



## Enforcement of Legal Sanctions Against Environmental Pollution Violations Caused by Natural Stone Business Waste in Cirebon Regency

Susanti<sup>1</sup>, Ikrima Istiqomah Rizkha<sup>2</sup>, Ghina Sa'diyah<sup>3</sup>, Harmono<sup>4\*</sup>, Deni Yusup Permana<sup>5</sup>

Universitas Swadaya Gunung Jati, Cirebon

**Corresponding Author:** Harmono [harmono@ugj.ac.id](mailto:harmono@ugj.ac.id)

### ARTICLE INFO

*Keywords:* Law Enforcement, Environmental Pollution, Natural Stone Waste, Environmental Management

*Received :* 01 April 2025

*Revised :* 22 April 2025

*Accepted:* 24 May 2025

©2025 Susanti, Rizkha, Sa'diyah, Harmono, Permana: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

Developing the industrial and mining sectors, especially the natural stone business in Cirebon Regency, contributes significantly to regional economic growth. However, this activity poses serious problems related to environmental pollution due to the waste produced, both solid and liquid waste. If not managed properly, the garbage can pollute the environment and negatively impact public health and ecosystems. Despite the regulations on environmental protection, business actors who are not subject to strict sanctions create legal uncertainty and reflect the low effectiveness of the legal system. This study aims to evaluate the effectiveness of law enforcement and identify the factors that affect its success. The methodology includes normative juridical approaches and qualitative analysis through observation and interviews. The research shows the need for stricter policies to improve environmental law enforcement, strengthen supervision, develop WWTPs, and educate business actors and the community on sustainable practices. These policies are expected to create collective awareness supporting sustainable environmental conservation efforts. The effectiveness of enforcing legal sanctions against environmental pollution violations due to natural stone business waste in Cirebon Regency is still relatively low, even though there are normatively adequate regulations. Local governments strengthen the institutional capacity of law enforcement, especially the Environment Agency, through increasing the number and competence of human resources as well as adequate budget allocation for supervision and enforcement.

## **INTRODUCTION**

Water is the primary need for the survival of living things. However, water quality can decline due to increasing population density and growing activities. As the population grew, the demand for goods and commodities also increased, which encouraged the industry's growth to meet it. One of the industries that is developing is the natural stone industry, especially in handicrafts and stone processing. The sector produces liquid and solid waste from the stone-cutting process. About 38 natural stone industries are operating around the Jamblang Kiri River, most of which are small-scale industries owned by the community. (Nurjanah, 2018) (Uktiani, 2016)

Environmental pollution due to natural stone business waste is a crucial issue in Cirebon Regency. Natural stone mining and processing businesses often ignore ecological aspects, negatively impacting ecosystems and public health. Enforcement of legal sanctions is one way to overcome these problems. However, the effectiveness and implementation of the sanctions is still a question mark. Waste from the natural stone business, both in the form of solid and liquid waste, if not appropriately managed, can pollute the surrounding environment and have a direct impact on public health and ecosystem sustainability. This environmental pollution problem shows an imbalance between economic development goals and environmental protection. Although some laws and regulations expressly regulate ecological protection and management, as stated in Law Number 32 of 2009, as well as local rules that apply in Cirebon Regency, the implementation and enforcement of legal sanctions against environmental pollution violations often do not run optimally.

Weak law enforcement can be seen from the fact that business actors still violate waste management provisions without being subjected to strict sanctions. This not only creates legal uncertainty but also reflects the low effectiveness of the legal system in protecting the environment. Several factors also affect the weak enforcement of this law, including limited human resources and budgets in law enforcement agencies, low legal awareness of business actors, lack of community participation in environmental monitoring, and lack of coordination between authorized agencies.

