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# Enforcement of Environmental Law in Efforts to Handle River Pollution Cases in Indonesia

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**ABSTRACT**

The enforcement of environmental laws in Indonesia plays a pivotal role in protecting and conserving natural resources while addressing various environmental pollution issues, including river pollution. This article aims to evaluate the effectiveness of regulations, implementation strategies, and challenges in enforcing environmental laws related to river pollution in Indonesia. Using normative legal research methods, the study examines the evolution of environmental legislation, beginning with UUPLH 1982 and culminating in Law No. 6/2023, which supersedes Law No. 11/2020. The findings reveal that river pollution in Indonesia stems from diverse human activities. Law enforcement mechanisms involve administrative, civil, and criminal sanctions designed to control pollution, deter violators, and restore damaged ecosystems. The recent amendments under Law No. 6/2023 introduce provisions for broader public participation, enhanced risk-based oversight, and stricter liability for polluters. This article underscores the critical need for robust regulations, heightened public awareness, and consistent monitoring to effectively address river pollution. Strong law enforcement measures are essential for maintaining aquatic ecosystem balance, safeguarding citizens' rights to a healthy environment, and fostering sustainable development in Indonesia.

KeyWords: *Environmental Law, Law Enforcement, River Pollution.*

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## INTRODUCTION

Environmental law serves as an essential mechanism for controlling environmental damage and contamination. Its primary functions include protecting, regulating, and safeguarding communities from activities that harm the environment. The rapid development of environmental law has demonstrated its dual role as both a tool for development and a catalyst for change, going beyond its traditional purpose of ensuring societal stability (Arliman S, 2018). According to Fadli et al (2016), law enforcement involves the monitoring and application of administrative, criminal, or civil measures to ensure compliance with regulations and constitutions that affect individuals and the general public. In environmental policy planning, enforcement represents the final and critical phase. These efforts encompass 1) Legal provisions; 2) Standardization of norms; 3) Licensing; 4) Execution and implementation; and 5) Law enforcement.

Global summits involving world leaders on environmental and sustainable development issues such as the United Nations (UN) Conference in Stockholm in 1972, the Earth Summit in Rio de Janeiro in 1992, and the Johannesburg Summit in 2002 have served as catalysts for heightened global commitment and national policy-making to address environmental challenges (Fadli et al., 2016). This world-level conference contributed to the formation of These conferences laid the groundwork for the enactment of Indonesia's Law No. 4/1982 on Basic Provisions for Environmental Management (hereafter referred to as UUPLH 1982). The implementation of environmental law developments in Indonesia has paralleled the government's increasing focus on environmental challenges. The establishment of UUPLH 1982 is widely regarded as a pivotal moment in Indonesia's constitutional history. It not only serves as a legal framework but also acknowledges the critical link between national development and environmental preservation. (Fadli et al., 2016). Since then, numerous improvements have been made to environmental laws in Indonesia to address emerging and diverse challenges requiring specialized solutions. The most recent regulatory update is Law No. 6/2023, promulgated on March 31, 2023, which reflects these ongoing refinements. As a nation with a vast maritime territory, where approximately 70% of its area consists of water, Indonesia holds the distinction of being the largest maritime country globally. However, the expanse of its aquatic ecosystems makes them particularly susceptible to pollution and environmental degradation resulting from human activities. This underscores the need for robust environmental legal protections to preserve and safeguard Indonesian waters. Rivers, as one critical component of these waters, require special attention. They are natural freshwater systems that distribute water from upstream to downstream, eventually flowing into lakes, oceans, or other rivers (Zuliyanti et al., 2022). Rivers play a vital role in the social, economic, and cultural lives of communities. However, many river systems in Indonesia are now severely polluted. According to a 2023 survey conducted by the Indonesian Central Bureau of Statistics, 16,487 rivers in Indonesia have been contaminated with waste. The primary source of this pollution is human activity, characterized by the introduction of materials, energy, living organisms, and other substances into the environment at levels exceeding Environmental Quality Standards. This pollution threatens aquatic ecosystems, with potentially catastrophic consequences for biodiversity and human well-being.

