government Regulation stipulates the obligation to prepare AMDAL (Environmental Impact Assessment) or UKL-UPL (Environmental Impact Assessment and Management) documents according to the activity's risk level, environmental approvals, B3 waste management, environmental quality standards, and environmental recovery mechanisms. In oil and gas exploration activities, companies are required to implement all commitments stated in the environmental documents. Any deviation or violation of these commitments can result in administrative sanctions in the form of written warnings, government coercion, administrative fines, suspension of environmental approvals, or revocation of environmental approvals.

Furthermore, Minister of Environment and Forestry Regulation No. 14 of 2024 concerning the Implementation of Environmental Supervision and Administrative Sanctions strengthens the oversight mechanism for business actors' compliance with environmental protection and restoration obligations. Through effective oversight, the government can ensure that oil and gas companies effectively fulfill their rehabilitation obligations and do not leave environmental damage after exploration activities are completed.

In the study of the substance of criminal law, the formulation policy stage can be seen as the basis or foundation for the subsequent stages of functionalization/enforcement of criminal law. Therefore, according to Muladi and Barda Nawawi Arief (1992), the formulation stage is the most strategic stage of the entire planning process of functionalization or operationalization of criminal law. The formulation or legislative policy stage becomes the basis, foundation and guideline for the subsequent stages of functionalization or operationalization of criminal law, namely the application and execution stages. Errors or weaknesses in the formulation stage are strategic errors that can become obstacles for the subsequent stages in criminal law policy (penal policy), namely application and execution (Arief, 2001). In general, a plan or policy formulated in criminal legislation should include: (1) planning or policy regarding what prohibited acts are addressed because they are considered dangerous or detrimental; (2) planning or policy regarding what sanctions can be imposed on perpetrators of prohibited acts (either criminal or action) and the system of their implementation; (3) planning or policies regarding the procedures or mechanisms of the criminal justice system in the context of the law enforcement process (Arief, 1990). In relation to this, the criminal law policy in the environmental sector here examines the policy of formulating criminal acts, criminal responsibility and criminal sanctions contained within and outside Law Number 23 of 1997 concerning Environmental Management and then the aspect of implementing formulative policies by law enforcement officers.

As an autonomous force in the life system, society plays a strategic and decisive role. Society is a group of people directly affected by their living environment and therefore requires a living environment that can ensure their continued existence. Environmental management by the state, corporations, companies, traditional and modern markets, and individuals often gives rise to pollution problems that harm the surrounding community. Various cases of environmental pollution have claimed victims within the community. Consequently, disputes arise, and the community, as the aggrieved party, has the right to bring these pollution issues through diplomacy, negotiation, and, if necessary, legal channels, all of which are undertaken to uphold environmental sustainability. Therefore, attitudes and actions are needed that can strengthen community autonomy and participate

in resolving environmental disputes. As parties directly impacted by environmental pollution, communities need the power to guarantee their interests and provide protection against any resulting consequences. Current environmental dispute resolution practices are considered inadequate in upholding community interests. Environmental law enforcement channels have not been able to address the complexity of community interests. So it is necessary for the community to build strength within itself that can be used as a shield to protect itself from environmental disputes (Veronica, 2002).

Communities affected by environmental pollution have the right to demand compensation from companies responsible for polluting and destroying the environment. Each individual has their own interests that cannot be simply generalized. However, a wise and prudent awareness is needed to be willing to collaborate and unite toward goals or demands that are a form of collective societal demand, as a manifestation of the strength of community autonomy from all communities affected by environmental impacts. Without this unity, it is impossible to realize these shared desires. Certainly, togetherness is stronger than fighting alone. In this case, coordination among all elements of society, non-governmental organizations, and environmental organizations is more powerful than lawsuits or demands filed by individuals or small groups. By strengthening the strength of community autonomy, it can be demonstrated that victims of environmental impacts actually exist and are relatively numerous. This does not emphasize personal egotism, but rather the common interest of victims of environmental pollution, receiving support and solutions to environmental disputes that are good and beneficial to the community.

The large number of companies polluting the environment is worsening public health. Therefore, it is necessary to strengthen community empowerment to resolve environmental problems, which requires awareness and concern for the environmental pollution occurring around them, which has harmed them. The desire for unity among all communities affected by pollution is essential for resisting industrial activities that pollute the environment. Strengthening community autonomy to unite voices is crucial in resolving environmental issues. Without harmony and unity within the community itself, success will be difficult. Each party strives to harmonize their desires and demands for compensation.

