



## **Effectiveness of Criminal Law Enforcement on Hazardous and Toxic Waste Pollution (B3)**

**Ikama Dewi Setia Triana, Eti Mul Erowati**

Faculty of Law, Wijayakusuma University, Purwokerto

Email: [trianadewi007@gmail.com](mailto:trianadewi007@gmail.com)

### **Article Info**

*Entered: 1 September 2024*

*Accepted: 10 Oktober 2024*

*Release: 1 November 2024*

### **Keywords:**

*Environmental pollution, B3 waste, criminal law enforcement, legal effectiveness, environmental protection*

### **Abstract**

*This study aims to determine how the implementing legal provisions and utilization of forest land conversion into plantations are oriented towards capitalism. This study uses a normative legal research method with the types of approaches, namely the legislative approach and the conceptual approach. The legal materials used are primary, secondary, and tertiary legal materials, obtained by conducting a literature study. The results of the study indicate that law enforcement against violations related to B3 waste still faces various significant obstacles. One of the main obstacles is the weak supervision by the responsible authorities, such as the Ministry of Environment and Forestry and related agencies at the regional level. Suboptimal supervision is often caused by limited human resources and technology that supports the monitoring process of companies or industries that produce B3 waste. This causes some violations to go undetected or not followed up properly. In addition, limited law enforcement facilities and infrastructure are also inhibiting factors. The lack of adequate laboratories to test waste samples, obsolete environmental quality monitoring equipment, and minimal budget to support supervision and investigation operations causes the effectiveness of law enforcement to be low. Law enforcers such as police, prosecutors, and judges who handle environmental cases often do not have sufficient knowledge or technical expertise about the impacts and characteristics of B3 waste, so that the case handling process does not run optimally.*

*The sanctions given to perpetrators of pollution have also not provided a sufficient deterrent effect. In some cases, the administrative sanctions or fines imposed are*

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*relatively light compared to the damage caused to the environment and public health. As a result, perpetrators prefer to pay fines rather than make improvements to their waste management systems.*

*On the other hand, public ignorance regarding the procedures for reporting B3 waste violations also slows down the legal process. Communities affected by pollution often do not know how to report the incident or do not have access to adequate complaint channels. Lack of socialization from the government and related authorities also plays a role in slowing down the handling of violations.*

*Although regulations are available, such as Law No. 32 of 2009 concerning Environmental Protection and Management, their implementation in the field has not been optimal.*

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### **Abstract**

Penelitian ini bertujuan untuk mengetahui bagaimana ketentuan hukum pelaksana dan pemanfaatan alih fungsi lahan hutan menjadi perkebunan yang berorientasi kepada kapitalistik. Penelitian ini menggunakan metode penelitian yuridis normatif dengan jenis pendekatan yaitu pendekatan perundang-undangan dan pendekatan konseptual. Bahan hukum yang digunakan yaitu bahan hukum primer, sekunder, dan tersier, diperoleh dengan melakukan studi kepustakaan. Hasil penelitian menunjukkan bahwa penegakan hukum terhadap pelanggaran terkait limbah B3 masih menghadapi berbagai kendala yang signifikan. Salah satu kendala utama adalah lemahnya pengawasan oleh otoritas yang bertanggung jawab, seperti Kementerian Lingkungan Hidup dan Kehutanan serta dinas terkait di tingkat daerah. Pengawasan yang tidak optimal seringkali disebabkan oleh terbatasnya sumber daya manusia dan teknologi yang mendukung proses pemantauan terhadap perusahaan atau industri yang menghasilkan limbah B3. Hal ini menyebabkan beberapa pelanggaran tidak terdeteksi atau tidak ditindaklanjuti dengan tepat.

Selain itu, keterbatasan sarana dan prasarana penegakan hukum juga menjadi faktor penghambat. Kurangnya laboratorium yang memadai untuk menguji sampel limbah, peralatan pemantauan kualitas lingkungan yang usang, serta minimnya anggaran untuk mendukung operasi pengawasan dan investigasi menyebabkan efektivitas penegakan hukum menjadi rendah. Penegak hukum seperti polisi, jaksa, dan hakim yang menangani kasus lingkungan sering kali tidak memiliki pengetahuan atau keahlian teknis yang cukup

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### **Corresponding Author:**

*Ikama Dewi Setia Triana  
Eti Mul Erowati Email:  
[trianadewi007@gmail.com](mailto:trianadewi007@gmail.com)*

### **DOI:**

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tentang dampak dan karakteristik limbah B3, sehingga proses penanganan kasus tidak berjalan maksimal.