Addressing river pollution necessitates targeted interventions and strict enforcement of environmental laws. This article aims to conceptually explore the application of environmental law in Indonesia as a response to the pressing issue of river pollution. Specifically, the focus is on examining the progression of environmental law enforcement in addressing river pollution cases in the country. From the objectives outlined, two key research questions emerge: First, what are the environmental law enforcement measures taken in Indonesia to combat river pollution? Second, what forms of sanctions are applied under environmental laws to address this issue?.

**METHODS**

This study adopts a normative legal research methodology. Such research primarily involves analyzing documents derived from various legal sources, including statutory regulations, court rulings, agreements and contracts, legal theories, doctrines, and expert opinions (Muhaimin, 2020). Given its focus on written laws and texts, as well as its reliance on secondary data obtained from library resources, normative legal research is also commonly referred to as doctrinal or library-based research. In this study, the statutory and conceptual approaches are utilized as the principal research methodologies.

The central legal issue explored in this article pertains to the enforcement of environmental law, tracing its progression from UUPLH 1982 to Law No. 6/2023. Additionally, the article delves into the types of sanctions applied and their practical enforcement in addressing river pollution cases.

The primary legal sources underpinning this study include UUPLH 1982, Law No. 23/1997, Law No. 32/2009, Law No. 11/2021, and Law No. 6/2023. These statutes serve as secondary data, forming the foundation for the legal analysis. To supplement this analysis, secondary legal materials such as legal texts, scientific journals, and academic publications are used to provide broader context and critical insights into the primary legal sources. For defining legal terms and concepts related to environmental law enforcement, the Big Indonesian Dictionary (KBBI) is employed as a tertiary reference.

The data collection process relied on a literature study approach, focusing on systematically gathering and analyzing relevant legal materials. This process involved several key steps, including identifying pertinent legal references, developing a comprehensive database of required legal documents, citing relevant statutes and regulations, and critically evaluating the collected materials in alignment with the research objectives and issues. Descriptive analysis methods were then applied to interpret and present the findings within the context of the identified legal challenges (Muhaimin, 2020).

# Results and DiscussionS

## Environmental Law Enforcement

The advancement of science and technology significantly impacts the quality of human life. While industrialization brings notable benefits, such as enhanced efficiency and productivity, it also poses serious environmental risks. For instance, industrial production processes generate hazardous and toxic waste, including liquid waste, which, if improperly discharged into water bodies, can harm ecosystems and disrupt the survival of humans and other living organisms. Efforts to protect the environment are essential to mitigate the potential negative effects of scientific and technological developments. Siti Sundari Rangkuti, referencing R. Seerden and M. Heldeweg, describes a "regulatory chain" in environmental management, consisting of: legislation, regulation, permit issuance, implementation, and enforcement. This chain approach is depicted in Figure 1, highlighting the interconnected steps necessary for effective environmental management. Establishing legal frameworks in the form of policies and laws is one of the government's strategies to address Indonesia's environmental management and conservation challenges.

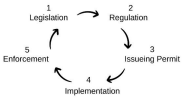


Figure 1. Regulatory Chain in Environmental Management (placeholder; insert visual representation)

Enforcement of environmental law is a critical governmental responsibility to enhance compliance among individuals and business entities with regulations aimed at addressing environmental issues. As a specialized branch of functional law, environmental law encompasses administrative, criminal, and civil law components (Drupsteen in Rahmadi, 2023). Environmental law enforcement can be divided into three main categories (Fadli et al., 2016), namely 1) Administrative enforcement of environmental law; 2) Criminal enforcement of environmental law; and 3) Civil enforcement of environmental law.

