

Implementation of Criminal Sanctions as Ultimum Remedium in Article 100 of Law Number 32 of 2009 concerning Environmental Protection and Management

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Abstract

Criminal law enforcement against environmental violations serves as the last step (ultimum remedium) used when administrative sanctions are proven to be unable to stop violations. This study aims to analyze the application of the principle of ultimum remedium and assess the suitability of the application of Article 100 paragraphs (1) and (2) in Law Number 32 of 2009 concerning Environmental Protection and Management in cases of environmental pollution carried out by PT. Trisan Abadi. This study uses a normative juridical method with a case study approach. The results of the study show that the relevant agencies have first issued administrative sanctions through Decree Number 660.31/Kep.412-DLH/2020. However, because business actors do not comply with the sanctions and violations occur again, criminal sanctions are then imposed. The application of the articles used has met the elements of the law, including the imposition of responsibility on corporations as legal subjects. These findings show that although the principle of ultimum remedium has been implemented in accordance with the provisions, its effectiveness still needs to be improved through stricter supervision, training for law enforcement officials, and inter-agency synergy. These measures are important to have a deterrent effect and ensure sustainable environmental protection.

Keywords: Administrative Sanctions, Corporate Responsibility, Environmental Criminal Law; Ultimum Remedium; Waste Pollution.

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1. Introduction

The environment is the priceless foundation for the continuation of human civilization. Managing it is not merely an obligation, but a significant responsibility that must be shared by the government, the public, and businesses. Ironically, however, amidst the growing calls for conservation, many businesses still neglect their responsibilities. One clear example of this negligence is the practice of discharging liquid waste that falls far short of quality standards, which not only pollutes the environment but also threatens the future of future generations.

Environmental pollution and degradation in Indonesia have spread to various regions. Each year, this condition continues to increase and tends to become increasingly difficult to control. Various forms of damage, such as forest fires, flooding during the rainy season, and drought during the dry season, are clear symptoms of an increasingly alarming crisis.¹ This reflects the increasing environmental damage. Discussing the relationship between human society and the environment, we see that both are essentially a single entity, a biotic community. Humans and their communities, in addition to having the right to utilize and preserve the environment, also have the responsibility to protect and preserve it.²

Therefore, humans should not treat the environment excessively, let alone exploit it excessively beyond reasonable limits. One of the main goals of environmental management is to realize environmentally conscious development and ensure the wise and responsible use of natural resources. Every development activity, wherever and whenever it occurs, inevitably has an impact. This impact can be positive, providing benefits to human life, but it can also have a negative impact that causes harm or threats to the wider community.³ Article 33 of the 1945 Constitution states that the land, water, and natural resources contained therein are controlled by the state and used for the greatest prosperity of the people.

Until now, environmental management has often been understood merely as an effort to optimize natural resources to meet material needs. However, sustainable development should be directed towards a development model that prioritizes environmental sustainability, maintains the continued function of the supporting ecosystem, and encourages integrated and sustainable development activities. This must also involve the active participation of the wider community and implement procedures that consider the carrying capacity and resilience of the ecosystem, to ensure its sustainability for both present and future generations.⁴

The exploitation of natural resources is almost always accompanied by pollution, a universal, natural consequence. Development undertaken by the state is indeed intended to bring about change for the benefit of humanity. However, changes

¹ Absori, "Penegakan Hukum Lingkungan Pada era Reformasi," *Jurnal Ilmu Hukum* 3, no. 2 (2015): 221.

² Hilman Zainal, *Hukum Penyelesaian Sengketa Lingkungan Hidup, Sebuah Model Penyelesaian Sengketa Lingkungan Hidup Dengan Pendekatan partisipatif*, (Surakarta: Muhammadiyah University. 2019), 80.

³ Djatmiko Margono, *Pendayaan Waste Management (Kajian Lingkungan Indonesia)*, (Bandung: PT. Citra Aditya Bakti, 2013), 11.

⁴ Adyana Sunanda Absori, and Aidul Fitriadi, *Penegakan hukum lingkungan & antisipasi dalam era perdagangan bebas*, (Surakarta: Muhammadiyah University Press, 2000), 34.

that benefit humanity are not necessarily in harmony with environmental sustainability. If development is carried out continuously without considering its ecological impacts, it will ultimately not only harm the environment but also negatively impact humanity itself.⁵

The role of environmental law today can be examined from the perspective of the process of law formation and its role in international and national development. This way of thinking, the role of international environmental law is considered part of the concept of international development. This can be seen in the use of the World Commission on Environment and Development.⁶ In line with the above way of thinking, the process of forming national and international environmental law is greatly influenced by the development law approach.⁷

Various environmental conventions, covering the laws of the sea, airspace, space, forests, biodiversity, natural resources, and pollution, have spurred significant developments in international environmental law. Global conventions are proliferating, and agreements specifically governing specific environmental media are accelerating the emergence of new international environmental legal norms. These developments directly influence the formation and adjustment of environmental legislation at the national level. In fact, a trend is emerging that national environmental regulations are being viewed as an integral part of the ecological dynamics of international environmental law.⁸

The Citarum River, one of Indonesia's longest and most vital rivers, is currently under national scrutiny due to alarming levels of pollution. One of the main causes of the decline in river water quality is the discharge of liquid waste from industrial activities, particularly those that do not meet the quality standards stipulated in Law of the Republic of Indonesia Number 32 of 2009 concerning Environmental Protection and Management. Article 100 paragraphs (1) and (2) of this law states that if administrative sanctions are not implemented or if violations are repeated, the perpetrators can be subject to criminal sanctions.⁹

⁵ Otto Soemarwoto, *Analisis mengenai dampak lingkungan*, (Yogyakarta: Gadjah Mada University Press, 2016), 24.

⁶ Otto Soemarwoto, *Analisis mengenai dampak lingkungan*, (Yogyakarta: Gadjah Mada University Press, 2016), 26.

⁷ Adyana Sunanda Absori, and Aidul Fitriciada, *Penegakan hukum lingkungan & antisipasi dalam era perdagangan bebas*, (Surakarta: Muhammadiyah University Press, 2000), 36.

⁸ Otto Soemarwoto, *Analisis mengenai dampak lingkungan*, (Yogyakarta: Gadjah Mada University Press, 2016), 23.

⁹ Lalu Sabardi, "Peran serta masyarakat dalam pengelolaan lingkungan hidup menurut Undang-undang Nomor 32 Tahun 2009 tentang Perlindungan dan pengelolaan lingkungan hidup," *Yustisia Jurnal Hukum* 3, no. 1 (2014): 70.

