

Legal Perspective on Compensation From The Impact of Environmental Pollution Through Industrial Activities

Cholilah Hanum¹ | Rizkan Zulyadi¹ | Wenggedes Frensh¹

1. Faculty of Law, Postgraduate University of Medan Region

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Abstract

This study examines the legal mechanism of compensation for environmental pollution caused by industrial activities, focusing on the analysis of the provisions in Law No. 32 of 2009 concerning Environmental Protection and Management. The main issues discussed include: the legal consequences of environmental pollution, the legal accountability process by industry players, and the role of local governments, especially the Mandailing Natal Regency Environmental Office, in prevention efforts. The research method used is normative juridical with a conceptual and legislative approach. The results of the study show that environmental pollution results in legal sanctions in the form of administrative, criminal, and civil sanctions. In addition, the principle of absolute responsibility places industry players as parties who are obliged to compensate for losses caused, both material and immaterial. The study also highlights that the legal remedies available to pollution victims are often limited by limited access to justice, inadequate legal awareness, and bureaucratic inefficiencies. In addition, weak enforcement by environmental authorities often undermines the deterrent effect of existing regulations. Therefore, this study recommends strengthening the monitoring and law enforcement system as a preventive and repressive measure in overcoming environmental pollution. Increasing public participation, improving environmental dispute resolution mechanisms, and increasing the capacity of local government agencies is essential to ensure environmental justice and the realization of compensation rights for affected communities.

Keywords: Environmental compensation; industrial pollution; legal liability.

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Introduction

Industrial growth in Indonesia continues to increase, but unfortunately it is accompanied by a high potential for environmental pollution, especially liquid, air, and soil waste from plantation industrial activities, smelters, and B3 waste management. This pollution has a direct impact on people's right to a healthy environment and livelihood. Low-class communities that depend on rivers or lakes as a source of water and food are the most vulnerable groups, but access to redress and legal justice is still very limited. (Azmia, 2024) Industrial development in Indonesia has become a major pillar in encouraging national economic growth. However, behind its contribution to the Gross Domestic Product (GDP), industrial activities also contribute to serious problems in the form of environmental pollution. Industrial liquid waste polluting rivers, toxic gas emissions polluting the air, and hazardous waste disposal that pollute the soil are just a small part of the increasingly worrying environmental impact. One of the main problems that arises is the inadequacy of legal mechanisms to ensure fair and proportionate compensation for the communities affected by the pollution. This raises fundamental questions about the effectiveness of environmental law in ensuring ecological and social justice. (L T Wongkar & Correspondence, 2024)

Law Number 32 of 2009 concerning Environmental Protection and Management initiates the

Correspondence regarding this article should be addressed to:
Cholilah Hanum, Postgraduate of Medan Area University
Email address: cholilahhanum@gmail.com



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principle *pollute country* and *Strict Liability* as the basis for the accountability of industry players. However, the practice often encounters obstacles, such as inconsistent understanding of law enforcement officials in the regions, delays in the execution of decisions, and weakening of the principle of strict liability through regulatory changes such as in PERMA No. 1 of 2023.(Moh Fauzan Adzim, Sabrina Berliana Putri, Damar Panji Yudhanto, Birvy, 2025). Although Law Number 32 of 2009 concerning Environmental Protection and Management has regulated the principle of *Strict Liability* in Article 88, its implementation still faces major challenges. The application of this absolute responsibility is supposed to relieve victims of the obligation to prove the elements of the fault of industry players, but in practice, many courts still require proof of losses that are difficult to access for the poor, who are directly affected. This inequality is exacerbated by the weak capacity of regional environmental institutions and the lack of integration between administrative, civil, and criminal legal instruments in taking comprehensive action against polluters.(Maulana & Annisa, 2024)

Environmental protection is an integral part of fulfilling human rights, especially the right to a healthy and decent environment for life. Unfortunately, the growth of the industrial sector in various regions of Indonesia, especially in coastal areas, inland areas, and around watersheds, often ignores aspects of sustainability and environmental protection. As a result, there has been an increase in the escalation of environmental pollution cases that cause massive ecological and social losses.(Nafila Putri et al., 2024) Regulations regarding compensation for pollution victims are still minimal in technical instructions. Although there is normative right to compensation in a civil context, there is no clear standard for the method of calculating losses, whether material (such as damage to crops, livestock, or clean water) or immaterial (such as loss of livelihood or long-term health problems). This has led to uneven practices between regions, even opening a gap for the criminalization of people who demand environmental justice.(Rahmawati et al., 2025)