Liquid waste is a type of waste produced from natural stone mining business activities. Based on the results of previous research, the liquid waste has been discharged directly into the Cimanggu River and the Jamblang River. This results in river water pollution characterized by a change in color to a cloudy gray and a thick resemblance to the color of cement. The polluted water then flows into the irrigation canals of the community's farms, thus negatively impacting the rice fields and reducing the productivity of rice crops. River pollution significantly impacts the agricultural sector, where agricultural production tends to stagnate and decrease due to land being polluted with waste from natural stone mining activities. Considering that 90.09% of the food needs of the Indonesian people are met through rice consumption, the sustainability of the agricultural business system of food crops, especially rice fields, is crucial. Therefore, a deeper understanding of rice farmers' business conditions as the

leading rice producers is needed, which is vital in ensuring national food availability. (Fauzia, 2021) (Sintanala Arsyad, 2008)

It is essential to study this problem in depth to determine the effectiveness of law enforcement against environmental pollution violations due to natural stone business waste in Cirebon Regency and to identify factors that affect law enforcement's success. Through this study, it is hoped that strategic and applicable policy recommendations can be obtained to improve the quality of environmental law enforcement, strengthen institutional capacity, and encourage active community participation in preserving the environment.

## **LITERATURE REVIEW**

### **Environmental Protection**

Constitutional rights are basic rights guaranteed by a country's constitution and include various aspects of life that are essential for the welfare of citizens. One of the crucial constitutional rights is the right to a good and healthy environment, as guaranteed by Article 28H Paragraph (1) of the 1945 Constitution of the Republic of Indonesia (1945 Constitution). This right demonstrates the country's commitment to ensuring every citizen can live in an environment supporting their health and well-being. The constitutional recognition of the right to the environment not only emphasizes the importance of maintaining environmental quality but also underlines the state's obligation to protect and manage natural resources sustainably. In this context, the Indonesian government has adopted various laws and policies to implement environmental protection, including Law Number 32 of 2009 on Environmental Protection and Management (Susanto et al., 2024).

### **Waste Management**

Land directly influences human activities because it is a factor of production that usually plays a crucial role in societal building (Ani, 2024, in Ibrahim et al., 2025). Data from the United Nations Environment Programme (UNEP) shows that about 8 million tons of plastic waste flow into the ocean yearly, most of which comes from land. The coast is the area most affected by this waste because it acts as a place to accumulate waste from various sources, both from human activities and carried by ocean currents. This problem pollutes the environment and negatively impacts the ecosystem, public health, and the local economy. In Indonesia, which is known as an archipelagic country with the second-longest coastline in the world, the problem of coastal waste is a big challenge. Indramayu Regency, one of West Java Province's coastal areas, faces serious waste management issues, especially at Dadap Beach. This beach, which should be one of the tourism potentials and a source of livelihood for the fishing community, actually experiences a decline in environmental quality due to the accumulation of garbage that worsens yearly (Ibrahim et al., 2025).

### **Legal Politics**

Legal politics comes from the Dutch term "rechtspolitiek" and refers to state policies in achieving goals through laws and regulations. In Indonesia, legal politics based on Pancasila, the 1945 Constitution, and the nation's cultural

values, reflect the needs of the community,, which later became a habit, with the state as the guarantor of its implementation (Zhafira, 2024, in Budiyanto et al., 2025). According to Hoogerwerf, political and legal policies include the development of a society that is directed through power (Doelbewuste vormgeving aan de samenleving door middel van machtsuitoefening) (Budiardjo, 2003). In practice, legal politics is the direction of legal development by creating regulations that reflect the ideals of the state as stated in the Preamble to the 1945 Constitution, Paragraph IV (Islamiyah & Hendrawati, 2019).

Therefore, the application of political laws in water resources management must be directed to create policies that not only reflect the country's ideals but are also able to answer the challenges of water management holistically, including household, agricultural, and industrial needs (Budiyanti et al., 2025). The management of pollution violations, especially stone, has not been regulated optimally, both for household, agricultural and industrial needs. Therefore, a more inclusive legal policy is needed, involving the central, regional, and village governments, as well as considering the local wisdom of the community in pollution violations of natural stone business waste.