Cases of environmental damage resulting from oil and gas exploration activities in Indonesia demonstrate that the search for oil and gas reserves not only has an economic dimension but also carries very high ecological risks. The exploration phase, which includes seismic surveys, exploration well drilling, well pad construction, drilling mud use, and drilling waste management, has the potential to cause landscape changes, soil pollution, groundwater pollution, vegetation damage, and even environmental disasters if not carried out in accordance with technical standards and legal provisions. Therefore, Indonesian law requires companies not only to take preventative measures but also to ensure environmental recovery if exploration activities result in pollution or damage.

One of the most relevant cases in the development of Indonesian environmental law is the Lapindo Brantas mudflow in Porong, Sidoarjo Regency, East Java. This case began with the drilling of the Banjar Panji-1 exploration well carried out by PT Lapindo Brantas Inc. in 2006. During the drilling process, a hot mudflow (blowout) occurred which then developed into a national-scale environmental disaster. The continuously gushing mud submerged thousands of homes, industrial areas, agricultural land, national roads, railways, and damaged the quality of land, water, and air in the surrounding area. These ecological impacts lasted for a long time, requiring very complex environmental recovery efforts. When analyzed from the perspective of Indonesian environmental law, the main issue is not only about providing compensation to the community, but also about the obligation to restore environmental functions. This is in accordance with Article 54 of Law Number 32 of 2009 concerning Environmental Protection and Management, which stipulates that any pollution or environmental damage must be restored through stopping the source of pollution, remediation, rehabilitation, restoration, and other methods in accordance with developments in science and technology. Thus, the company's legal obligations do not end after providing compensation to the community, but must ensure that environmental conditions are restored as close as possible to their original state.

In the Lapindo case, the implementation of environmental restoration obligations has presented various problems. Most solutions have focused more on compensation payments to affected

communities than on comprehensive ecosystem restoration. However, the damage caused extends beyond the loss of land rights, including the loss of the area's ecological function, declining groundwater quality, disruption of the hydrological system, destruction of flora and fauna habitats, and increased public health risks due to the presence of certain metals and chemical compounds in the mud. Various legal studies have shown that environmental restoration has not been fully implemented as mandated by the Environmental Protection and Management Law.

The hot mudflow in Sidoarjo Regency began in 2006 when PT Lapindo Brantas Inc. drilled the Banjar Panji-1 exploration well. The continuous mudflow covered thousands of hectares of residential areas, agricultural land, industrial areas, and public infrastructure. The resulting environmental impacts included changes in the landscape, damage to soil quality, disruption of the hydrological system, and the loss of the area's ecological function (Hariyanto et al., 2025). In this case, environmental restoration is not sufficient through compensation payments to the community. The damaged environment still requires comprehensive rehabilitation to restore the quality of the soil, water, and ecosystems. Law Number 32 of 2009 establishes environmental restoration as a stand-alone obligation that cannot be replaced by compensation payments. Therefore, remediation, rehabilitation, restoration, and environmental monitoring must continue as long as the impacts of pollution persist. The Lapindo case demonstrates that environmental recovery is a long-term process that requires coordination between the government, companies, and communities. Successful resolution of environmental issues is measured not only by the fulfillment of community economic rights, but also by the restoration of environmental functions in accordance with the objectives of environmental protection and management as stipulated in Law No. 32 of 2009.

Oil exploration and drilling activities in the PT Pertamina EP Asset 1 Field Jambi work area have caused environmental pollution due to an oil spill that contaminated the soil and waterways of communities around the drilling site. The oil spill originated from a leak in the drilling facility, causing hydrocarbons to seep into the soil and flow into water bodies. This condition caused soil quality to decline, vegetation around the site died, and the community was unable to utilize water sources as before. This incident demonstrates that oil and gas exploration activities carry a high risk of environmental damage even before entering the commercial production stage. The company's responsibility extends beyond stopping the oil leak; it is also required to undertake environmental restoration through cleanup of contaminated soil, removal of oil waste, vegetation rehabilitation, and regular monitoring of groundwater quality. This obligation implements Article 54 of Law Number 32 of 2009, which stipulates that environmental restoration is carried out through remediation, rehabilitation, and restoration. The government, through the Ministry of Environment and Forestry, oversees the implementation of restoration to ensure that environmental conditions return to the established quality standards. This case demonstrates that environmental restoration is a legal obligation inherent in companies from the moment pollution occurs. Compensation payments to the community do not eliminate the obligation to rehabilitate the polluted environment. All restoration costs are the responsibility of the company, in accordance with the polluter pays principle adopted in Indonesia's environmental law system (Rahmadi, 2023).