The approach to environmental law enforcement may be preventive or repressive, depending on the circumstances and its intended effectiveness. A repressive approach involves the imposition of administrative sanctions, while a preventive approach focuses on supervising and controlling compliance with regulations (Fadli et al., 2016). The government’s policies must not only be enacted but also followed through with consistent supervision to ensure effective implementation by communities and business entities. To address environmental degradation in Indonesia, the government employs both preventive and repressive measures, recognizing the law's role in shaping public behavior. By fostering legal awareness, these measures encourage individuals and organizations to protect and preserve environmental functions (Sood, 2019). Achieving a balance between natural resources and environmental sustainability requires stringent enforcement efforts. This includes curbing environmental degradation through robust laws, effective regulations, and competent legal institutions, as well as improving public understanding of environmental law (Sood, 2019).

Siti Sundari Rangkuti further emphasizes that environmental law enforcement ensures adherence to constitutional provisions and regulations, both general and specific, through mechanisms of administrative, criminal, and civil oversight.

**Development of Environmental Law**

The legal framework in Indonesia is fundamentally designed to ensure that society can enjoy a decent and healthy environment. This principle is embedded in the 1945 Constitution, which serves as the supreme legal authority and provides a benchmark for all subsequent legislation (Pelokilla, 2023). Article 28H, paragraph (1), of the 1945 Constitution guarantees individuals the right to a good and healthy environment, access to healthcare, and the opportunity to achieve material and spiritual prosperity. Based on this constitutional mandate, additional legal instruments have been established to address environmental issues, including river pollution.One of the earliest legal frameworks addressing environmental issues was the 1982 Environmental Management Law (UUPLH 1982), which was designed to address three key interests (Fadli et al., 2016). First, Indonesia was undergoing significant national development at the time, necessitating regulations to manage ecological concerns alongside economic growth. Second, the UUPLH 1982 provided a foundational legal structure for enforcing environmental laws across all sectors, ensuring consistency between existing and future legislation. Third, Indonesia's rich biodiversity and unique geographical position straddling two oceans and two continents called for a robust legal framework to protect natural resources and accommodate its diverse socio-economic and cultural makeup.

The UUPLH 1982 is regarded as the cornerstone of environmental law in Indonesia and has undergone various amendments to address emerging challenges. Law No. 23/1997 was introduced as a revision to the UUPLH 1982, but it proved inadequate for addressing contemporary environmental issues. The limited authority of the Ministry of Environment and ambiguities in legal clauses left the law vulnerable to manipulation, resulting in its ineffectiveness (Fadli et al., 2016). Additionally, Law No. 23/1997 emphasized anthropocentric values, failing to incorporate biocentric or ecocentric perspectives necessary to address modern environmental concerns, particularly the integration of technology and environmental protection measures.

To address these shortcomings, Law No. 32/2009 was enacted, introducing the concept of Environmental Protection and Management (PPLH) as a critical component of environmental governance. According to Article 4 of Law No. 32/2009, PPLH encompasses six key functions: planning, utilization, control, maintenance, supervision, and enforcement. This law also mandates central and regional governments to prioritize sustainable environmental management in their activities.

In 2020, the government enacted Law No. 11/2020 on Job Creation (commonly referred to as the Job Creation Law or UUCK 2020). Passed by the DPR on October 5, 2020, and promulgated on November 2, 2020, this legislation aimed to boost Indonesia's competitiveness and foster sustained economic growth while emphasizing sustainability principles (Ruhiyat & Imamulhadi, 2022). The UUCK 2020 sought to simplify regulations by repealing and amending numerous existing laws, including Law No. 32/2009, to streamline environmental management and investment processes. The overarching objectives of this legislation were to resolve conflicting laws efficiently, enhance coordination between national and regional governments, simplify licensing procedures, and improve bureaucratic efficiency (Busroh, 2017).