## METHODOLOGY

**This study aims to determine the effectiveness of enforcing legal sanctions against environmental pollution violations caused by natural stone business waste in Cirebon Regency and identify the factors that affect implementing and enforcing these legal sanctions.** The type of research used is normative juridical legal research, which focuses on analyzing laws and regulations, legal norms, and other legal documents. This research also incorporates a qualitative approach to deeply understand the phenomenon through primary data collected directly from the research site. The data collection technique is carried out through observation, which is direct observation of conditions in the field and relevant evidence. And Interviews are direct communication with relevant informants to obtain in-depth and accurate data. This research is expected to provide a real picture of the implementation of environmental law in the Cirebon Regency area.

## RESEARCH RESULT AND DISCUSION

The discharge of waste directly into water bodies such as rivers and irrigation canals leads to water pollution, which is characterized by an increase in the value of water quality parameters such as *Biochemical Oxygen Demand* (BOD) exceeding quality standards. This condition causes a drastic decrease in water quality, so that water is no longer suitable for use for agricultural purposes or human consumption. In addition to polluting water, natural stone waste also has the potential to pollute the soil, which in the long term can damage soil structure and fertility.

Water is a basic necessity for the life of all living things. However, water quality is now declining due to increasing population density and the development of industrial activities. As the population grew, the demand for goods and commodities also increased, driving the growth of industries, including the natural stone industry in the handicraft and stone processing

sectors. Cutting stones in this industry produces liquid and solid waste that pollutes the environment. Around the Jamblang Kiri River are around 38 natural stone industries, most of which are small-scale industries owned by the community. Unfortunately, many industries lack Wastewater Treatment Plants (WWTPs). As a result, environmental pollution is widespread, such as declining agricultural yields due to the use of polluted irrigation water, public health disturbances due to unsuitable water for consumption, and disturbances in the balance of aquatic ecosystems, including the death of organisms such as phytoplankton that play an essential role in the marine food chain.

One of the real examples of the impact of pollution occurred in the Cigayam River, Dukupuntang District, Cirebon Regency, which is known to have been polluted with natural stone waste, with BOD levels exceeding the set threshold. Therefore, managing natural stone industrial waste is urgent and crucial to prevent wider environmental damage and protect the sustainability of ecosystems and public health. The company is supposed to be responsible to the environment, society, consumers, and so on in the company's operations. Cirebon Regency has 18 Watersheds (DAS), and six of them have been categorized as rivers with heavy pollution levels, namely the Ciberes, Cimanis, Jamblang, Kumpul, Kuista, and Suba Rivers. Some of these rivers are a source of raw water for drinking water and agricultural irrigation. The Jamblang River, for example, is one of the important rivers that flows through the Palimanan District area consisting of 12 villages: Balerante, Cilukrak, Beberan, Cengkuang, Ciawi, Kepuh, Lungbenda, East Palimanan, Panongan, Pegagan, Semplo, and Tegal Karang. (Nessa, 2021)

### **Enforcement of legal sanctions against environmental pollution violations caused by natural stone business waste in Cirebon Regency.**

In the Indonesian legal system, the enforcement of environmental pollution violations caused by the natural stone industry in Cirebon Regency. Various rules regulate waste problems, such as the regulation of Law Number 32 of 2009 concerning Environmental Protection and Management in General Provisions Article 1, number 1. And it is contained in Government Regulation No. 101 of 2014 concerning the Management of Hazardous and Toxic Waste (B3), as well as Cirebon Regent Regulation Number 1 of 2014 concerning Provisions for Licensing of Liquid Waste Disposal to Water Sources in Cirebon Regency.

The effectiveness of enforcing legal sanctions against environmental pollution violations is measured by the extent to which the sanctions can prevent similar violations and reduce negative environmental impacts. In Cirebon Regency, in practice, many people still consider business synonymous with profit-making activities, so the existence of the natural stone business has contributed to the economy. Still, on the other hand, it also causes serious problems in environmental pollution due to waste management that does not follow standards. (Alawy F. S., 2024)

Although normatively, there are laws and regulations governing environmental protection and management, such as Law Number 32 of 2009 and various derivative regulations, implementing existing legal sanctions is still ineffective. Many business actors, such as AMDAL or UKL-UPL, do not have

environmental permits, do not have waste treatment facilities, or directly dispose of production waste into the surrounding environment. Ironically, authorities or institutions often do not strictly act upon these violations.