The case of PT. Trisan Abadi, which discharged liquid waste into the Citarum River Basin (DAS) with Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) levels exceeding the threshold, is a concrete example of weak compliance with environmental regulations. Despite administrative sanctions imposed by the Bandung Regency Environmental Agency, violations continue. This situation not only exacerbates the condition of the Citarum River but also highlights the limited effectiveness of administrative law enforcement and the need for more stringent legal action through the implementation of criminal sanctions.

The imposition of criminal penalties in this case is not only intended to punish, but also as a deterrent, ensure compliance with the law, and encourage more responsible environmental management practices. This reinforces the importance of the principle of *ultimum remedium*, namely, criminal penalties as a last resort when administrative approaches are no longer adequate.¹⁰

The purpose of this study is to examine in depth how Article 100 paragraph (1) and (2) of Law Number 32 of 2009 is applied in the case of Citarum River pollution by PT. Trisan Abadi, and to analyze the application of the *ultimum remedium* principle in the enforcement of environmental criminal law in Indonesia. The reason for choosing this title is based on the importance of examining the effectiveness of criminal law enforcement as a last resort in environmental protection, especially in concrete cases that have wide impacts such as the pollution of the Citarum River. The urgency of this study lies in the need for a comprehensive evaluation of the implementation of environmental law at the practical level, considering the continued occurrence of violations even though administrative sanctions have been imposed. The results of this study are expected to provide strategic contributions to policy formulation, increasing the capacity of law enforcement, and strengthening the legal framework to ensure the sustainability of environmental management in Indonesia.

Based on the above background, the research questions are as follows:

1. How are environmental pollution crimes regulated under Law Number 32 of 2009?
2. How are the principles of *ultimum remedium* and *premium remedium* applied in enforcing environmental criminal law?
3. What is the criminal liability of corporations for environmental pollution crimes under the Environmental Management and Management Law?

¹⁰ Sudi Fahmi, "Asas Tanggung Jawab Negara Sebagai Dasar Pelaksanaan Perlindungan dan Pengelolaan Lingkungan Hidup," *Jurnal Hukum Ius Quia Iustum* 18, no. 2 (2011): 220.

2. Research Method

This research is descriptive-analytical in nature, aiming to present a comprehensive overview of the issues under study. It is called descriptive because it is expected to provide a clear, detailed, and systematic explanation of the phenomena being studied. Meanwhile, the analytical aspect refers to efforts to analyze the data obtained to find solutions to the problems based on applicable legal provisions.¹¹

This research method is normative juridical, namely research that refers to the norms and legal principles contained in laws and court decisions.¹² The rationale for using normative legal research is that this study aims to examine the applicable legal norms governing errors in environmental crimes according to Law Number 32 of 2009 concerning Environmental Protection and Management.

The data collection technique in this study was conducted through library research, reviewing various relevant documents. The data obtained was then carefully identified and selected to identify theories, principles, norms, and provisions of legal articles containing legal principles. Next, the data was analyzed and systematically organized to form a classification that aligns with and aligns with the legal issues focused on in the study.¹³

The data obtained were analyzed qualitatively, namely by selecting the theories, concepts, principles, norms, doctrines, jurisprudence, and legal articles most relevant to the problem being studied. Next, the data were systematically arranged to form a specific classification that aligns with the research focus. This qualitative analysis was presented in the form of a structured description, explaining the interrelationships between the data elements found. All selected and processed data were then analyzed descriptively, so that they were not only able to describe and explain the legal basis of the problem but also could offer appropriate solutions to the issues raised in this research.

¹¹ Lexy J. Moleong, "Metodologi Penelitian Kualitatif Remaja Rosdakarya," *Inter Komunika, Stikom InterStudi* 4, no. 13 (2018): 553.

¹² Soerjono Soekanto, *Ringkasan Metodologi Penelitian Hukum Empiris*, (Jakarta: Indonesia Hillco, 2000), 106.

¹³ Bambang Sunggono, *Metode Penelitian Hukum (Suatu Pengantar)*, (Jakarta: PT. Raja Grafindo Persada, 2011), 193.

3. Research Results and Discussion

3.1. Regulation Of Environmental Pollution Crimes

Law Number 32 of 2009 concerning Environmental Protection and Management strictly regulates the crime of environmental pollution through the provisions in Articles 98 to 102, which stipulate that any person or corporation that intentionally or through negligence pollutes or damages the environment so that it exceeds environmental quality standards can be subject to criminal sanctions in the form of imprisonment and fines.¹⁴ This regulation includes elements of unlawful acts, forms of pollution, criminal responsibility, and affirmation regarding legal subjects that include individuals and corporations. In addition, Article 100 stipulates that violations of wastewater quality standards, emissions, or disturbances that are not heeded after being subject to administrative sanctions can be escalated to criminal offenses, thus demonstrating that the PPLH Law applies a tiered approach between administrative and criminal sanctions in handling environmental pollution.

Environmental pollution is a condition in which hazardous substances enter the natural or artificial environment, disrupting the balance of the ecosystem and endangering the survival of living things.¹⁵ This pollution can occur in various environmental elements, such as air, water, and soil, as well as through excessive noise and lighting. Generally, pollution is caused by human activities, including industry, transportation, and agriculture, although natural factors can also contribute.

For example, air pollution is caused by the accumulation of hazardous particles, such as dust, motor vehicle emissions, factory smoke, and the combustion of fossil fuels, which can cause respiratory health problems in humans and animals.¹⁶ Water pollution, on the other hand, occurs when waste from industry, agriculture, or households contaminates water bodies such as rivers, lakes, or the sea, damaging aquatic ecosystems and endangering aquatic organisms. Soil pollution is also a serious threat,

¹⁴ Dani Amran Hakim, "Politik Hukum Lingkungan Hidup Di Indonesia Berdasarkan Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup," *Fiat Justitia: Jurnal Ilmu Hukum* 9, no. 2 (2015): 353.

¹⁵ Stefani Margareta, and Widyawati Boediningsih, "Tanggung gugat korporasi akibat pencemaran lingkungan ditinjau berdasarkan undang-undang perlindungan dan pengelolaan lingkungan hidup," *Jurnal Hukum Indonesia* 2, no. 1 (2023): 10.