Despite its intended benefits, the UUCK 2020 faced significant criticism and opposition from various civil society organizations. Concerns centered around the limited public involvement during its drafting and the perceived weakening of environmental protection measures. The law’s approach, as an omnibus law, consolidated multiple unrelated issues into a single piece of legislation, often bypassing thorough deliberation (Fitri & Hidayah, 2021). As Barbara Sinclair defines, omnibus laws are typically complex and lengthy, covering a range of topics that may not necessarily relate to one another, and are often passed with limited debate (Krutz, 2001).In late 2021, the Constitutional Court (MK) declared the UUCK 2020 conditionally unconstitutional due to procedural flaws, requiring revisions within two years to avoid annulment (Negara et al., 2023; Naqiyyah & Sujatnika, 2023). In response, the government issued Government Regulation instead of Law No. 2/2022 (PERPU 2022) in December 2022, citing "compelling urgency" to maintain a favorable investment climate and ensure legal certainty. The PERPU introduced amendments to the UUCK, and it was formally adopted as Law No. 6/2023 on March 31, 2023, replacing Law No. 11/2020 (Iskandar et al., 2023).

**Types of Sanctions for River Pollution Cases**

The enforcement of environmental law in river pollution cases involves three main types of sanctions: administrative sanctions, civil sanctions, and criminal sanctions.

***Administrative Sanctions***

Administrative sanctions are typically the first step in addressing violations related to river pollution. However, the enforcement of such sanctions is often considered one of the weakest aspects of environmental law in Indonesia. Several systemic issues hinder effective enforcement, such as lack of independence in courts, unprofessional government officials, and low integrity among public servants, which reduces accountability and responsiveness to public concerns (Ariefianto, 2015).When enforced effectively, administrative sanctions can ensure compliance and environmental protection. These sanctions are governed by Law No. 32/2009 and Law No. 6/2023, with detailed provisions laid out in Government Regulation (PP) No. 22/2021 and Minister of Environment and Forestry Regulation No. 14/2024. Sanctions include 1) Written warnings; 2) Government coercion, such as halting production or closing wastewater channels; 3) Administrative fines; 4) Suspension of business permits; and 5) Revocation of business permits.Government coercion is applied when violations pose significant risks to environmental and human health (Article 511, PP No. 22/2021). Administrative fines are imposed when businesses fail to comply with coercive measures or delay their implementation (Article 513, PP No. 22/2021). These fines align with the polluter-pays principle, holding violators financially responsible for their environmental damage (Syarif & Wibisana, 2015).

Recent updates in Law No. 6/2023 introduced new mechanisms, such as administrative fines for exceeding wastewater quality standards. This marks a shift from previous regulations, which mandated criminal sanctions for similar violations.The ultimate administrative sanction is the revocation of business permits (Article 522, PP No. 22/2021), which applies when entities fail to comply with government coercion, pay fines, or rectify pollution. For example, the Malinau Regent's Decree No. 660.5/K/.86/2021 imposed government coercive sanctions on PT X for discharging waste into a river (Roselyn et al., 2023).

***Civil Sanctions***

Civil sanctions provide remedies for those affected by pollution. These remedies include compensation, restoration, and guarantees to prevent future harm. Civil sanctions are governed by Law No. 32/2009 (Articles 84–92). Under the polluter-pays principle, violators are required to compensate victims and restore polluted environments. An example of civil sanctions is the case against PT Subur Agro Makmur. The Kandangan District Court (Case No. 01/Pdt.G/2013/PN) found the company liable for herbicide pollution that killed local buffalo and caused skin diseases in livestock. The court ordered material compensation to affected victims and environmental restoration (Nurisman & Sandy, 2016).

***Criminal Sanctions***

Criminal sanctions are considered a last resort and are applied when administrative measures fail or violations are repeated. These sanctions are outlined in Law No. 32/2009 (Article 100), with penalties including: 1) Imprisonment of up to three years; and 2) Fines of up to IDR 3 billion. Criminal charges can be brought against corporations, as well as individuals within these corporations, such as executives or decision-makers (Article 116, Law No. 32/2009). Additional sanctions include confiscation of profits, closure of facilities, and mandated compensation (Article 119, Law No. 32/2009). An example of criminal enforcement occurred in the case of PT A, which polluted the Citarum River. The court (Case No. 700/Pid.B/LH/2020/PN) imposed a fine of IDR 100 million and ordered PT A to clean up waste and restore the affected environment (Nuryanta et al., 2023).