Legal sanctions against violators are generally limited to administrative sanctions, such as reprimands, warning letters, or temporary permit freezes. Law enforcement rarely touches the criminal or civil realms, which can have a greater deterrent effect. This indecisiveness in law enforcement creates legal uncertainty, where business actors feel that environmental violations are not serious and will not cause severe legal consequences.

In addition, this weak law enforcement is caused by various factors. Among them are the Environment Agency's limited human resources and budget, the lack of coordination between law enforcement agencies, and conflicts of interest between the needs of regional economic development and environmental conservation. On the one hand, the local government wants to maintain the natural stone industry's sustainability because it creates jobs and regional income. But on the other hand, environmental sustainability is neglected due to weak enforcement of violations. Furthermore, low legal awareness among business actors and the surrounding community is also the leading cause of weak compliance with environmental regulations. Many business actors view waste management as an additional burden, not a legal obligation that must be fulfilled. Therefore, the effectiveness of law enforcement is greatly influenced by the commitment of local governments, the consistency of law enforcement officials, and education and socialization efforts to business actors. (Yusmiati, 2023)

In this condition, it can be concluded that the effectiveness of enforcing legal sanctions against environmental pollution by natural stone businesses in Cirebon Regency is still low. Concrete steps are needed, such as increasing supervisory capacity, implementing stricter and more balanced sanctions, and coaching business actors to create a stronger legal culture and environmental awareness.

### **Natural stone business waste in Cirebon Regency causes factors that affect the implementation and enforcement of legal sanctions for environmental pollution violations.**

Implementing and enforcing legal sanctions against environmental pollution violations caused by waste from natural stone businesses in Cirebon Regency cannot be separated from various interrelated and affecting factors. One of the main factors that is a significant obstacle is the limitation of human resources and budgets in environmental law enforcement agencies or institutions, such as the Environment Service (DLH) and the Cirebon Regency Agriculture Office.

This limitation directly impacts the weak capacity for supervision, investigation, and law enforcement actions that should be carried out regularly and comprehensively against business actors who are proven to pollute the environment. A lack of adequate field officers and environmental monitoring equipment often leads to violations not being detected quickly, resulting in slow or no action.

In addition, the level of legal awareness of natural stone business actors is also a crucial factor affecting the effectiveness of law enforcement sanctions. Many business actors, especially small and medium-scale, do not understand the legal provisions related to waste management, as stated in Law Number 32 of 2009 concerning Environmental Protection and Management and applicable regional regulations. This low understanding causes many business actors not to take care of environmental permits, not to have liquid or solid waste treatment systems, and to ignore the long-term impact of their activities on the environment and the surrounding community's health. This condition is exacerbated by weak social sanctions or pressure from the local community, so violations seem commonplace and do not cause meaningful consequences for business actors.

Public participation and support are also essential factors in encouraging the implementation of legal sanctions. However, in the context of Cirebon Regency, public awareness of the rights to a clean and healthy environment is still relatively low. Communities tend to be passive and not proactive in reporting suspected environmental violations to the authorities due to a lack of information and understanding of the complaint mechanism, and fear of social conflict with business actors who may be part of the local community. As a result, the role of the community as social supervisors in the environmental law enforcement system has not been effectively optimized. It is necessary to balance development and ecological sustainability to minimize pollution and environmental damage to maintain the ecosystem. (Ariadica, 2020)

Another factor that is no less important is the lack of coordination between government agencies that have authority in environmental affairs. The weak synergy between local governments, DLH, law enforcement officials, and licensing agencies has often led to disagreements regarding ecological pollution cases. For example, there is an overlap of authority or inconsistency in violation data, so the handling becomes unintegrated and seems sporadic. The absence of an integrated mechanism to share information, conduct joint inspections, and formulate uniform legal measures causes law enforcement efforts to be ineffective and less deterrent to business actors.