¹⁶ Thoriq Muhammad, Siti Winda Astuti, Maulana Arif Al Djazairi, and Nurlaili Rahmawati, "Peran pemerintah dalam menangani pencemaran udara berdasarkan undang-undang lingkungan hidup," *Journal of Islamic and Law Studies* 7, no. 2 (2023): 156. See too, Muhamad Sadi Is, "Kepastian hukum terhadap perlindungan dan pengelolaan lingkungan hidup di Indonesia," *Jurnal Yudisial* 13, no. 3 (2020): 318.

particularly due to exposure to toxic chemicals such as pesticides, heavy metals, and industrial waste, which contribute to soil degradation and groundwater contamination.

Furthermore, noise pollution from vehicles, industrial machinery, and construction activities can cause sleep disturbances, stress, and even hearing loss. Equally important, light pollution resulting from the excessive use of artificial light from streetlights, buildings, or public facilities at night can disrupt biological rhythms and the natural cycles of living things. These various forms of pollution have become a serious problem that requires a rapid response and an integrated approach to safeguard human health and environmental sustainability.

The negative impacts of environmental pollution are extensive, including disruptions to human health, reduced biodiversity, and threats to global environmental safety.¹⁷ Therefore, environmental protection measures, effective waste management, and the use of environmentally friendly technologies are needed to reduce pollution rates and maintain ecosystem sustainability.

Over time, environmental pollution has expanded at an unprecedented rate. Since the end of World War II, pollution trends have shown two main trends: increasing releases of chemical compounds from industrial and transportation activities, and the use of products containing hazardous chemicals such as carbon monoxide. The burden of water pollution is also increasing due to the influx of industrial waste containing toxic substances, including heavy metals such as mercury (Hg), lead (Pb), cadmium (Cd), arsenic (As), and others, which, even at low levels, can harm ecosystems.

Pollution has also spread to the air and land, with various impacts on the environment and living things. Besides human activities (anthropogenic), pollution can also be caused by natural factors such as forest fires due to prolonged dry seasons, volcanic eruptions, and other natural phenomena.¹⁸

Water is a natural resource that plays a vital role in human life. When water quality declines due to the entry of other substances or elements into a body of water, this condition is known as water pollution.¹⁹ According to Article 1, number 1 of Government Regulation Number 82 of 2001, water is defined as all water above and below the surface of the earth, except seawater and fossil

¹⁷ Yayuk Sugiarti, "Aspek hukum pencemaran lingkungan akibat limbah perusahaan tahu (study kasus di kabupaten sumenep)," *Jurnal Jendela Hukum* 7, no. 2 (2020): 72.

¹⁸ Ketut Irianto, *Buku Bahan Ajar Pencemaran Lingkungan*, (Bali: Universitas warmadewa, 2014), 3.

¹⁹ Ardiatama Iedha Aradhea, "Tinjauan hukum terhadap kasus pencemaran air (studi putusan nomor 91Pid. BLh2021Pn Tte)," *Jurnal Justitia: Jurnal Ilmu Hukum dan Humaniora* 6, no. 2 (2023): 420.

water. Furthermore, Article 8 of the same regulation classifies water quality into four classes, namely class 1 to class 4, according to its level of use.

According to Article 1, point (11) of Government Regulation Number 82 of 2001 concerning Water Quality Management and Water Pollution Control, water pollution is defined as the entry of living creatures, substances, energy, or other components into water due to human activities, which causes a decline in water quality to a certain level so that the water can no longer be used as intended.²⁰

3.2. Application of the Principles of Ultimum Remedium and Premium Remedium

In the context of Indonesian criminal law, the crime of environmental pollution is specifically regulated in Law Number 32 of 2009 concerning Environmental Protection and Management law (*Undang-Undang Perlindungan dan Pengelolaan Lingkungan Hidup*/UU PPLH).²¹ However, legal protection for the environment already existed in the Criminal Code (*Kitab Undang-Undang Hukum Pidana*/KUHP), although it did not explicitly mention the term “environmental pollution.” Several provisions in the KUHP remain relevant, such as Article 98, which regulates acts that damage protected forests, plants, fish, and wildlife; Article 99, which regulates acts of water pollution that could endanger public health; Article 100 concerning air pollution; and Article 101, which protects land from contamination with hazardous materials that impact public health.

While limited, these provisions demonstrate that attention to environmental protection existed in the Indonesian criminal law system before the enactment of the PPLH Law. However, Law Number 32 of 2009 introduced significant reforms by introducing the concept of minimum penalties, expanding the scope of evidence, imposing criminal sanctions for violations of quality standards, integrating criminal law enforcement into criminal law enforcement, and implementing the principle of ultimum remedium, which is a last resort after administrative approaches are deemed ineffective.

This ultimum remedium principle is applied selectively, particularly to formal crimes such as violations of wastewater quality standards, emissions,

²⁰ Farah Nur Laily, “Penegakan hukum lingkungan sebagai upaya mengatasi permasalahan lingkungan hidup di Indonesia,” *Wacana Paramarta: Jurnal Ilmu Hukum* 21, no. 2 (2022): 21.

²¹ Sri Yuliana, Raja Agung Kesuma Arc, and Jonli Oswan, “Pelanggaran Hak Manusia Dalam Mempertahankan Lingkungan Hidup Menurut Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup,” *Justicia Sains: Jurnal Ilmu Hukum* 7, no. 1 (2022): 53.

and environmental disturbances. The application of this principle is crucial in distinguishing between repressive and preventive approaches in environmental law, ensuring a balance between law enforcement and fostering business compliance with environmental standards.

Criminal law is viewed as *ultimum remedium*, meaning it should be viewed as a last resort in improving human behavior. The term *ultimum remedium* was first used by the Dutch Minister of Justice, Mr. Modderman, in response to a question from Mr. Mackay, a member of the Dutch parliament, regarding the legal basis for imposing penalties for individuals who have committed a violation. In response to this question, Modderman stated: "... that what can be punished first of all are violations of the law. This is a *conditio sine qua non* (a condition that must not be absent). Second, what can be punished are violations of the law, which according to experience cannot be eliminated by other means. Punishment should be a last resort (*ultimum remedium*).²²

It is true that any threat of criminal punishment will always elicit certain objections or resistance. This is logically understandable to anyone with sound judgment, even without in-depth explanation. However, this does not mean that the threat of criminal punishment should be eliminated altogether. Rather, the threat of criminal punishment must be considered proportionally, assessing the benefits and risks it poses. The application of criminal sanctions should be a means of recovery or improvement, not a worsening of existing conditions.