Sanksi yang diberikan kepada pelaku pencemaran juga belum memberikan efek jera yang cukup. Dalam beberapa kasus, sanksi administratif atau denda yang dijatuhkan relatif ringan dibandingkan dengan kerusakan yang ditimbulkan terhadap lingkungan dan kesehatan masyarakat. Akibatnya, pelaku lebih memilih membayar denda daripada melakukan perbaikan terhadap sistem pengelolaan limbah mereka.

Di sisi lain, ketidaktahuan masyarakat mengenai prosedur pelaporan pelanggaran limbah B3 turut memperlambat proses hukum. Masyarakat yang terdampak oleh pencemaran sering kali tidak tahu bagaimana melaporkan kejadian tersebut atau tidak memiliki akses ke saluran pengaduan yang memadai. Kurangnya sosialisasi dari pemerintah dan otoritas terkait juga berperan dalam memperlambat penanganan pelanggaran.

Walaupun regulasi sudah tersedia, seperti Undang-Undang No. 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup, implementasinya di lapangan belum berjalan maksimal.

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## **INTRODUCTION**

Article 1 Paragraph 3 of the 1945 Constitution of the Republic of Indonesia states that "Indonesia is a country of law." This means that all aspects of life in the Unitary State of the Republic of Indonesia are regulated in detail based on applicable laws. These regulations have been regulated in the 1945 Constitution, which is binding, mandatory, and includes strict sanctions, both for the government as the state administrator and for every citizen. The 1945 Constitution is the basis and guideline for all affairs and hopes of the Indonesian nation.

Indonesia is known as an archipelagic country because it has many islands, and is also called a maritime country because its sea area is wider than its land area. Thus, Indonesia is rich in natural resources. This natural wealth is a very valuable asset for Indonesia because through the utilization of natural resources, this country can build itself well. Therefore, environmental conservation efforts are very important to maintain the sustainability of natural resources so that they remain clean and suitable for use.

A decent and healthy environment and residence for all Indonesian citizens has been promised in the constitution contained in Article 28H paragraph (1) <sup>1</sup>of the 1945 Constitution which states that "everyone has the right to live in prosperity physically and mentally, to live and have a good and healthy living environment and

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<sup>1</sup> Dias Rahmadanti dan Rahayu Subekti, 2022, penegakan hukum lingkungan melalui sanksi administratif terhadap pelanggaran limbah b3 di kota Surakarta, Jurnal Pendidikan Kewarganegaraan Undiksha Vol. 10 No. 2, Surakarta, hal 441

has the right to receive health services". Which means that all Indonesian citizens have the right to obtain a decent living environment and adequate health services. Related to the regulations in Article 28H paragraph 1, which means that the government is required to guarantee the maintenance of the environment and health services so that the constitution is realized. On the other hand, community participation is very much needed to always maintain and care for the environment, so that a healthy environment can last in the long term.

The economic growth of Indonesian society from year to year is increasing followed by population growth. This impact is increasingly felt on the environment, namely that humans tend to damage the environment in order to maintain their lives. The quality of the environment continues to decline, causing environmental degradation problems in people's lives. Environmental problems are complex and interesting problems to study in more depth because of the increasingly rampant environmental crisis<sup>2</sup>. The current global environmental crisis is at least caused by various things, namely wrong and failed policies, inefficient technology that even tends to be destructive, low political commitment, ideas, and ideologies that ultimately harm the environment; deviant actions and behavior from state actors who are 'lost', starting from transnational corporations to the spread of cultural patterns such as consumerism and individualism and individuals who are not properly guided. The background to the birth of Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH) is the increasing number of cases related to the environment which are increasingly concerning, one of which is related to the problem of B3 Waste pollution<sup>3</sup>