During its management of the Rokan Block Working Area, PT Chevron Pacific Indonesia conducted various exploration activities and drilled new wells in several areas of Bengkalis, Siak, Rokan Hulu, and Dumai Regencies. These drilling activities generated drilling waste, drilling mud, oil-contaminated soil, and former drilling sites that must be restored after exploration activities are completed. One of the government's priorities is the implementation of Abandonment Site Restoration (ASR) for discontinued exploration wells to prevent them from becoming sources of environmental pollution in the future (SKK Migas, 2022).

Recovery involves permanent well closure (plug and abandonment), dismantling of drilling facilities, removal of hazardous waste, restoration of land contours, revegetation, and regular environmental quality monitoring. These steps aim to restore the area's ecological function so that the land no longer poses a threat to the surrounding community or environment. This obligation has become part of the environmental requirements that must be met by the cooperation contract contractor before the work area is transferred to the next operator.

The problems that arise in practice lie not with restoration techniques, but rather with financing and who is responsible for implementing ASR when the cooperation contract ends. Several legal studies explain that the obligation to restore remains with the contractor conducting the exploration activities because environmental damage is a direct consequence of their business activities. Changing operators does not eliminate legal responsibility for the environmental damage that has occurred (Rahman & Fauzi, 2025).

Oil and gas companies are responsible for remediation based on the polluter pays principle. This principle requires that all environmental remediation costs be borne by the party causing the pollution. In the context of oil and gas exploration activities, companies are required to provide environmental rehabilitation costs as part of their operational costs. This principle also prevents the government from using public funds to repair damage caused by private business activities.

On the other hand, Law Number 32 of 2009 also recognizes the principle of strict liability, as stipulated in Article 88. This principle is crucial in oil and gas exploration activities because drilling activities use hazardous materials and produce waste that has the potential to pose a serious threat to the environment. Through the principle of strict liability, victims are not burdened with the burden of proving any element of corporate fault. Simply proving a link between business activities and environmental damage is sufficient for the company to be held legally accountable. The application of this principle is intended to provide more effective legal protection while accelerating the environmental recovery process.

In practice, environmental recovery from oil and gas exploration involves more than just stopping drilling activities. Recovery encompasses various technical measures, including plugging and abandonment of unproductive exploration wells, cleaning up contaminated drilling mud, processing drilling waste in accordance with environmental standards, removing hydrocarbon-contaminated soil, revegetating cleared areas, improving drainage systems, restoring surface and groundwater quality, and conducting regular environmental quality monitoring. All of these actions are integral and inseparable from the company's legal obligations.

This obligation is reinforced by Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management, which stipulates that every holder of an Environmental Approval is required to implement all commitments stated in the AMDAL or UKL-UPL documents. If environmental pollution occurs due to exploration activities, the company is required to implement remedial measures in accordance with the government-approved environmental documents. Failure to comply with these obligations will result in the government imposing administrative sanctions in the form of written warnings, government coercion, administrative fines, suspension, or revocation of environmental approvals.

In addition to obligations under environmental law, the upstream oil and gas sector also recognizes the obligation of Abandonment Site Restoration (ASR), or post-operational activities. ASR is a mechanism for restoring oil and gas sites after wells are no longer used. The goal is to restore the land to a safe condition for the community and prevent long-term pollution. However, in practice, various issues remain regarding the implementation of ASR, particularly in oil and gas blocks undergoing management transfers or contract terminations. Several legal studies have criticized the continued tendency to shift responsibility for restoration, thus contradicting the polluter pays principle (Rahman & Fauzi, 2025). The first form of responsibility is to stop the source of pollution. When an oil leak, mudflow, or pollution occurs due to exploratory drilling activities, the company is obliged to immediately stop all activities causing the damage. This obligation is the initial action to prevent the spread of pollution to land, water bodies, air, and forest areas. In practice in the upstream oil and gas sector, stopping the source of pollution is carried out by closing wells experiencing technical failures, repairing drilling installations, installing containment systems, and securing waste to prevent its spread to the surrounding environment. This obligation implements Article 54 of Law Number 32 of 2009, which requires every business person responsible to take remedial measures from the moment pollution occurs (Rahmadi, 2023).