Law enforcement, as stipulated in Law Number 32 of 2009 concerning Environmental Protection and Management, encompasses the principles of good environmental governance. This aligns with the principles of good governance, which emphasize the importance of transparency, public participation, accountability, and fairness in every process of formulating and implementing law enforcement and mitigation instruments. This law also grants broader authority to regional governments to implement environmental protection and management in their respective regions, a matter not previously comprehensively regulated in Law Number 23 of 1997.

²² Alvi Syahrin, *Beberapa Isu Hukum Lingkungan Kepidanaan* (Jakarta: PT. Sofmedia, 2019), 9. See too, Andang Binawan, and Maria Grasia Sari Soetopo, "Implementasi Hak Atas Lingkungan Hidup Yang Bersih, Sehat, Dan Berkelanjutan Dalam Konteks Hukum Indonesia," *Jurnal Hukum Lingkungan Indonesia* 9, no. 1 (2022): 132.

3.3. Corporate Criminal Liability in Environmental Pollution Crimes

Regarding the grounds for aggravating criminal penalties, in the context of environmental crimes, specific aggravating factors should be formulated. For example, if the criminal act is part of a pattern or practice of violating legal obligations or regulations, if the perpetrator has previously been sentenced for a similar crime, if there is an element of intent in the commission of the crime, and if the consequences of the act are considered serious or significantly detrimental. Including these specific aggravating factors is important to create a deterrent effect and provide a balanced sense of justice for both society and the environment.²³

Determining an act as an environmental crime cannot be done haphazardly but must go through a process of criminalization, which involves bringing the act under the purview of criminal law through provisions in legislation. This concept of criminalization, as explained by Sudarto, a leading Indonesian criminal law expert, must be based on sound and prudent principles.²⁴ He emphasized that the use of criminal law must be proportional and support the goals of national development, namely creating a just, prosperous, and materially prosperous society, based on the values of Pancasila. Within this framework, criminal law is seen as a crucial instrument for maintaining public order and safety, as well as combating crimes that harm the wider community.

In addition, Sudarto emphasized that not all actions can be criminalized.²⁵ Actions to be criminalized must be those that are truly deemed undesirable by society because they cause real harm both physical and spiritual to citizens. The use of criminal law must also consider the carrying capacity and capabilities of law enforcement agencies to prevent overburdening, which can actually reduce the effectiveness of the criminal justice system.

In this context, environmental crimes are specifically regulated in Law Number 32 of 2009 concerning Environmental Protection and Management.²⁶ This law provides a clear legal framework for declaring environmental

²³ Muladi, *Prinsip-prinsip Dasar Hukum Pidana Lingkungan dalam Kaitannya dengan UU Nomor 23 Tahun 1997*, Makalah Seminar Nasional Kajian dan Sosialisasi Undang-undang Nomor 23 Tahun 1997 tentang Pengelolaan Lingkungan Hidup, Semarang: Fakultas Hukum UNDIP, 1998), 15.

²⁴ Sudarto Sudarto, *Hukum dan Hukum Pidana*, (Bandung: Alumni, 2001), 53.

²⁵ Sudarto Sudarto, *Hukum dan Hukum Pidana*, (Bandung: Alumni, 2001), 56.

²⁶ Dahlia Kusuma Dewi, "Izin Lingkungan dalam Kaitannya dengan Penegakan Administrasi Lingkungan dan Pidana Lingkungan Berdasarkan Undang-undang No. 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup (Uupplh)," *Jurnal Mutiara Hukum* 1, no. 1 (2018): 1-14.

pollution and destruction a serious crime. For example, Article 100 states that any violation of wastewater quality standards, emissions, or environmental disturbances is subject to criminal sanctions with a maximum prison sentence of three years and a fine of up to three billion rupiah, particularly if the perpetrator fails to comply with previous administrative sanctions or is a repeat offender.²⁷

Furthermore, Article 101 stipulates that anyone who releases or distributes genetically engineered products into the environment without a permit or in violation of applicable regulations can be sentenced to a minimum of one year and a maximum of three years in prison and a fine of between one and three billion rupiah. Article 103 also stipulates that managing Hazardous and Toxic Materials (B3) waste without a permit, or failing to comply with B3 waste management obligations, is subject to similar criminal penalties.

In addition to highlighting individual responsibility, the Environmental Management and Management Law also explicitly regulate corporate criminal liability.²⁸ Article 116 states that if an environmental crime is committed by, for, or on behalf of a business entity, criminal charges and sanctions can be imposed on that business entity, as well as on any party giving orders or acting as a leader in carrying out the crime. This means that both institutions and individuals with authority within the entity can be held legally accountable.

Article 117 reinforces these provisions by stipulating that if criminal charges are filed against the person who ordered or led the crime, the penalty imposed will be increased by one-third of the principal penalty. Meanwhile, Article 118 stipulates that sanctions against business entities are imposed through their official representatives, namely managers who have the authority to represent the company both in and out of court. This provision provides a clear legal basis for enforcing criminal liability against legal entities, not just individuals.

Furthermore, Article 120 states that in the process of implementing a legally binding court decision, prosecutors are required to coordinate with agencies responsible for environmental protection and management. The government is also authorized to take over the management of sanctioned business entities

²⁷ Muhammad Nurdin, "Peranan Penyidik Dalam Penegakan Hukum Terhadap Pelanggaran Tindak Pidana Lingkungan Hidup," *Jurnal Hukum Samudra Keadilan* 12, no. 2 (2017): 179.

²⁸ Muladi dan Dwidja Priyatno, *Pertanggungjawaban Pidana Korporasi (Cetakan Ketiga Edisi Revisi)*, (Bandung: Kencana, 2012), 56.

by placing them under guardianship, as a form of implementation of the court's decision.²⁹

All of these provisions emphasize that environmental crimes are not merely administrative violations, but rather serious crimes that can damage ecosystems, threaten public health, and disrupt socio-economic balance.³⁰ With comprehensive criminal law provisions in the Environmental Management and Management Law, it is hoped that law enforcement against perpetrators of environmental pollution, both individuals and corporations, will have a deterrent effect and encourage environmentally responsible behavior. In Article 1 paragraph (32) of Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH), it is stated that the term "every person" includes both individuals and business entities, both legal entities and non-legal entities.³¹ This provision confirms that legal subjects in environmental crimes are not only limited to individuals, but also include corporations. This is reinforced by the provisions in Article 69 and Articles 98 to 115 of the PPLH Law which state that perpetrators of criminal acts can be individuals, groups, or legal entities. This means that business actors in the form of limited liability companies, cooperatives, CVs, firms, or other forms of bodies can be considered perpetrators of environmental crimes and fulfill the elements of crimes in environmental crimes.³²

Along with the development of modern criminal law, the recognition that legal entities or corporations can be subject to criminal sanctions has become increasingly stronger. In this context, criminal penalties in the form of fines can be imposed on corporations as entities, while imprisonment can be imposed on managers or leaders responsible for acts of environmental pollution or destruction. Although this concept has long been studied, the results of previous research remain relevant because they demonstrate the importance of strengthening the role of criminal sanctions in effectively establishing corporations as subjects of environmental criminal law.