Over the past 25 years, the problem of hazardous material and toxic waste disposal has become increasingly crucial. Toxic waste is still being dumped into the environment by individuals or certain business entities, thus negatively impacting society and the ecosystem. Unprocessed waste will have a negative impact on the environment, especially if the waste is B3 waste. B3 waste itself is a byproduct of an activity in which, due to its type, concentration, and quantity, there are hazardous chemicals that can damage the environment. The increase in the amount of B3 waste certainly has an impact, one of which is on health. Breathing is one of the impacts of B3 waste on health because inhaling large amounts of smoke can be dangerous. Excessive amounts have the potential to irritate the lungs, nose, and throat, causing various neurological problems, including headaches, nausea, vomiting, loss of coordination, and taste. Acute concentration exposure can cause fainting to death.<sup>4</sup>In addition, other impacts can irritate the skin and eyes causing dermatitis. Likewise, digestion can also be affected by the accumulation of B3 waste in the digestive tract.<sup>5</sup>The application of the precautionary principle in B3 waste management is clearly regulated by law. The Environmental Protection and Management Law (UU PPLH) emphasizes that every individual or party that

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<sup>2</sup> Kim, S. W. (2013). Kebijakan Hukum Pidana Dalam Upaya Penegakan Hukum Lingkungan Hidup. *Jurnal Dinamika Hukum* Vol. 13 No. 3. Hlm. 415-427

<sup>3</sup> Elly Kristiani Purwendah, Agoes Djatmiko, & Elisabeth Pudyastiwi. (2023). PROBLEMATIKA PENEGAKAN HUKUM LINGKUNGAN DI INDONESIA. *Jurnal Pacta Sunt Servanda*, 4(1), 238-249

<sup>4</sup> Ginting, P. (2007). Sistem Pengelolaan Lingkungan dan Limbah Industri. Yrama Widya

<sup>5</sup> Ichtiakhiri, T. H., & Sudarmaji. (2015). Pengelolaan Limbah B3 dan Keluhan Kesehatan Pekerja di PT. Inka (Persero) Kota Madiun. *Jurnal Kesehatan Lingkungan*, 8(1), 118-127

produces B3 waste is responsible for managing it properly. In addition, the PPLH Law also stipulates that the implementation of B3 waste management must obtain approval from the authorities, namely the minister, governor, or regent/mayor. This provision is the legal basis that requires every B3 waste manager to obtain an official permit<sup>6</sup>.

Thus, criminal law enforcement related to B3 waste pollution must be carried out effectively. Based on this, this study will discuss in more depth the effectiveness of criminal law enforcement in cases of Hazardous and Toxic Materials (B3) waste pollution.

## **RESEARCH METHODS**

The research method used in this study is a type of normative legal research or known as doctrinal legal research, which is a process to find legal rules, and to answer legal problems or issues studied by reviewing library materials. This study uses a statutory approach and a conceptual approach. The statute approach to analyze or review regulations related to implementing legal provisions and the use of forest land conversion into plantations that are oriented towards capitalism. The conceptual approach to provide views and doctrines of legal science as a basis for analyzing problem solving. The legal material collection technique used consists of primary legal materials, secondary legal materials, and tertiary legal materials obtained by conducting a literature study consisting of legal material instruments that have a direct relationship to the effectiveness of criminal law enforcement in cases of Hazardous and Toxic Materials (B3) waste pollution.

## **RESULTS AND DISCUSSION**

### **Obstacles in Criminal Law Enforcement Against B3 Waste Pollution**

Criminal law regulations on environmental pollution in Indonesia are regulated in several laws, namely: A. Law Number 32 of 2009 concerning Environmental Protection and Management Law Number 32 of 2009 concerning Environmental Protection and Management (UU PPLH) is a law that regulates environmental protection and management. This law aims to protect a healthy and productive environment for human life and other living things. In this law, several things are regulated, namely: 1) Environmental management must be carried out sustainably to meet the needs of present and future generations 2) Everyone is obliged to protect the environment and avoid actions that can damage or disrupt the balance of the ecosystem 3) Every activity that has the potential to cause a negative impact on the environment must obtain an environmental permit from the authorized agency. 4) Every person or legal entity that carries out activities that can cause a negative impact on the environment must be responsible for the impacts caused 5) Law enforcement and sanctions for violations of the law must be carried out firmly and fairly. The PPLH Law also regulates B3 waste and stipulates that