Thus, enforcing legal sanctions for environmental pollution in Cirebon Regency is influenced by internal factors such as institutional capacity and understanding of business actors, and external factors such as community participation and inter-institutional coordination. Therefore, a comprehensive approach is needed through institutional capacity building, legal education, community empowerment, and strengthening cross-sector coordination.

## **CONCLUSIONS AND RECOMMENDATIONS**

This study shows that the effectiveness of enforcing legal sanctions against environmental pollution violations due to natural stone business waste in Cirebon Regency is still relatively low, even though there are normatively adequate regulations. Various factors, including limited human resources and budgets in law enforcement agencies, low legal awareness of business actors, lack of public participation in environmental monitoring, and lack of coordination

between authorized institutions, contribute to the weak implementation of legal sanctions.

Thus, increasing the effectiveness of law enforcement requires concrete steps in the form of strengthening institutional capacity, stricter and more consistent law enforcement, legal education for business actors, and active community involvement in environmental conservation. These efforts are crucial to ensure the sustainability of the ecosystem, protect public health, and maintain a balance between economic growth and ecological protection in Cirebon Regency.

### **Recommendations**

Based on the fact that the effectiveness of enforcing legal sanctions against environmental pollution due to natural stone business waste in Cirebon Regency is still low, it is recommended that local governments strengthen the institutional capacity of law enforcement, especially the Environment Agency, through increasing the number and competence of human resources as well as adequate budget allocation for supervision and enforcement; In addition, it is necessary to carry out strict and consistent law enforcement against business actors who violate, by not only providing administrative sanctions but also applying criminal and civil sanctions if required to cause a deterrent effect. Education and socialization of environmental law to business actors must be improved, especially in encouraging the implementation of waste management systems that meet standards, such as Wastewater Treatment Plants (WWTP). Active community participation is also essential to be strengthened by establishing environmental monitoring groups at the local level and providing easy and secure reporting mechanisms. On the other hand, more synergistic coordination is needed between institutions, such as DLH, the police, the prosecutor's office, and the licensing office, to ensure no overlap of authority and an integrated handling of violations. The government should also provide incentives or awards to business actors who comply with environmental regulations and encourage collaboration with universities and NGOs in education and the development of environmentally friendly technology. This strategic recommendation is expected to increase the effectiveness of environmental law enforcement, ensure ecosystem sustainability, and maintain a balance between economic development and ecological preservation in Cirebon Regency.

### **ADVANCED RESEARCH**

Future research should focus on evaluating the capacity and effectiveness of environmental law enforcement institutions in Cirebon Regency, particularly the Environment Agency (DLH). Studies can assess the adequacy of human resources, budget allocation, and institutional coordination in handling environmental violations. Research should also examine the implementation of administrative, civil, and criminal sanctions against polluting businesses to determine their impact on compliance and deterrence.

In addition, further investigation is needed on community involvement and awareness of environmental regulations. This includes studying the role of environmental monitoring groups, public reporting mechanisms, and the

effectiveness of education and socialization programs. Research should also explore potential collaborations between the government, universities, and NGOs to promote environmentally friendly technologies and reward businesses that adhere to environmental standards. These efforts aim to improve enforcement, protect ecosystems, and support sustainable development in Cirebon Regency.