²⁹ Arvin Asta Nugraha, I. Gusti Ayu Ketut Rachmi Handayani, and Fatma Ulfatun Najjicha, "Peran hukum lingkungan dalam mencegah kerusakan dan pencemaran lingkungan hidup," *Jurnal Hukum To-Ra: Hukum Untuk Mengatur Dan Melindungi Masyarakat* 7, no. 2 (2021): 292.

³⁰ Baren Sipayung, Indah Dwiprigitaningtias, Rahmat Joko Nugroho, and Bartolomeus Bernard, "Environmental law enforcement in Indonesia in terms of the concept of sustainable development," *Jurnal Hukum Dan HAM Wara Sains* 2, no. 03 (2023): 199.

³¹ Ferina Ardhi Cahyani, "Upaya Peningkatan Daya Dukung Lingkungan Hidup Melalui Instrumen Pencegahan Kerusakan Lingkungan Hidup Berdasarkan Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup," *Nurani Hukum* 2, no. 1 (2020): 57.

³² A. Sutrisno, "Politik hukum perlindungan dan pengelolaan lingkungan hidup," *Ius Quia Iustum Law Journal* 18, no. 3 (2011): 453.

Legally, a corporation is a legal entity consisting of a physical structure (“corpus”) and a will (“animus”) recognized by law as a legal subject possessing personality. As a legal creation, the existence and dissolution of a corporation are entirely determined by legal provisions. In global economic practice, corporations are often a key pillar of the economy. However, over time, many corporations ignore ethical principles and legal norms in pursuit of maximum profit, which then encourages them to engage in unfair competition practices, even leading to corporate crimes, including in the environmental sector.³³

In this regard, Article 116 paragraph (1) letter (a) of the Environmental Management and Management Law states that if an environmental crime is committed by, for, or on behalf of a business entity, then criminal charges and sanctions can be imposed on that business entity. Furthermore, Article 116 paragraph (2) states that a business entity is considered to have committed a crime if the act is committed by individuals in an employment relationship or other form of relationship acting within the scope of the business entity’s activities. Therefore, not every act by an individual working in a company automatically constitutes a corporate crime, unless the act is committed within the context of business activities.³⁴

Environmental crimes committed by corporations can have broad and complex impacts, ranging from damage to natural resources to disruption of the social and economic order of society.³⁵ One clear example is the toxic gas leak tragedy that occurred at the Unicorn Carbide India Limited factory in Bhopal, India, in 1984. This tragedy occurred due to negligence in safety systems and cost-saving efforts by the company, which resulted in a long-term disaster that lasted decades. Another example is the hot mudflow in Sidoarjo, East Java, which was allegedly caused by a technical failure in drilling by PT Lapindo Brantas. This incident caused significant losses, including thousands of people losing their homes, property, and paralyzing economic activity in the affected area.

³³ Hanafi, *Kejahatan Korporasi*, (Yogyakarta: Fakultas Hukum Universitas Islam Indonesia, 2010), 23.

³⁴ Dwientha Ayu Pratjna, Nyoman Serikat Putra Jaya, and Purwoto Purwoto, “Kebijakan Hukum Pidana dalam Upaya Penanggulangan Tindak Pidana Lingkungan Hidup di Indonesia,” *Diponegoro Law Journal* 8, no. 2 (2019): 1032.

³⁵ Sri Yuliana, Raja Agung Kesuma Arc, and Jonli Oswan, “Pelanggaran Hak Manusia Dalam Mempertahankan Lingkungan Hidup Menurut Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup,” *Justicia Sains: Jurnal Ilmu Hukum* 7, no. 1 (2022): 52.

The recognition of legal entities as subjects of criminal law is also in line with global dynamics in the economic and legal fields, marked by increasing internationalization and shifts in national legal systems through a mechanism known as legal transplantation. Therefore, acts that cause environmental pollution or damage, whether intentional (*opzet*) or negligence (*culpa*), have been categorized as criminal acts or offenses.

In this regard, Article 98 paragraph (1) of the Environmental Management and Management Law stipulates that acts of intentional environmental pollution are subject to criminal sanctions in the form of imprisonment and fines. This is the primary offense in the Environmental Management and Management Law, combining two types of criminal offenses. Meanwhile, Article 99 paragraph (1) regulates criminal acts resulting from negligence that result in exceeding water or air quality standards or environmental damage. For these violations, perpetrators can be subject to a minimum of one year and a maximum of three years' imprisonment and a fine in accordance with applicable regulations.

Thus, the placement of corporations as subjects of criminal offenses in environmental law not only reflects developments in legal thought but also represents an urgent need to address the complexity of environmental issues involving large-scale economic actors. This approach also emphasizes the importance of criminal liability as a means of controlling environmentally unfriendly business practices.

Environmental pollution and damage are direct consequences of human activities and industrialization. Actions that have the potential to endanger the sustainability of ecosystems and the environment as a whole are strictly regulated by Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH), which serves as the primary legal framework, along with various other related regulations.³⁶ Any act that negatively impacts the environment falls under the category of environmental crimes, as detailed in Articles 98 to 115 of the Law.

The criminal provisions in these articles outline actions categorized as environmental crimes, whether committed intentionally or through

³⁶ Jeane Neltje Saly, and Cherya Metriska, "Kebijakan pemerintah dalam pengendalian pencemaran udara di Indonesia berdasarkan undang-undang nomor 32 tahun 2009," *Jurnal Kewarganegaraan* 7, no. 2 (2023): 1646.

negligence.³⁷ For example, Article 102 regulates the management of Hazardous and Toxic Materials (B3) waste without official government permits. If B3 waste is managed without meeting legal requirements, it can be classified as an environmental crime, subject to criminal sanctions in the form of imprisonment and fines. It should be emphasized that B3 waste management is actually permitted, as long as it complies with applicable standards and laws.