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<sup>6</sup> Elly Kristiani Purwendah Eksistensi Pasal 59 dan Pasal 102 UU PPLH terhadap Pengelolaan Limbah B3 Pasca Putusan MK Nomor 18/PUU-XII/2014. (2024). *GERECHTIKEIT : Jurnal Riset Peradaban Hukum*, 1(1), 12-19

every person or legal entity that produces B3 waste is obliged to manage the waste in accordance with applicable provisions. B3 waste management must pay attention to technical, environmental, health, and work safety aspects

In addition, the Environmental Management Law also regulates the environmental management agency responsible for implementing environmental management policies. The agency is responsible for issuing environmental permits, monitoring and supervising activities that may have a negative impact on the environment, and taking action against violations of the Environmental Management Law. B. Law Number 23 of 1997 concerning Environmental Management Law Number 23 of 1997 concerning the Environment is a law that regulates environmental management. This law aims to maintain environmental sustainability, realize sustainable development, and improve the quality of human life. Some of the things regulated in this law are: 1) Environmental management through efforts to prevent environmental pollution and damage, as well as control and handling of environmental impacts caused by human activities. 2) Development and application of environmentally friendly technology<sup>7</sup>

Criminal Liability for Environmental Pollution Perpetrators as a Result of the environment in development activities. 3) Obligations of the government, society, and business actors to protect the environment. 4) Imposition of criminal and administrative sanctions for violators of environmental provisions. This law has been amended several times, including the latest amendment regulated in Law Number 32 of 2009 concerning Environmental Protection and Management . However, Law Number 23 of 1997 still has an important role in regulating environmental management in Indonesia. C. Law Number 4 of 1982 concerning Basic Provisions for Environmental Management Law Number 4 of 1982 concerning Supervision and Control of Water, Air and Land Pollution is a law that regulates the supervision and control of water, air and land pollution. This law aims to protect health, social interests, and the environment from the negative impacts of pollution. This law also stipulates the obligation for every person or legal entity that carries out activities that can cause water, air or land pollution to report these activities to the authorized agency and carry out obligations to prevent and overcome such pollution. The sanctions imposed for violations of this law are in the form of fines, temporary or permanent closures, and even imprisonment. It should be noted that Law Number 4 of 1982 is no longer in effect since the enactment of Law Number 32 of 2009 concerning Environmental Protection and Management. However, this law has an important role in the history of environmental regulation in Indonesia and is the basis for newer laws. The three laws regulate criminal acts against perpetrators of environmental pollution. In the PPLH Law, criminal acts against environmental pollution are regulated in Articles 88 to 96. Meanwhile, in the PLH Law, criminal acts against environmental pollution are regulated in Articles 69 to 84. Meanwhile, in Law 4/1982, criminal acts against environmental pollution are regulated in Articles 25 to 36. The criminal sanctions that can be imposed on perpetrators of environmental pollution include fines, imprisonment, and/or imprisonment. The

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<sup>7</sup> Purwendah, E.K., Rusito, & Periani, A. (2022). KEWAJIBAN MASYARAKAT DALAM PEMELIHARAAN KELESTARIAN LINGKUNGAN HIDUP MELALUI PENGELOLAAN SAMPAH BERBASIS MASYARAKAT. *Jurnal Locus Delicti*.

amount depends on the level of environmental damage caused by the polluter. Specifically, the criminal law regulations governing B3 waste are: a. Law Number 32 of 2009 concerning Environmental Protection and Management, Article 69 paragraph (1) which states that anyone who carries out actions that result in environmental pollution and/or damage can be subject to criminal sanctions. b. Law Number 23 of 1997 concerning Environmental Management, Article 38 which states that anyone who carries out actions that damage or pollute the environment can be subject to criminal sanctions.