Remediation is an effort to remove or reduce pollutants so that environmental quality returns to standard standards. In oil and gas exploration activities, remediation is carried out through the

removal of hydrocarbon-contaminated soil, drilling mud treatment, oil spill cleanup, hazardous and toxic waste management (B3), and the purification of oil-contaminated groundwater. All remediation costs are the responsibility of the company as the business entity causing the environmental impact.

In oil and gas exploration activities, rehabilitation is carried out through re-contouring of ex-drilling areas, revegetation with local plants, restoration of water catchment areas, construction of environmental drainage systems, and erosion control at exploration sites. These activities must be carried out until environmental conditions are declared stable based on government monitoring. Rehabilitation aims not only to improve the physical condition of the land but also to restore the balance of the ecosystem disturbed by exploration activities (Rangkuti, 2018).

Environmental restoration. Restoration is an effort to return ecosystem functions as close as possible to their pre-damage condition. In the oil and gas sector, restoration is carried out in areas that have experienced changes in the landscape due to the development of drilling sites or exploration access roads. Restoration includes replanting native vegetation, restoring wildlife habitats, normalizing affected water bodies, and returning the area to its ecological function. Restoration is the most comprehensive form of responsibility because it not only repairs physical damage but also restores the biological function of the environment.

Abandonment Site Restoration(ASR) for completed exploration wells. ASR is a specific obligation in upstream oil and gas business activities that aims to ensure that former drilling sites no longer pose a threat to the environment or the community. ASR implementation includes permanent well closure (plug and abandonment), dismantling of all drilling facilities, waste removal, land contour restoration, revegetation, and post-operational monitoring. These obligations must be completed before the work area is returned to the state or transferred to another contractor. Therefore, companies are not permitted to leave exploration sites in a condition that still has the potential to cause pollution.

The environment according to the Big Indonesian Dictionary (KBBI) is a unity of space with all objects, power, conditions, and living creatures including humans and their behavior that affect the life and welfare of humans and other living creatures (Ministry of National Education, 2010). To get a clearer picture of the meaning of the environment, the following will explain several opinions of environmental experts and the meaning of the environment according to laws and regulations. In the environmental dictionary compiled by Michael Allaby (1975), the environment is defined as: the physical, chemical and biotic conditions surrounding and organism.

SJ McNaughton and Larry L. Wolf (1973) define it as all external biological and physical factors that directly affect the life, growth, development, and reproduction of organisms. According to Emil Salim (1982), the environment is defined as all objects, conditions, and influences that exist in the space we occupy and affect living things, including human life. The boundaries of environmental space according to this definition can be very broad, but for practical purposes, we limit environmental space to factors that can be reached by humans, such as natural factors, political factors, economic factors, social factors, and others. The opinion above illustrates that humans in their lives have a reciprocal relationship with their environment. Humans in their lives, both individually and as a community group, always interact with the environment in which they live, meaning that humans, with their various activities, will influence human life (Arifin, 1993).

The term environment is literally translated as “Life Environment”, but in reality it is always translated as “Environment”. According to AL Slamet Riyadi (1981), it states that the environment is a science. It is said that environmental science is a science that is able to apply various disciplines (fragments of various basic sciences) through an ecological approach to environmental problems caused by human activities themselves. Furthermore, according to Munadjat Danusaputro (1980), the environment is all objects and conditions including humans and their actions, which are found in the space where they are located and affect the survival and well-being of humans and other living organisms.

Likewise, according to Otto Soemarwoto, the environment is the sum of all objects and conditions within the space we occupy that influence our lives. In theory, space is infinite, but in practice, we always limit that environmental space. According to our needs, these limits can be determined by natural factors such as ravines, rivers, or seas, economic factors, political factors, or other factors. Human behavior is also part of our environment; therefore, the environment must be

interpreted broadly, namely not only the physical and biological environment, but also the economic, social, and cultural environment (Soemarwoto, 1977).

There are two types of environments: natural and built environments, each with its own distinct characteristics and conditions. Built environments are areas or components of nature that have been influenced or engineered by humans. Certain geographic areas, such as conservation forests, are generally still considered natural environments, although human intervention has occurred within them, although it remains very limited. Nature reserves, for example, are areas that have not experienced any human intervention at all (Asaad et al., 2011).