The provisions of Articles 98 to 108 cover acts that directly impact environmental pollution and destruction, which can occur at varying intensities and are caused by a variety of factors. Therefore, any human action that significantly damages or pollutes the environment constitutes a violation of the law, as stipulated in the Environmental Management and Management Law (UU PPLH), and can be classified as a crime if the elements of the criminal provisions are met.

The UU PPLH, as the legal umbrella for environmental law in Indonesia, emphasizes that environmental crimes are serious crimes and must be strictly enforced. Environmental crimes are prohibitions or legal orders imposed on legal entities, which, if violated, will result in criminal sanctions.³⁸ These sanctions protect not only the environment in general, but also its essential elements such as land, water, air, flora and fauna, and humans as part of the ecosystem.

Furthermore, regulations regarding environmental crimes are not limited to the scope of the Environmental Management Law (PPLH). Many other laws and regulations also address environmental aspects, indicating that this issue is multidimensional and cross-sectoral. Thus, environmental protection is not merely ecological but also part of the broader national legal system.

Law Number 32 of 2009 introduced several reforms in the enforcement of environmental criminal law. These include the introduction of minimum and maximum penalties, expanded evidence, provisions for criminal penalties for violations of environmental quality standards, and criminal provisions for

³⁷ Thoriq Muhammad, Siti Winda Astuti, Maulana Arif Al Djazairi, and Nurlaili Rahmawati, "Peran pemerintah dalam menangani pencemaran udara berdasarkan undang-undang lingkungan hidup," *Journal of Islamic and Law Studies* 7, no. 2 (2023): 158. See too, Muhamad Sadi Is, "Kepastian hukum terhadap perlindungan dan pengelolaan lingkungan hidup di Indonesia," *Jurnal Yudisial* 13, no. 3 (2020): 320.

³⁸ Cut Era Fitriyeni, "Penyelesaian Sengketa Lingkungan Hidup Melalui Pengadilan," *Kanun Jurnal Ilmu Hukum* 12, no. 3 (2010): 568.

corporations as legal subjects.³⁹ Furthermore, environmental criminal law adopts the principle of *ultimum remedium*, which states that criminal sanctions are only imposed as a last resort if administrative sanctions are deemed ineffective or if violations are repeated. This principle is applied only to certain formal crimes, such as violations of wastewater quality standards, emissions, and disturbances, as stipulated in Article 100 of the PPLH Law.

Article 100 paragraph (1) of the Environmental Management and Management Law states that anyone who violates this quality standards can be subject to a maximum prison sentence of three years and a maximum fine of three billion rupiah. However, paragraph (2) states that this criminal provision only applies if the previously imposed administrative sanctions have not been complied with, or if the violation is repeated.

On the other hand, other criminal articles in the Environmental Management and Management Law refer to the *premium remedium* principle, which states that criminal sanctions can be applied immediately without waiting for an administrative violation, particularly for material crimes. For example, dumping hazardous waste such as fly ash and bottom ash without an official permit can be categorized as a serious environmental crime, given its serious impact on public health and ecosystem balance.

This criminal act must be punished, both for the individual perpetrator and the business entity responsible. Criminal law or *strafrecht* in Dutch legal terms is a set of legal rules that determine which acts constitute crimes and the types of penalties that can be imposed on perpetrators. Therefore, the use of criminal law in the context of environmental protection is not solely aimed at punishment, but also to provide a deterrent effect and ensure environmental sustainability in the future.⁴⁰

Thus, in general, law enforcement can be defined as the act of applying legal instruments with the aim of imposing legal sanctions to ensure compliance with established provisions. The ultimate goal of environmental law enforcement is compliance with applicable environmental laws. Compliance refers to the achievement and maintenance of environmental legal provisions, both generally applicable and individually applicable. Therefore, environmental law enforcement encompasses compliance measures, namely

³⁹ Risno Mina, "Desentralisasi perlindungan dan pengelolaan lingkungan hidup sebagai alternatif menyelesaikan permasalahan lingkungan hidup," *Arena Hukum* 9, no. 2 (2016): 154.

⁴⁰ Syamsul Arifin, *Aspek hukum perlindungan dan pengelolaan lingkungan hidup*, (Medan: Medan Area University Press, 2018), 34.

administrative actions (administrative sanctions) and judicial actions, including civil lawsuits (compensation and environmental restoration costs) and criminal prosecutions (criminal sanctions).

This aligns with the idea that the primary effort that must be undertaken is compliance, compliance with regulations, or preventive enforcement with preventive supervision. These efforts align with the concept of partnership in environmental problem-solving, which leads to collaborative problem-solving efforts between the government, businesses, and communities represented by non-governmental organizations (NGOs).

This demonstrates the close link between these preventive efforts and the institutional aspects of environmental law enforcement. This is because a lack of knowledge about what the authorities should do or a lack of capacity to take preventative measures can result in environmental pollution or destruction. If this occurs, it can lead to the use of civil and criminal law for further law enforcement.⁴¹

The criminal law provisions in Law Number 32 of 2009 require the application of the principle of Subsidiarity as stated in the General Explanation of this Law that “as a support for administrative law, the application of criminal law provisions still takes into account subsidiarity, namely that criminal law should be utilized if sanctions in other legal fields such as administrative sanctions and civil sanctions, and alternative resolution of environmental disputes are ineffective and/or the level of the perpetrator’s fault is relatively serious and/or the consequences of his actions cause public unrest.”⁴² Thus, in principle, the status of the criminal function in environmental criminal law is no more than a last-tier (alternative) means where various other environmental protection devices and means are given priority functionally, while if these means are felt to have not achieved effective results, then criminal law is then used.⁴³

Criminal law enforcement in the environmental sector is an integral process carried out in accordance with the provisions of substantive criminal law and criminal procedural law. This process includes three main stages that complement each other within the framework of environmental crime prevention. The first stage is preemptive, namely a series of early actions

⁴¹ N.H.T Siahaan, *Hukum Lingkungan*, (Jakarta: Pancuran Alam, 2009), 355. See too,

⁴² Absori Absori, “Advokasi Masyarakat Dalam Penyelesaian Sengketa Lingkungan Hidup Di Jaten, Kabupaten Karanganyar,” *Warta LPM* 10, no. 1 (2017): 254.