Law Number 4 of 1982 concerning Basic Provisions on Animal, Fish, and Plant Quarantine, Article 31 which states that anyone who commits an act that violates the provisions on animal, fish, and plant quarantine, may be subject to criminal sanctions. d. Government Regulation Number 18 of 1999 concerning Management of Hazardous and Toxic Waste, Article 35 paragraph (1) which states that anyone who commits an act that damages or pollutes the environment due to the disposal of B3 waste, may be subject to criminal sanctions. e. Decree of the Minister of Environment Number Kepmen LH 4 of 1995 concerning Guidelines for Environmental Impact Assessment, Article 33 paragraph (2) which states that anyone who commits an act that results in environmental pollution, may be subject to criminal sanctions. Criminal sanctions that can be imposed on perpetrators of environmental pollution include fines, imprisonment, or even imprisonment. In addition, perpetrators of environmental pollution can also be subject to administrative sanctions in the form of payment of environmental restoration costs or revocation of business licenses. Hospitals are one of the sources of B3 waste in Indonesia. B3 waste produced by hospitals if not managed properly can have negative impacts on the environment and human health. Therefore, the Indonesian government has issued various regulations to regulate the management of B3 waste from hospitals. Some regulations that regulate the management of B3 waste from hospitals are: a. Law Number 18 of 2008 concerning Environmental Management b. Government Regulation Number 101 of 2014 concerning B3 Waste Management c. Regulation of the Minister of Health Number 75 of 2014 concerning Pharmaceutical Service Standards in Hospitals d. Decree of the Minister of Environment and Forestry Number SK.97/Menlhk/Setjen/Kum.1/10/2015 concerning Guidelines for B3 Waste Management in Hospitals

This study found that one of the main obstacles in enforcing criminal law related to B3 waste pollution is the weak supervision and action by the competent authorities. Although existing regulations, such as Law Number 32 of 2009 concerning Environmental Protection and Management, have provided a clear legal basis, implementation in the field still often encounters obstacles. Limited human resources and technology, especially in the process of monitoring and supervising B3 waste, are significant problems. The use of outdated equipment and limited laboratories for waste testing cause the process of collecting evidence of pollution to be slow and less than optimal.

In addition, the lack of technical knowledge among law enforcers also slows down the legal process. Many law enforcers do not yet have a deep understanding of B3 waste and the ecological impacts it causes. As a result, law enforcement is often unable to provide sanctions that are commensurate with the level of damage caused.

In some cases, the fines imposed do not provide a strong deterrent effect for perpetrators of pollution, so that violations tend to be repeated.

### **The Role of Management Permits in Ensuring Compliance of B3 Waste Managers**

The development of the world from time to time and the development of human civilization, has an impact on the increasing pollution and destruction of the environment due to human behavior. According to Law No. 32 of 2009 concerning Environmental Protection and Management, the influence of human behavior is divided into two, namely environmental pollution and environmental destruction. The definition of environmental pollution referred to in Article 1 Paragraph (14) of the UUPPLH stipulates several elements, namely: a) the entry or introduction of substances, energy, and/or other components into the environment, whether intentionally or not, which are dangerous and result in changes to the environmental order; b) the existence of human activities; c) resulting in a decrease in environmental quality and a reduction or inability to function the environment according to its intended use. Meanwhile, the definition of environmental destruction referred to in Article 1 Paragraph (17) stipulates its elements, namely: a) the existence of changes, either directly or indirectly, to the physical, chemical, and biological properties of the environment; b) the reduction or decline in the function of the environment in supporting life<sup>8</sup>

Hazardous and Toxic Materials (B3) waste management permits are an important element in safe and sustainable environmental management. B3 waste, which includes materials that have the potential to pollute the environment and endanger human health, requires careful handling in accordance with applicable regulations. Management permits serve as a legal instrument to ensure that companies or entities that produce, transport, store, and process B3 waste comply with standard procedures and strict safety protocols. Without adequate permits, risks to the environment and public health can increase significantly.

One of the main roles of a B3 waste management permit is to ensure compliance with regulatory provisions set by the government. Regulations regarding B3 waste management in Indonesia are regulated through several laws and government regulations, such as Law No. 32 of 2009 concerning Environmental Protection and Management and Government Regulation No. 101 of 2014 concerning Management of Hazardous and Toxic Waste. Through the issuance of permits, the government has a mechanism to monitor and control every stage in waste management, from identifying the type of waste, collection, transportation, temporary storage, processing, to final disposal. This licensing process also ensures that every B3 waste manager has adequate knowledge and technology to process the waste safely and responsibly.