Extractive industry can be defined as a process that involves a variety of activities that lead to the extraction of raw materials from the earth (such as oil, metals, minerals and aggregates), processing and utilization by consumers. In this case, of course, this industrial process is also moving and has a close relationship with infrastructure development as a support for the processing of natural materials to be processed into finished materials. (Armansyah, 2021). Pollution due to industrial activities and other consequences caused in the form of direct or indirect industrial waste, will endanger human life, both material wealth in the form of property damage, immaterial losses in the form of disturbances in the atmosphere of comfort of life, the occurrence of diseases, respiratory disorders and even loss of life (death). (Akhmaddhian & Hanipah, 2021). Environmental dispute resolution mechanisms often prioritize a non-litigation process that is compromising. This process is often used by business actors to avoid liability that must actually be borne based on the principle *Strict Liability*. In fact, in some cases, there has been criminalization of communities or environmental activists who fight for the right to compensation and a healthy environment. This phenomenon not only injures the principle of substantive justice, but also creates a power imbalance between industrialists and citizens.(Prasetya et al., 2024)

The environment is the unity of space, meaning that the environment is a container that includes terrestrial space, marine space and air space including space on earth. So space in the scope of the environment is all the space that belongs to the scope of the Earth's atmosphere. The Earth's atmosphere itself exists up to about 500 km from the Earth's surface with a variety of different layers. So if the environment is likened to a jar, then the outer layer of the jar or the topmost atmosphere of the earth is the boundary of space for the environment.(Luthfillah Fazari, 2020). In Law No. 32 of 2009 concerning the Environment, the environment concerns all objects, forces, circumstances, and living beings, including humans. The largest object in the environment is the earth, on the earth itself there are various other things such as water, be it in the form of rivers, lakes or oceans, rocks, mountains and others.(Yuliana, 2022). To ensure the protection of human rights from the consequences of environmental pollution, there needs to be a legal umbrella as a basis to provide certainty to people affected by environmental pollution cases. In line with that, the author also in this article only discusses legal aspects that protect the interests of individuals. The legal aspects discussed in this paper concern legal aspects that provide protection for people who experience the impact of pollution due to production from industrial activities.(Cristiana et al., 2023)

According to Munadjat Danusaputro, the environment or environment includes all objects, powers, and conditions around humans, including human activities themselves, that exist in the space where humans are and interact. This environment plays a very important role in influencing the survival and well-being of humans and other living things. Meanwhile, according to Otto Soemarwoto, the environment is defined as a space inhabited by living beings and the living and non-living objects that exist in it. By paying attention to these various definitions, it can be concluded that the environment has a very broad meaning, which includes all the elements that exist around living things.(Fawwaz, 2024). The industrial activity in question is an economic activity that processes raw materials, raw materials, semi-finished materials and finished goods into goods with a higher use value. The author believes that every processing industry activity must produce waste, waste produced by industrial activities is very dangerous in the form of toxic substances that if not controlled technically with the existence of an EIA (Environmental Impact Analysis) can result in the continuation of the life process of living beings, especially humans.(Rangkuti et al., 2023). Happy with this, of course, the author also sees that from this industrial activity must produce waste that if not properly regulated will have an impact on environmental pollution. Talking about environmental pollution, of course, those who experience the effects or impacts of this pollution are humans, so as an issue, the author certainly looks at whether there is a legal aspect of compensation for people affected by environmental pollution.(Nurul Nur Solikah, 2020)

In this paper, the benefits of research are divided into two, namely theoretical benefits and practical benefits, namely: 1) The theoretical benefits of this research are to contribute to the development of legal science. Theoretically, this research is expected to provide benefits as an academic reference in the field of law. 2) Practical benefits are expected to be able to provide benefits for entrepreneurs and practical for legal practitioners such as the Police, Prosecutors, Judges, and Lawyers in providing legal aspects of compensation for environmental pollution due to industrial activities, providing recommendations for lawmakers and policies in forming laws and regulations related to compensation law.(Delyarahmi & Murniawati, 2023). This research is limited to a normative juridical analysis of the compensation mechanism for environmental pollution caused by industrial activities based on Law Number 32 of 2009 concerning Environmental Protection and Management. The focus of the discussion only covers corporate civil liability through the principle of *strict liability* and does not discuss in depth the criminal aspects of the environment or the impact of public health. The case study used is limited to the Mandailing Natal Regency area