From the opinions above, the definition of the environment can be summarized in a series of elements as follows (Siahaan, 1987): All objects, in the form of: humans, plants, organisms, soil, water, air, houses, rubbish, cars, wind, etc.

The Indonesian environment is the environment within the territorial boundaries of the Republic of Indonesia. According to the General Explanation of Law Number 4 of 1981, the environment in the ecological sense does not recognize national or administrative boundaries. However, if the environment is linked to its management, the boundaries of the authority for such management must be clearly defined (TLN No. 3215). Therefore, it is clear that the concept of the Indonesian environment is not merely ecological but also a legal and political concept (Abdurrahman, 1986).

It is also said that the Indonesian environment according to the territorial concept is a legal concept. In this sense, the Indonesian environment is nothing other than the archipelago, which occupies a cross position between two continents and two oceans with a tropical climate and weather and seasons that provide natural conditions and a position with a strategic role of high value, where the Indonesian nation and people organize their national life in organizing environmental protection and management is the Archipelago Insight (Abdurrahman, 1986).

Therefore, Article 2 of Law Number 4 of 1982 states: "The Indonesian Environment based on the Nusantara perspective has a scope that includes space, where the Republic of Indonesia exercises sovereignty, sovereign rights and jurisdiction."

Furthermore, in General Explanation number 3, it is stated that the Indonesian environment as an ecosystem consists of various regions, each as a sub-system, which includes socio-cultural, economic and physical aspects with different patterns between one sub-system and another, and with different environmental carrying capacities. Guidance and development based on the state of environmental carrying capacities will increase the harmony and balance of the sub-systems, which also means increasing the resilience of one sub-system will affect other sub-systems, which in turn will also affect the resilience of the ecosystem as a whole. Therefore, environmental management demands the development of a system with integration as its main characteristic. This means the need for a national environmental management policy.

The government can impose written warnings, government coercion, administrative fines, freeze environmental approvals, or even revoke environmental approvals. In addition, the public or the government can file a civil lawsuit to recover environmental restoration costs. Under certain circumstances, companies and those responsible can also be punished if environmental pollution or damage is committed intentionally or through negligence, as stipulated in Chapter XV of Law Number 32 of 2009. The application of these three law enforcement instruments demonstrates that environmental restoration obligations have strong coercive power in the Indonesian legal system.

The case of PT Lapindo Brantas Inc., PT Pertamina EP Field Jambi, and the implementation of Abandonment Site Restoration in the Rokan Block Working Area shows that corporate responsibility is not only measured by the amount of compensation paid to the community. The true measure of success lies in the restoration of the ecological function of the environment through the cessation of pollution sources, remediation, rehabilitation, restoration, safe well closure, environmental monitoring, and the return of environmental quality to the quality standards set by the government. Environmental restoration is a legal obligation that must be implemented comprehensively so that the community's right to a good and healthy environment as guaranteed in Article 28H paragraph (1) of the 1945 Constitution of the Republic of Indonesia can be protected.

Under the Legal Responsibility Theory, oil and gas companies bear three forms of responsibility simultaneously. First, administrative responsibility, which involves fulfilling all

obligations stipulated in environmental agreements, environmental impact assessments (EIA), and technical provisions in the oil and gas sector. Second, civil responsibility, which involves paying compensation to the community and restoring the environment until ecological functions are restored. Third, criminal responsibility, which involves carrying out environmental pollution or damage unlawfully or through negligence that fulfills the elements of an environmental crime. Thus, the environmental accountability regime in Indonesia is comprehensive and does not limit itself to a single type of sanction.

When linked to the Lapindo Brantas case, a gap between das sollen and das sein is apparent. Normatively, Law Number 32 of 2009 provides comprehensive legal instruments for environmental restoration, including the application of strict liability and restoration obligations. However, in its implementation, the resolution is more focused on compensation mechanisms for victims rather than on restoring the ecosystem as a whole. As a result, some damaged environmental functions have not been optimally restored, thus the environmental protection objectives mandated by the law have not been fully achieved (Amaliya et al., 2025).