In addition to being a control instrument, B3 waste management permits also function as a means of periodic evaluation of waste management carried out by

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<sup>8</sup> Genoveva Puspitasari Larasati. Purwendah, E.K, (2022). PENERAPAN PRINSIP PENCEMAR MEMBAYAR TERHADAP PENCEMARAN LIMBAH BAHAN BERBAHAYA DAN BERACUN (B3). *Jurnal Pacta Sunt Servanda*, 3(2), 183-193



companies or industries. In the process of submitting and renewing permits, B3 waste managers must report in detail on the systems and procedures used, and include an analysis of the impacts caused by waste management on the environment. This allows authorities to assess whether the management procedures implemented are still relevant and effective in reducing the risk of pollution. If any discrepancies or violations are found in waste management, the permit can be revoked or frozen, and sanctions can be imposed on the manager.

Thus, this management permit also functions as an effective monitoring tool, encouraging waste managers to remain compliant with the rules and standards set.

Not only that, B3 waste management permits also play a role in increasing transparency and accountability of waste managers. Every manager who has a permit is required to report waste management data periodically to the relevant agencies. This report includes information on the volume of waste produced, the processing methods used, and the results of the processing process. With this reporting obligation, waste managers are not only required to comply with operational standards, but are also responsible to the public and government for the impact of their activities on the environment. This transparency provides assurance to the public that waste management is carried out responsibly and without harm.

Furthermore, the B3 waste management licensing process encourages managers to adopt best technology and practices in waste management. In some cases, management permit requirements require the use of environmentally friendly technology and waste processing methods that comply with international standards. This encourages companies to continue to innovate in finding more efficient and safe waste management solutions. Thus, management permits not only serve as a control tool, but also as a driver for waste managers to continue to improve the quality of their operations and contributions to environmental protection.

Overall, the role of B3 waste management permits in ensuring waste management compliance is very significant. This permit not only ensures that waste managers comply with existing regulations, but also encourages the development of better and safer management practices. Through permits, the government has an effective mechanism to supervise, control, and evaluate B3 waste management so that negative impacts on the environment can be minimized. This role is very important in efforts to maintain the sustainability of the ecosystem and protect public health from the threat of hazardous waste.

## **CLOSING**

### **Conclusion**

Criminal law enforcement against Hazardous and Toxic Materials (B3) waste pollution has a crucial role in protecting the environment and public health. Although regulations have been set out in various regulations, such as Law No. 32 of 2009 concerning Environmental Protection and Management and Government Regulation No. 101 of 2014, violations related to B3 pollution still often occur. This is due to several factors, such as weak supervision, lack of strict sanctions, and minimal awareness and compliance from the industry.

Criminal law enforcement efforts in B3 waste pollution need to pay attention to preventive and repressive aspects. Preventively, education and supervision of

waste managers must be increased so that compliance with safe management standards is strengthened. Repressively, strict law enforcement, including the imposition of criminal sanctions and heavy fines, is an important step to provide a deterrent effect. However, in practice, the effectiveness of law enforcement still needs to be improved with the support of adequate facilities and infrastructure and good coordination between related agencies.

### **Suggestion**

1. **Strengthening Supervision and Periodic Inspections:** Supervision and inspection of B3 waste management must be tightened and carried out periodically by related agencies. The use of real-time monitoring technology can help identify potential pollution more quickly, so that preventive measures can be taken immediately. **Stricter and More Consistent Law Enforcement:** Criminal sanctions against violators of B3 waste pollution must be applied firmly and consistently, including high fines and imprisonment. This is important to provide a deterrent effect and show that environmental pollution will not be tolerated. **Increasing the Capacity of Law Enforcement Officers:** Law enforcement officers who handle B3 waste pollution cases need to be equipped with special training and knowledge about B3 waste and its impacts. This will ensure that case handling is effective and based on in-depth understanding.
2. **Collaboration Between Related Agencies:** Cooperation between various related agencies, such as the Ministry of Environment, the Police, and the Prosecutor's Office, must be improved. Good coordination will speed up the investigation and handling of B3 waste pollution cases, as well as reduce the risk of overlapping authority. **Socialization and Education to the Community and Industry:** Awareness and education to industry and the community need to be increased so that they understand the importance of B3 waste management in accordance with regulations. With increased knowledge, business actors will be more aware of their responsibilities in protecting the environment.

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