***Case Study: Citarum River Pollution***

The Citarum River Basin (DAS) has been a significant focus of enforcement efforts due to repeated violations by corporations. Research (Adi Fajar Winarsa et al., 2022) revealed instances where companies operated without wastewater treatment plants (IPAL) and discharged untreated waste into water bodies, violating environmental laws. Investigations are ongoing for companies lacking environmental permits or failing to process waste according to regulations.

**Types of Sanctions for River Pollution Cases**

The incidence of river pollution in Indonesia continues to rise each year, significantly degrading the rivers' ability to support the needs of surrounding communities. Moreover, river pollution poses serious risks to human health (Taufan et al., 2021). This environmental damage highlights the urgent need for the development of environmental law enforcement measures tailored to address river-specific challenges.

***Causes of River Pollution***

River pollution in Indonesia is driven by several factors:

* Industrial Expansion: The rapid growth of industry has led to increased production of waste, much of which is improperly managed.
* Inadequate Domestic Waste Management: Untreated organic and inorganic waste is often discharged into rivers through sewage systems.
* Agricultural Runoff: Fertilizers and pesticides from agricultural activities contaminate river systems when improperly disposed of.
* Weak Oversight and Law Enforcement: Insufficient supervision and inconsistent enforcement of regulations exacerbate pollution problems.

***Role of Environmental Inspectors***

Environmental inspectors play a pivotal role in combating river pollution. Their responsibilities include monitoring pollution sources, enforcing environmental laws, and promoting sustainable practices to protect water quality. Supervision of river pollution must be carried out both directly and indirectly, involving:

* Direct Supervision: Regular and incidental visits to businesses or activity sites to ensure compliance with environmental regulations.
* Indirect Supervision: Reviewing reports and evidence provided by the parties responsible for businesses or activities (Article 496, PP No. 22/2021).

According to environmental law expert Siti Sundari Rangkuti, supervision is the final step in the regulatory chain of environmental law enforcement. It represents a preventive effort and is considered a critical aspect of effective environmental law enforcement.

***Factors Influencing Effective Law Enforcement***

Law enforcement efforts for river pollution can be effective if several key factors are addressed (Rangkuti, 2005):

* Legal Factors: Clear and comprehensive regulations are essential.
* Law Enforcement Factors: Credible and competent environmental officers are required.
* Supporting Infrastructure: Adequate facilities and resources for monitoring and enforcement activities.
* Community Factors: Public awareness and participation in environmental conservation efforts.
* Cultural Factors: A culture of compliance and environmental stewardship must be cultivated.

To enhance enforcement, the competence and credibility of environmental law enforcement officers must evolve in line with technological advancements. This development is crucial for achieving good and effective environmental law enforcement.

**CONCLUSIONS**

Environmental law plays a pivotal role in engaging communities and addressing environmental challenges, particularly in the context of sustainable management. It serves to regulate human activities, prevent environmental damage, ensure social justice, and foster sustainable economic growth by controlling resource usage and minimizing pollution. This aligns with the broader purpose of law: to establish social order and revitalization within society (Fadli et al., 2016). Over time, Indonesia’s environmental legal framework has evolved significantly, starting from UUPPLH 1982 to Law No. 6/2023, reflecting the growing urgency to address environmental issues effectively. The preservation of rivers, essential ecosystems that support human and ecological well-being, exemplifies the role of environmental law. Mechanisms such as administrative measures, civil sanctions, and criminal consequences are employed to control river pollution, with administrative fines and permit revocations being among the most frequently applied tools. Environmental supervisors have a critical function in enforcing these laws and mitigating river pollution. Their responsibilities span monitoring, supervising, and imposing sanctions for violations, requiring close coordination across regional and central sectors to ensure effective implementation (Syaprillah, 2016). Supervisors also play a vital role in promoting preventive measures and ensuring that corrective actions are enforced. These efforts are closely aligned with the objectives of the 1945 Constitution, which guarantees every citizen the right to a decent and healthy environment. By safeguarding river ecosystems through stringent enforcement and proactive governance, environmental law not only protects natural resources but also upholds the constitutional rights of present and future generations.

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