The responsibility for environmental restoration resulting from oil and gas exploration by oil and gas companies is an imperative legal obligation under Indonesian law. Companies are required to undertake restoration from the time the damage occurs through remediation, rehabilitation, restoration, and post-recovery monitoring, in addition to providing compensation to the community. The success of environmental law enforcement is measured not only by the amount of compensation paid, but primarily by the extent to which environmental functions can be restored as mandated by Law Number 32 of 2009, Law Number 22 of 2001 concerning Oil and Gas, and Government Regulation Number 22 of 2021. Therefore, the primary focus of oil and gas companies' accountability must shift from merely resolving economic losses to sustainable ecological restoration, as only through effective environmental restoration can the goals of sustainable development and the protection of the community's right to a good and healthy environment be realized.

In practice, environmental restoration responsibilities are not only administrative but can also give rise to civil and criminal liability. Administrative liability is realized through the obligation to fulfill environmental agreements and implement restoration. Civil liability is realized through the payment of compensation to the community and the state for environmental damage (Hardjasoemantri, 2018). Meanwhile, criminal liability can be imposed if a company intentionally or through negligence pollutes or damages the environment that meets the elements of a criminal act as stipulated in the Law on Environmental Protection and Management.

From the perspective of modern environmental law theory, responsibility for environmental restoration embodies the principle of sustainable development, which balances economic, social, and environmental sustainability (Siahaan, 2009). While the exploitation of oil and gas resources significantly contributes to state revenue and national energy security, their utilization must not be at the expense of environmental sustainability. Therefore, companies are required to internalize environmental costs as part of their operational costs, ensuring that environmental restoration is not considered an additional burden but rather a legal consequence of their business activities (Rangkuti, 2018).

Based on this description, it can be understood that the Indonesian legal system has comprehensively regulated the responsibilities of oil and gas companies for environmental recovery resulting from exploration activities. These regulations include obligations for prevention, control, recovery, compensation, and the application of the principle of strict liability. Therefore, any environmental damage arising from exploration activities is, in principle, the company's legal responsibility to restore it until the environment returns to its proper function, thereby achieving the objectives of environmental protection and management as mandated by laws and regulations.

B. Legal Consequences of Responsibility for Environmental Restoration Due to Exploration by Oil and Gas Companies Based on Statutory Regulations

Oil and gas exploration activities are the initial part of a series of upstream oil and gas business activities aimed at obtaining data on the existence of oil and gas reserves. Although

exploration has not yet entered the full production phase, these activities still have the potential to cause changes to environmental conditions. Opening road access, drilling exploration wells, the use of drilling chemicals, disposal of drilling waste, and the use of heavy equipment can result in vegetation damage, soil pollution, surface and groundwater pollution, and disruption of the ecosystem around the activity location. Therefore, any environmental damage arising from exploration activities has legal consequences in the form of environmental restoration obligations that must be fulfilled by the company as a form of legal responsibility.

To avoid irrational use of natural resources, government intervention is required in the management of these natural resources. The provisions of Article 33 paragraph (3) of the 1945 Constitution place the government's responsibility in regulating the management of the environment and the natural resources contained therein. Law Number 23 of 1997 concerning environmental management is an improvement of Law Number 4 of 1982, which is the Law on environmental management. Law Number 23 of 1997 is a description and preamble to the Constitution of the Republic of Indonesia and Article 33 paragraph 3, which requires that natural resources be used for the greatest prosperity of the people. Article 6 of Law Number 23 of 1997 states that everyone is obliged to maintain the sustainability of environmental functions and prevent and overcome environmental pollution and destruction.

Articles on environmental crimes outside the Criminal Code and Law Number 23 of 1997 include Law Number 11 of 1974 concerning Waters, Law Number 5 of 1983 concerning the EEZ, Law Number 9 of 1985 concerning Fisheries, Law Number 5 of 1990 concerning Conservation of Natural Resources and Ecosystems, Law Number 41 of 1999 concerning Forestry (Sunarso, 2006). In Law Number 41 of 1999 Article 50 paragraph I states that everyone is prohibited from damaging forest protection infrastructure and facilities. paragraph (2) states that everyone who is given a business permit to utilize an area, carries out activities that cause forest damage.