⁴³ Penjelasan UU No. 32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

aimed at identifying and mapping criminogenic factors, namely conditions that encourage environmental damage or pollution. At this stage, efforts are more focused on observing potential environmental violations before damage occurs. The next stage is preventive, namely the implementation of concrete steps aimed at preventing violations of environmental regulations. In practice, this stage is realized through continuous monitoring activities carried out in sectors that have a significant impact on the environment, such as industry and forestry. For example, forestry officials conduct patrols to prevent illegal logging, and supervision of industry to ensure that waste is managed in accordance with regulations.

The third stage is repressive, which is carried out once a violation has already occurred. At this stage, law enforcement officials such as the police, prosecutors, and civil servant investigators (*Penyidik Pegawai Negeri Sipil/PPNS*) act using criminal instruments to prosecute perpetrators in accordance with applicable legal procedures. This repressive approach is crucial to provide a deterrent effect and prevent the recurrence of similar violations.

Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH) divides environmental crimes into several categories: material crimes, formal crimes, and corporate crimes. This division directly impacts the application of sanctions and legal procedures. Articles in the Law PPLH provide clear definitions of the types of crimes and their legal consequences. For example, violations of environmental quality standards can be classified as formal crimes, subject to criminal sanctions even if they have not yet caused direct impacts.

This classification of crimes also influences the investigation process. Police investigators or Civil Servant Inspectors (PPNS) will first assess whether a violation falls into the category of a material offense, which requires proof of actual consequences, or a formal offense, which is sufficient if the formal elements of the offense are met. This allows for appropriate resolution and law enforcement strategies to be formulated, depending on the type of crime.

In practice, the primary source of environmental pollution often stems from large-scale industrial activities that fail to comply with regulations. A concrete example is PT. Trisan Abadi, a food industry company found to have managed hazardous and toxic waste without an official permit. This action clearly violates Article 59 of the Environmental Management Law (UU

PPLH), which requires every business actor to obtain a permit from an authorized agency such as a minister, governor, or regent/mayor before managing hazardous waste. The PT. Trisan Abadi case was subsequently prosecuted and decided by the Bandung District Court in Decision Number 535/Pen.Pid/2021/PN. Bdg dated May 19, 2021.

Actions that intentionally cause environmental pollution or damage are not only social deviations but also fall under the category of criminal offenses. Therefore, perpetrators found guilty should be subject to criminal sanctions as a form of legal accountability. Environmental damage is essentially an act that causes significant changes to the physical or biological elements of the environment, resulting in the environment losing its basic function of supporting sustainable development.

The imposition of criminal sanctions in this context has two main objectives. First, it serves as a social education effort to instill moral awareness in the community that behavior that harms the environment is an intolerable offense. Second, it serves as a deterrent against future destructive behavior, both by individuals and corporations, to prevent the recurrence of similar violations. Within this framework, criminal law enforcement functions not only as a repressive tool but also as a normative instrument to foster legal compliance in sustainable environmental protection.⁴⁴

The application of criminal sanctions in environmental cases requires a broader interpretation, not only for the direct perpetrator, but also for parties who are also responsible for the consequences of the crime.⁴⁵ Perpetrators in the context of environmental crimes can be individuals or business entities. In the case of individuals, laws and regulations, specifically Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH), stipulate that “every person” includes both individuals and business entities, whether incorporated or not.

Meanwhile, in the case of corporate criminal liability, there are important principles that must be considered. Corporations, in this context, include entities with or without legal entities, such as organizations. Corporations can also be private or public. If an environmental crime is committed within an organizational context, liability can be imposed on both the corporation and the individuals involved, such as managers, agents, or employees, either

⁴⁴ Muladi dan Barda Nawawi, *Teori-teori dan Kebijakan Pidana* (Bandung: Alumni, 2014), 12.

⁴⁵ Siti Sundari Rangkuti, *Sanksi Pidana dalam Hukum Lingkungan*, (Surabaya: Universitas Airlangga, 2014), 42.

individually or together (the principle of bipunishment). Criminal penalties are possible even if the individuals involved have not been identified or have not yet been legally processed.

Furthermore, all types of criminal sanctions can be imposed on corporations, except the death penalty and imprisonment. In international contexts, such as in the United States, the concept of a “corporate death penalty” or “corporate imprisonment” has even been recognized, which means prohibiting a corporation from conducting certain businesses or restricting its operations as a form of sanction. It is also important to note that criminalizing a corporation does not eliminate individual criminal liability. Criminal penalties against a business entity must take into account the decision-making authority of its management and the role of those decisions in the commission of the crime.

According to the 2009 Environmental Management and Management Law, corporate criminal liability is explicitly regulated in Articles 116 through 119. Article 116 states that if an environmental crime is committed by, for, or on behalf of a business entity, criminal sanctions may be imposed on the business entity and/or the person giving the order or leading the activity. If the crime is committed by someone acting on behalf of the business entity within an employment relationship, criminal sanctions shall be imposed on the person giving the order or the leader, whether the perpetrator is an individual or a group of individuals.

Furthermore, Article 117 stipulates that the criminal penalty for the leader or the person giving the order is increased by one-third of the applicable criminal provisions. Article 118 stipulates that the business entity as the perpetrator may be subject to criminal sanctions through a representative of the management authorized to represent the company in and out of court. Meanwhile, Article 119 emphasizes that in addition to the principal criminal penalties, the business entity may be subject to additional penalties or administrative measures such as confiscation of profits, business closure, obligation to repair damage, order to implement previously neglected obligations, and placement of the company under amnesty for a maximum of three years.

Thus, these provisions demonstrate that the Indonesian legal system provides a strong basis for comprehensively prosecuting environmental violations, both against individuals and corporations, in order to ensure maximum

environmental protection. The imposition of additional penalties on business entities, as referred to in Article 119, is intended to deter perpetrators of environmental pollution and/or destruction. These additional penalties cannot be imposed independently, but must accompany the imposition of the principal penalty.

In Indonesia's environmental criminal law system, there is a provision that judges cannot impose additional penalties without a principal penalty. This indicates that additional penalties are secondary, not independent, and can only be imposed if the perpetrator is first proven to have violated the principal penalty. This provision is also relevant in the context of legal accountability for environmental crimes resulting from non-compliant electronic waste management. Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH) details the forms and types of criminal sanctions that can be imposed on perpetrators, whether individuals or corporations.