## REFERENCES

- Ariadica, A.A., Sutrisno, E., & Dimiyati, A. (2020). "Repositioning Environmental Restoration Policy Against Illegal Mining of Excavation C". *Responsive Law*, 11(2).
- Arsyad, S., Eman, R. 2008. *Saving Land, Water, and the Environment*. Jakarta: Yayasan Pustaka Obor Indonesia.
- Budiyanti, S., Hidayat, D., Permana, D. Y., Karmenita, K., & Wiranata, F. (2025). The Influence of Politics and Law on the Sustainability of Water Resources in the Cigugur Region, Kuningan Regency. *Jurnal Legisci*, 2(4), 268-282.
- Cirebon Regency Regional Regulation Number 5 of 2011 concerning Spatial Planning.
- Cirebon Regency Regional Regulation Number 6 of 2016 concerning Environmental Protection and Management.
- Cirebon Regent Regulation Number 1 of 2014 concerning Licensing Provisions for the Disposal of Liquid Waste to Water Sources in Cirebon Regency.
- Constitution of 1945.
- Fauzia, D. A., & Siska, F. (2021). "Procurement of Wastewater Treatment Plants as a Condition for Liquid Waste Disposal in Efforts to Prevent Water Pollution based on Cirebon Regent Regulation Number 1 of 2014 concerning Licensing Provisions for the Discharge of Liquid Waste to Water Sources in Cirebon". *Journal of Legal Research*, 104-110.
- Government Regulation of the Republic of Indonesia Number 101 of 2014 concerning Waste Management of Hazardous and Toxic Materials (B3).
- Government Regulation of the Republic of Indonesia Number 22 of 2021 concerning the Implementation of Environmental Protection and Management.
- Ibrahim, S. M., Sagita, A. T., Permana, D. Y., & Dikrurahman, D. (2025). Legal Study on Waste Management on the Coastal Dadap Indramayu Coast in Waste Reduction and Handling from the Perspective of Indramayu Regency Regional Regulation Number 12 of 2016. *Jurnal Legisci*, 2(4), 255-267.
- Islahuddin "Natural Stone Waste Needs Extra Handling, Needs a Budget of Rp. 60 Billion, DLH Cirebon Regency Admits Recollection Is Not Young" Cirebon Voice, Accessed From <https://suaracirebon.com/2023/01/30/limbah-batu-alam->

butuh-penanganan-ekstra-butuh-anggaran-rp60-miliar-dlh-kabupaten-cirebon-akui-rekolasi-tak-mudah/2/ on April 29, 2025, at 14.57 WIB.

Law Number 32 of 2009 concerning Environmental Protection and Management.

Nessa, R. R., Sutrisno, E., Mawar, R., & Sudarminto, S. (2021). "Legal Aspects of Social Responsibility and the Environment of Micro, Small and Medium Enterprises". *Responsive Law*, 12(2).

Nuraeni, N., Taufik Hidayat, M., & Wulandari, S (2014). "Supervision of Natural Stone Industrial Waste Management by the Regional Environment Agency of Cirebon Regency (Case Study in Dukupuntang District)". *Journal of Publishing*, 2(2), 285-288.

Nurjanah, R. (2018). *The Impact of Ornamental Stone Industrial Waste Disposal on the Water Quality of the Cigayam River in Cangkoak Village, Dukupuntang District, Cirebon Regency* (Doctoral dissertation, Siliwangi University).

Salsabilla, B., Retnowati, R., & Istiana, R (2024) "Analysis of Cigayam River Water Pollution in Cirebon Regency Due to Natural Stone Industrial Waste Disposal". *Journal of Environmental Pollution Control*, 6(2), 37-40.

Subarka, S., Alawy, F.F., AlRasyid, M.I., Harmono, H., & Dimyati, A. (2024). *Juridical Review of the Implementation of Corporate Social Responsibility (CSR) in the Perspective of Community Empowerment*. *Edunity Social and Educational Studies*, 3 (9), 816-829.

Susanto, A., Baralaska, S., & Jaelani, A. (2024). *Constitutional Rights and Environmental Protection in Indonesia from a Legal and Policy Perspective*. *Jurnal Legisci*, 2(2), 121-129.

Uktiani, A., Suroso., & Setyaningsih, W. (2014). "The Impact of Natural Stone Industrial Waste Disposal on Irrigation Water Quality in Palimanan District, Cirebon Regency". *Geo Image (Spatial-Ecological-Regional)* 3(2), 2-3.

Yusmiati, Y., Imamulhadi, I., & Sekarwati, S. (2023). "Guidance for Environmental Law Violators in the Environmental Law Enforcement System Based on Law No. 32 of 2009". *LITRA: Journal of Environmental, Spatial and Agrarian Law*, 2(2), 189-214.