The above article provides a legal explanation and affirmation of the prohibition on illegal logging. Furthermore, Chapter XIV outlines criminal provisions for violators of Article 50, paragraphs 1 and 2, which carry a maximum penalty of 10 years' imprisonment and a maximum fine of Rp. 5,000,000,000.00 (five billion rupiah). The regulation of environmental issues in Indonesia has experienced several major leaps since the enactment of Law Number 4 of 1982 concerning Basic Provisions for Environmental Management, then replaced by Law Number 23 of 1997 concerning Environmental Management, and finally replaced by the enactment of Law Number 32 of 2009 concerning Environmental Protection and Management. One of the concerns in these three laws is the increasingly strong role of the state in providing a good and healthy environment as a means for the Indonesian people to live. The 1945 Constitution of the Republic of Indonesia has stated that a good and healthy environment is a basic and constitutional right for every Indonesian citizen (Harahap, 2020). Therefore, the state, government, and all stakeholders are obliged to protect and manage the environment in the implementation of sustainable development so that the Indonesian environment can remain a source and support for life for the Indonesian people and other living creatures.

Although environmental management has received significant attention from various groups, within the prevailing mainstream of thought, the environment is treated merely as an object of industrial management and investment. Meanwhile, we know that the mission of industrial management is to satisfy the interests of its subjects, namely humans. The environment has no meaning or value beyond merely a tool for human satisfaction. Environmental management is caught in a paradox. On the one hand, environmental management seeks to mitigate environmental damage, while on the other, human greed remains unchecked. Furthermore, our focus on the managerial dimension of environmental management has led us to neglect the reality that the establishment of a management system actually harbors the human capacity to cause systemic damage. The prevailing view is that, for humans to obtain optimal benefits, the environment must be managed. In this sense, humans treat themselves as subjects and the environment as objects of management. Implicit here is that an environment that is regulated and organized in such a way that humans do not suffer will allow humanity to prosper (Harahap, 2020).

The environmental sustainability paradigm refers to the concept of justice which is interpreted as having representation and its distribution, related to how policies in environmental management can become regulations that truly represent the aspirations of the wider community. Environmental management is an integrated effort to preserve environmental functions which includes policies on

arrangement, utilization, development, maintenance, restoration, supervision, and control of the environment. Natural resources such as water, air, land, forests and others are important resources for the survival of living creatures including humans. In its development, at least in Indonesia, three specific laws regarding the environment have been enacted as we will place them parallel for comparison. The first is Law Number 4 of 1982 concerning Basic Provisions for Environmental Management, then Law Number 23 of 1997 concerning Environmental Management which was later replaced by Law Number 32 of 2009 concerning Environmental Protection and Management.

From the perspective of Indonesian environmental law, legal consequences are the consequences arising from violations of legal norms or failure to fulfill obligations stipulated in laws and regulations. The concept of legal consequences aims to restore the proper state of affairs (restutio in integrum), provide legal certainty to affected communities, and simultaneously serve as a deterrent to business actors from neglecting environmental protection. Therefore, any oil and gas company that causes environmental pollution or damage is not only required to cease its activities but also to restore the damaged environment in accordance with applicable laws (Marzuki, 2021). The legal consequences for perpetrators of environmental pollution and destruction are expressly stipulated in Law Number 32 of 2009 concerning Environmental Protection and Management, as amended by Law Number 6 of 2023. Article 54 stipulates that anyone who commits environmental pollution and/or destruction is obliged to restore environmental functions. This provision indicates that environmental restoration is not an optional obligation, but rather a legal obligation. Thus, since environmental damage occurs due to oil and gas exploration activities, companies automatically bear the legal obligation to restore environmental conditions without having to wait for a court decision first (Rahmadi, 2023).

Environmental restoration itself has a broad scope. Based on the provisions of Article 54 paragraph (2) of the Environmental Protection and Management Law, environmental restoration can be carried out through stopping the source of pollution, remediation, rehabilitation, restoration, or other methods in accordance with developments in science and technology. Remediation is carried out to clean up polluted environmental media. Rehabilitation is carried out to improve environmental functions that have decreased. Restoration aims to return environmental conditions to close to their original state before the damage occurred. All of these actions must be carried out by the company as a form of implementing legal responsibility for the impacts of oil and gas exploration. The next legal consequence is the emergence of administrative responsibility. Under the environmental administrative law system, the government has the authority to oversee all business activities that impact the environment. If violations of environmental approvals, AMDAL documents, UKL-UPL, or other technical provisions are found, the government can impose administrative sanctions in the form of written warnings, government coercion, suspension of business permits, or even revocation of business permits. These administrative sanctions do not eliminate the company's obligation to continue environmental restoration. In other words, administrative sanctions and restoration obligations can be applied simultaneously because they have different legal objectives (Helmi, 2020).