Method

The research with the title "Legal Perspective of Compensation from the Impact of Environmental Pollution Through Industrial Activities" was carried out with normative legal research. Normative law research is a type of research that focuses on the rules or rules in the applicable positive law. Normative juridical research is carried out using various formal legal principles, such as laws, regulations that contain theoretical concepts and are then related to the problems to be studied in a research. This research aims to search for the truth systematically, methodologically, and consistently. Through this research, the analysis and construction of the data that has been collected is carried out. This research was conducted in Mandailing Natal Regency located in North Sumatra Province, Indonesia. This district has a fairly large area and is known to have abundant natural potential, such as agriculture, fisheries, and other natural resources. Along with the development of the industrial sector in this area, the problem of environmental pollution has become an increasingly important issue. One of the sectors that plays a major role in industrial activities is the mining industry, processing agricultural products, and other sectors that have the potential to have an impact on the environment.(Rasyid Zamzami Hasibuan, 2022). The data collection process in this study was made based on a series of collection activities from materials that can help achieve research, especially by using literature studies. In this case, conduct research on documents, namely primary legal material, then conduct research on secondary legal material. The purpose and benefit of literature studies is to show problem solvers in research. If it is known what has been done, it will be better prepared for more in-depth and complete information(Gea Aprilyada et al., 2023). Data analysis is carried out using qualitative descriptive analysis techniques, where researchers study, compile, and interpret the data that has been collected to provide a more comprehensive understanding of the problem being researched (Haki et al., 2024). In this case, the

analysis will include a discussion of the legal consequences of environmental pollution in accordance with Law No. 32 of 2009, the accountability process in providing compensation for environmental pollution, as well as the efforts made by the Mandailing Natal Regency Environment Agency to prevent pollution.

Results and discussion

Consequences of the Environmental Pollution Law Based on Laws and Regulations Number 32 of 2009 concerning Environmental Protection and Management

The implementation of Law Number 32 of 2009 concerning Environmental Protection and Management has shown progressive steps, especially in the supervision and enforcement of environmental violations. The main obstacle faced is the limitation of human resources and facilities such as technological devices needed for more effective supervision. The high operational costs for laboratory testing activities are one of the main obstacles.(Sanggam Alghozali, M.Malik Muda, Aditya, Mulya Bintang, Kiki Amalia, 2025). Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH) is the main legal basis in regulating environmental pollution actions in Indonesia. This law was born as a response to the increasingly massive environmental damage caused by human activities, especially in the industrial sector and unsustainable development. One of the important aspects of the UUPPLH is firmness in determining legal consequences for parties who pollute or destroy the environment, either directly or indirectly.(Margareta & Boediningsih, 2023)

The community hopes that the government will be more decisive in enforcing Law Number 32 of 2009 concerning Environmental Protection and Management, especially in imposing sanctions on environmental polluters. They also hope that there will be a program of reforestation and assistance in soil conservation techniques to prevent similar disasters in the future. The importance of synergy between the community, the government and other related parties in implementing environmental protection in a sustainable manner so that the risk of disasters such as landslides can be minimized. (October, 2023). Environmental pollution is one of the important issues regulated in Law Number 32 of 2009 concerning Environmental Protection and Management (PPLH Law). Environmental pollution is understood as an action that causes a decrease in the quality of the environment so that it cannot function optimally. The legal consequences of environmental pollution based on the PPLH Law include three main forms, namely administrative sanctions, criminal sanctions, and civil damages.(Dahlia Kusuma Dewi, 2018)

The legal consequences regulated in the UUPPLH include three main forms, namely administrative sanctions, criminal sanctions, and additional sanctions against business entities. Administrative sanctions are given by authorized officials, such as Ministers, Governors, or Regents/ Mayors, to business actors who are proven to have violated their environmental permits. This form of sanctions includes written reprimands, government coercion (*administrative coercion*), freezing of permits, and revocation of business licenses. This is expressly regulated in Article 76 of Law No. 32 of 2009, and strengthened by technical provisions through the Regulation of the Minister of Environment No. 02 of 2013 concerning Guidelines for the Implementation of Administrative Sanctions in the Field of Environmental Protection and Management.(Rachmat, 2023). In addition to administrative sanctions, the UUPPLH also provides space for the application of criminal sanctions. Criminal sanctions in this law are divided into two broad categories, namely criminal acts due to intentionality and due to negligence. In Article 98, polluters who deliberately release substances, energy, or other components into the environment exceed environmental quality standards can be sentenced to imprisonment for a minimum of 3 (three) years and a maximum of 10 (ten) years, as well as a fine of at least IDR 3,000,000,000 (three billion rupiah) and a maximum of IDR 10,000,000,000 (ten billion rupiah). If the act results in serious injury or death, the threat of punishment becomes more severe, namely imprisonment for a maximum of 12 years and a fine of up to IDR 12 billion.(Jiwanti, 2023)