Environmental crimes in this context can be divided into two main categories: material and formal. Material crimes emphasize the consequences of the perpetrator's actions. In this case, if the perpetrator intentionally pollutes or damages the environment as stipulated in Article 98 paragraph (1), they can be punished with a minimum of three years' imprisonment and a maximum of ten years' imprisonment, as well as a minimum fine of three billion rupiah and a maximum of ten billion rupiah. If the act results in injury or endangers human health, as stipulated in paragraph (2), the prison sentence increases to four to twelve years and a fine of four to twelve billion rupiah. Furthermore, if the act results in serious injury or death, as stipulated in paragraph (3), the penalty is five to fifteen years in prison and a fine of five to fifteen billion rupiah.

In addition to intent, negligence is also an important element in material crimes. Article 99 paragraph (1) states that if the perpetrator negligently causes environmental pollution, they can be punished with imprisonment of between one and three years and a fine of one to three billion rupiah. If the result of the negligence results in injury or endangers human health, the penalty stipulated in paragraph (2) increases to two to six years in prison and a fine of two to six billion rupiah. Meanwhile, if the negligence results in serious injury or death, as stipulated in paragraph (3), the perpetrator can be sentenced to imprisonment of between three and six years and a fine of three to nine billion rupiah.

Formal crimes, on the other hand, emphasize procedural violations without the need to wait for consequences to arise. For example, Article 100 paragraph (3) stipulates that anyone who intentionally violates certain provisions in environmental management can be subject to a maximum prison sentence of three years and a fine of up to three billion rupiah. Similarly, Article 102 stipulates that anyone who manages hazardous and toxic waste (B3) without a permit can be subject to a prison sentence of one to three years and a fine of between one and three billion rupiah. Persons who produce B3 waste and fail to manage it according to the procedures stipulated in Article 103 are also subject to the same penalties.

Dumping or carelessly disposing of waste into the environment, as stipulated in Article 104, is also subject to criminal sanctions, including a maximum prison sentence of three years and a fine of up to three billion rupiah. Heavier sanctions apply if someone imports B3 waste into Indonesian territory without a permit, as stipulated in Article 106, which can result in a prison sentence of between five and fifteen years and a fine of between five and fifteen billion rupiah. Similar provisions are contained in Article 107 for persons who import B3 waste expressly prohibited by law, with the same penalties and fines.

Thus, the criminal provisions in the Environmental Management and Management Law (PPLH) have been comprehensively designed to provide a deterrent effect on perpetrators of environmental crimes, including those involved in the illegal management of e-waste. The provisions, which distinguish between material and formal offenses, also reflect a holistic legal approach, both in terms of the substance of the consequences and the administrative aspects of environmental management. This approach is crucial for maintaining ecosystem balance and guaranteeing the public's right to a healthy and sustainable environment.

The sanctions (threats) of imprisonment and fines are cumulative, not alternative. Therefore, both imprisonment and fines are applied, not either one or the other. Furthermore, according to Article 117 of the 2009 PPLH Law, the criminal threat to those who order or lead criminal acts, as referred to in Article 116 paragraph (1) letter b, is increased by one-third.⁴⁶

⁴⁶ Akib Muhammad, *Hukum lingkungan perspektif Global dan Nasional*, (Jakarta: PT Raja Grafindo Persada, 2014), 176.

Based on the provisions of Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH), further clarified through Government Regulation Number 101 of 2014 concerning the Management of Hazardous and Toxic Waste (B3), every business entity or corporation that produces B3 waste is required to have an officially licensed Temporary Storage Facility (*Tempat Penyimpanan Sementara/TPS*). This facility is a crucial part of the waste management system, particularly for solid waste such as bottom ash and fly ash, given that the process of transporting or utilizing it by third parties requires a certain amount of time and volume to be carried out efficiently and safely.

However, PT. TA, as a producer of B3 waste, failed to fulfill this obligation. The company was found not to have followed waste management procedures as stipulated in Government Regulation Number 101 of 2014, thus giving rise to legal issues. For this violation, PT. TA was subject to sanctions in the form of a criminal fine and the threat of asset confiscation if the fine is not paid within one month of the final and binding decision. In addition, the company was also subject to additional penalties, requiring it to clean up the bottom ash solid waste from the company's premises and hand it over to a third party with an official permit for B3 waste management.

The verdict in this case was handed down by the Bandung Special Class A District Court in case number 535/Pen.Pid/2021/PN. Bdg on May 19, 2021. In the verdict, W., as a representative of PT. TA, was found guilty of his company's unauthorized waste management. However, the law enforcement process in this case is deemed not to fully reflect the implementation of the provisions stipulated in the Environmental Management and Management Law, particularly regarding the deterrent effect and the integration of legal instruments that should be optimally applied to cases of environmental violations by corporations.

3. Closing

Conclusion, based on the discussion that has been presented previously, it can be concluded that the implementation of Article 100 paragraph (1) and (2) of Law Number 32 of 2009 concerning Environmental Protection and Management in the case of Citarum River pollution by PT. Trisan Abadi has not been fully effective. Although administrative sanctions have been imposed by the relevant agencies, violations continue to occur repeatedly, which should be the basis for the

implementation of criminal sanctions as regulated in the article. This condition reflects the weak implementation of the principle of *ultimum remedium*, namely that criminal law is used as a last resort if administrative enforcement is unsuccessful. However, in practice, criminal law enforcement against environmental polluting corporations often faces various obstacles, both in terms of inter-agency coordination, weak supervision, and limited courage of officials in firmly ensnaring corporate perpetrators. Therefore, it is necessary to strengthen the environmental law enforcement system that does not only rely on administrative aspects, but also consistently enforces criminal sanctions as a form of responsibility and deterrent effect, especially in environmental crimes that have a major impact such as Citarum River pollution.

As a direct answer to the research questions raised in the introduction, it can be concluded that legal regulations regarding pollution prevention and environmental safety enforcement have a strong foundation through Law Number 32 of 2009, including mechanisms for government and business actors' responsibilities, as well as provisions for administrative and criminal sanctions. However, the alignment between legal norms and their implementation practices has not been achieved, as seen in the case of PT. Trisan Abadi, which continues to violate the law despite being subject to administrative sanctions. Forms of legal responsibility, both administrative and criminal, are not fully implemented, so that the effectiveness of environmental protection is not realized. Implementation obstacles, such as weak coordination, supervision, and the indecisiveness of law enforcement officials, reinforce the need to strengthen environmental law enforcement mechanisms to ensure the sustainability of the ecosystem and the fulfillment of regulatory objectives as mandated by the law.

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