In Indonesian environmental justice practice, compensation payments are never intended as a substitute for environmental restoration obligations. Both obligations are cumulative. This means that companies must still compensate for the economic losses suffered by the community while simultaneously restoring the damaged environmental function. This approach demonstrates that environmental protection is not solely financially oriented, but rather places greater emphasis on restoring ecological functions as the primary objective of environmental law. Another legal consequence that has special characteristics is the application of the principle*strict liability*as stipulated in Article 88 of the Environmental Protection and Management Law. Based on this principle, companies can be held accountable without having to prove fault. It is sufficient to prove that business activities pose a serious threat to the environment or use hazardous and toxic materials that result in environmental pollution or damage. The application of the principle of absolute liability aims to provide maximum environmental protection while facilitating proof for victims and the government in law enforcement processes (Rangkuti, 2018).

For oil and gas exploration activities, the application of the principle*strict liability*has very high relevance because the activity contains a high level of risk (*ultra hazardous activities*). These

risks include wild eruptions (*blow out*), oil spill (*oil spill*), drilling mud leak (*drilling mud*), well fires, and groundwater contamination due to well construction failures. When these risks actually cause environmental damage, companies cannot escape their obligation to carry out remediation simply by claiming they have met operational standards or that there was no intentional element. In addition to administrative and civil liability, companies may also be subject to legal consequences in the form of criminal liability. The Environmental Protection and Management Law regulates various criminal provisions for perpetrators of environmental pollution and destruction. Criminal liability can be imposed on corporations and company managers if proven to have committed an environmental crime. Criminal sanctions in the form of imprisonment, fines, additional penalties, and disciplinary action do not eliminate the company's obligation to restore the environment. Therefore, the implementation of criminal penalties continues concurrently with the implementation of restoration obligations.

Regulations regarding oil and gas business activities also require the implementation of environmental protection. Law Number 22 of 2001 concerning Oil and Gas, as amended by Law Number 6 of 2023, requires that all oil and gas business activities be carried out with due regard for occupational safety, operational security, resource conservation, and environmental protection. These provisions demonstrate that environmental aspects are an integral part of oil and gas exploration activities. Therefore, any violation of these obligations carries legal consequences in the form of environmental rehabilitation and restoration in accordance with statutory provisions. Furthermore, provisions regarding environmental impact analysis (AMDAL) play a crucial role in determining legal consequences for companies. The AMDAL document contains environmental management and monitoring plans that must be implemented during exploration activities. Failure to comply with the commitments outlined in the AMDAL constitutes a violation of the environmental agreement, which can result in administrative sanctions and legal action. In other words, the AMDAL serves not only as an administrative document but also as a legal basis for determining the company's accountability for environmental restoration.

From the perspective of the theory of legal responsibility, the legal consequences imposed on oil and gas exploration companies are an implementation of the principle of accountability (*accountability*) in a state of law. Every legal entity that obtains economic benefits from the use of natural resources must bear a balanced obligation towards environmental protection. This principle is in line with the concept of sustainable development (*sustainable development*) which requires a balance between economic, social and environmental sustainability interests. Based on the description, it can be understood that the legal consequences of environmental restoration responsibilities resulting from exploration by oil and gas companies include the obligation to carry out environmental restoration, payment of compensation, application of absolute liability (*strict liability*), the imposition of administrative sanctions, civil liability, and criminal liability. All forms of legal consequences are complementary, so they not only serve to impose sanctions on the company but also ensure the optimal restoration of environmental functions in accordance with the principles of environmental protection and management in the Indonesian legal system.

CONCLUSIONS

Oil and gas companies have a legal obligation to restore the environment damaged by exploration activities in accordance with Indonesian environmental and oil and gas regulations. Their responsibilities include pollution control, remediation, rehabilitation, environmental restoration, Abandonment Site Restoration (ASR), environmental monitoring, and compensation for affected communities. These obligations reflect the polluter pays principle, precautionary principle, and strict liability, ensuring that companies are accountable for environmental damage.

Failure to fulfill these obligations may result in multiple legal consequences, including administrative sanctions, civil liability, criminal penalties, and contractual consequences. Companies may also face business disruptions and loss of public and government trust. Therefore, environmental restoration is not merely a legal requirement but also an essential responsibility for ensuring environmental sustainability and the continuity of oil and gas operations in Indonesia.

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