The legal consequences of environmental pollution in Mandailing Natal Regency based on the UUPPLH include administrative, civil, and criminal sanctions. Even though it has been implemented, it is still faced with various challenges. For the sustainability of environmental management, better synergy between the government, the community, and business actors is needed, as well as increasing the

capacity of supervision and law enforcement in the regions. With this step, Mandailing Natal can protect its natural resources for future generations.(Warong et al., 2025)

Accountability in Providing Compensation for Environmental Pollution in Accordance with Law Number 32 of 2009

Pollution has had a serious impact both economically and healthily on society. The slow process of applying for compensation and lack of information are the main obstacles. It is hoped that the results of this interview can be the attention of related parties to immediately take concrete steps in solving the pollution problem and providing justice for the affected communities. One of the main principles used in environmental law in Indonesia is the principle of absolute responsibility or strict responsibility as stipulated in Article 88 of the UUPPLH. This principle stipulates that business actors who carry out activities with high risks to the environment are responsible for all losses incurred without the need to prove elements of error.(Alhayyan & Leviza, 2020). Accountability in providing compensation for environmental pollution is a crucial aspect that is clearly regulated in Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH). Article 70 of the UUPPLH explicitly stipulates the obligation of polluters to provide compensation as well as carry out environmental rehabilitation against the impacts caused. This article represents a manifestation of the principle *pollute country*, where the perpetrator is obliged not only to pay compensation but also to improve ecological conditions.(Bhamatika et al., 2025)

The implementation of compensation accountability in cases of environmental pollution does not always go smoothly. One of the main challenges is the difficulty of proving a causal relationship between the perpetrator's activities and the losses suffered by the victim. Although the principle of absolute liability does not require evidence of an element of wrongdoing, victims often find it difficult to show technical evidence of pollution impacts directly. The limited capacity of local governments in supervision and law enforcement is also an obstacle. Many people still do not understand their right to file a lawsuit for damages, so environmental violations are often not followed up with adequate legal remedies.(Ainur Ridlo & Arsali, 2024). This accountability practice provides a legal basis for victims of pollution, both individuals, local communities, and local governments to demand compensation for material and immaterial losses, without having to prove an element of fault (*Strict Liability*). This principle of no-fault liability makes it easier for victims to obtain justice through a civil or administrative lawsuit mechanism against business actors.(Pidada & Wijaya, 2025)

In court practice, compensation claims are often filed by the government as a representative of the community. For example, the declaration of compensation costs that have been paid is included as non-tax state income (PNBP), with the provisions of technical regulations such as the Minister of Environment Regulation No. 7 of 2014 which regulates the procedures and procedures for calculating compensation. However, the study revealed significant obstacles in the implementation of court decisions related to compensation, such as slow execution, limited transparency of calculations, and sub-optimal inter-agency coordination.(Teguh & Rumadan, 2023). In Mandailing Natal Regency, economic activities such as mining, oil palm plantations, and other industries have great potential to cause environmental pollution. In the event of pollution, both individuals, companies, and government agencies are responsible for providing compensation as stipulated in Article 87. This compensation includes losses suffered by the victim, both material and immaterial, as well as the cost of environmental restoration to return to its original condition.

The UUPPLH has great potential to become the main instrument in ensuring that polluters are responsible for the losses caused. The principle of absolute responsibility provides legal convenience for victims to get justice while encouraging business actors to be more responsible for the impact of their activities. This is in line with the main goal of the UUPPLH, which is to protect the environment for the welfare of the community and the preservation of the ecosystem.(Husna & Hakim, 2024). The government is expected to increase supervision of business activities, establish partnerships with the private sector, and involve the community in the process of environmental supervision and restoration. To strengthen the implementation of this accountability, local governments need to increase the capacity of environmental monitoring agencies, strengthen synergy between parties, and provide education to the public regarding their rights to a healthy and clean environment. Thus, the application *of the principle of*

Efforts made by the Mandailing Natal Regency Environmental Agency to prevent environmental pollution in the community

The Environment Agency (DLH) of Mandailing Natal Regency plays a central role in efforts to prevent environmental pollution in this area through various programs and policies that aim to reduce adverse impacts on environmental quality. This effort involves various aspects, ranging from education to the public to supervision of industrial and business activities that can damage the environment. DLH Mandailing Natal Regency has a strategic role in controlling and preventing environmental pollution in the area. One of the efforts made by DLH is to socialize and educate the public about the importance of maintaining cleanliness and environmental sustainability. DLH conducts periodic monitoring to ensure that each company complies with the stipulated waste management provisions, be it liquid, solid, or gaseous waste.(Widiani Agustien Wiguna Mukti, Suci Suroya, Rizky Wahyudin, Rihan Fathurahman Mubarok, 2024). The Mandailing Natal Regency Environmental Agency has implemented various programs and strategies as a tangible manifestation of efforts to prevent environmental pollution at the community level. One of them is the waste processing program into Solid Jumpatan Fuel (BBJP) which is carried out in collaboration with PLN. Through this initiative, DLH not only reduces the volume of household waste, but also creates environmentally friendly energy alternatives and increases public awareness of productive and sustainable waste management(Pulungan, 2025)

DLH collaborates with relevant agencies such as the Regional Environmental Management Agency (BPLHD) and the Police, to conduct inspections and law enforcement against environmental violations. If any company violates environmental regulations, DLH will provide strict sanctions in the form of fines or even temporary suspension of operations, as a preventive measure so that the impact of pollution does not spread.(Risyan Putri Maharani et al., 2024). In addition to supervision and law enforcement efforts, DLH Mandailing Natal Regency also collaborates with various parties, be it the private sector, NGOs, and educational institutions. This collaboration aims to increase the effectiveness of environmental management and strengthen community capacity in facing pollution challenges. For example, DLH collaborates with educational institutions to include materials about the environment in the educational curriculum, so that from an early age the young generation has been taught the importance of maintaining cleanliness and preserving nature. DLH collaborates with NGOs engaged in nature conservation to conduct campaigns to reduce plastic waste and protect biodiversity.(Ade, 2024)

In addition, DLH actively runs the Climate Village Program (ProKlim) through socialization and coaching to the community at the village level. The program aims to build public awareness of climate change adaptation and mitigation and encourage active community participation in protecting the environment through water conservation, waste management, and greening practices.² Plastic waste management education and environmental training are also routinely carried out to improve community skills in sorting, managing, and recycling waste to maintain environmental cleanliness and prevent potential pollution. With collaboration between the government, the community, and other sectors, environmental management efforts in Mandailing Natal Regency can be more effective and cover a wider range of aspects. However, despite various efforts that have been made, there are still several challenges in preventing environmental pollution in Mandailing Natal Regency. One of them is the limitation of human resources and the budget owned by DLH which hinders supervision and law enforcement in the field. The culture of the community that is not fully aware of the importance of waste management and the environment is also an obstacle.

Air and water quality monitoring by the Environment Agency is also an important agenda. DLH conducts routine monitoring in areas prone to pollution, such as industrial and densely populated areas, and provides water quality monitoring facilities and measuring tools in the main river in Mandailing Natal Regency as an effort to detect and mitigate potential pollution. Many people still tend to litter and disobey the rules, which ultimately leads to pollution in various places. Therefore, more intensive efforts are needed in providing education to the community, as well as increased cooperation between the government, the community, and the private sector to create a cleaner and healthier environment. (Pranaja et al., 2025).

Conclusion

Administrative sanctions include written reprimands, government coercion, license freezes, and revocation of licenses. In addition, there are also criminal sanctions applied as an ultimum remedium as well as civil compensation obligations for affected parties. Compensation includes economic losses and environmental damage, as well as recovery costs that must be borne by the perpetrator. Although these laws provide protection to affected communities, the main obstacles faced in their implementation are limited resources for oversight, a lack of public understanding of their rights, and difficulties in proving a direct link between pollution activities and their impacts. DLH also collaborates with various parties to increase public awareness and reduce pollution with a focus on waste and industrial waste management. Challenges faced include limited resources, suboptimal public awareness, and high costs required by the industrial sector to comply with environmental regulations.

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