

Environmental Law Enforcement in Waste Management Based on Good Environmental Governance Principles in Denpasar City

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Abstract

Waste management is still an unresolved problem. This study aims to examine problems in waste management in the city of Denpasar. This research is empirical legal research with a statutory approach. Data was collected with primary and secondary data and then analyzed qualitatively. Several laws and regulations correlate with waste management in Indonesia, namely Law No. 18 of 2008 concerning Waste Protection and Management. Structure, substance, and culture are three legal systems combined to make up law enforcement in the waste management industry. Moreover, there are two perspectives on law enforcement in waste management: preventive law enforcement and repressive law enforcement. To increase public awareness of a good and healthy environment, law enforcement in waste management also embraces the principles of Good Environmental Governance of the federal and municipal governments. The study results show that the Denpasar City Government already has mentoring rules regarding waste management. However, waste management based on good environmental governance in Denpasar City has not been effective. This is because the community and the lack of public awareness of healthy living still commit many violations. Thus, the government still needs to improve and increase the regulation and supervision of waste management in Denpasar City.

Keywords: law enforcement; good environmental governance; waste management

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Introduction

The 1945 Constitution of the Republic of Indonesia enshrines the right of every citizen to a good and healthy (Cahyani, Wulandari & Putri, 2022; Fatmawati, Mustari, Haerana, Niswaty & Abdillah, 2022). This constitutional provision mandates the State, Government, and all stakeholders to safeguard and manage the environment in a manner that promotes sustainable development, ensuring that Indonesia's environment continues to sustain life for its people and other living beings. Garbage management has emerged as a critical and pressing issue that necessitates immediate attention from the City Government of Denpasar

Proper waste management is essential to prevent environmental pollution and its negative impacts on human health, aesthetics, and greenhouse gas emissions. Encouraging awareness and responsibility among individuals regarding waste management is crucial. Research indicates a growing awareness of the impacts of waste, particularly food waste, leading to positive environmental outcomes (Heller, Selke & Keoleian, 2018; Pappalardo, Cerroni, Nayga & Yang, 2020). Waste management infrastructure at the reduce, reuse, and recycle (3R) level plays a significant role in mitigating pollution (Kassem, Pecchi, Maag, Baratieri, Tester & Goldfarb, 2022).

In enforcing environmental law in waste management to create a quality environment that is clean,

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green, and environmentally friendly, a paradigm shift in waste management is crucial. One effective approach is to focus on waste reduction at the source through the implementation of the 3R movement - Reduce, Reuse, and Recycle. This strategy involves direct public involvement and aims to instill community independence in maintaining environmental cleanliness. By engaging in 3R activities, communities can develop principles of participation, independence, efficiency, environmental protection, and integration (Saptaputra, Bonafix & Araffanda, 2023).

Community participation plays a significant role in household waste management. Studies have shown that the success of waste management schemes is influenced by household characteristics and moral norms. Therefore, policymakers should consider these factors, especially in areas where waste management infrastructure is underdeveloped (Handayani, Gitaharie, Yussac & Rahmani, 2018). Despite the importance of community involvement, it is noted that good waste management practices are often lacking at the community level (Santoso, 2019).

Implementing the 3R approach not only contributes to environmental quality but also aids in climate change mitigation. Strengthening the role of waste banks and applying the 3R principles in urban areas can lead to improved waste management, reduced environmental risks such as flooding, and lower greenhouse gas emissions (Antriyandarti, 2023; Nursetyowati, 2023). Additionally, the establishment of waste banks post-pandemic in certain cities has been driven by government initiatives and environmental concerns, indicating a growing awareness of the need for sustainable waste management practices (Samadikun, 2023).

The problem that is often faced in handling urban waste, in addition to the low awareness of the community to carry out the 3R, is the problem of high operational costs and the increasing difficulty of getting proper space to be used as a waste processing location, both for temporary processing sites (TPS) and final processing sites (TPA).). The increase in the volume of waste is in direct line with the increase in population. This causes waste generation to increase in line with the increasing population growth in Denpasar City. In addition to the increase in waste volume due to population growth, empirical facts also show that the types of waste generated from people's daily lives are increasingly diverse as people's lives become more consumptive; the volume of inorganic waste is increasing along with the wasteful pattern of people's lives that continues to grow.

As for generation data details of waste in Denpasar City in the Year 2021 are outlined in Table 1.

Table 1. Denpasar city waste

No	Subdistrict	Rate Arise Rubbish (Kg/ person. day)	Resident (Thousand Soul)	Arise Rubbish Domestic (Tons/ Day)	Arise Non - Domestic Waste (Tons/ Day)	Total Generation Waste (Tons/Day)
1.	South Denpasar	0.96	217,485	229.66	39.08	268.74
2	East Denpasar	0.96	128,503	135.70	12.84	148.54
3	West Denpasar	0.96	207,325	218.94	23.60	242.54
4	North Denpasar	0.96	173,286	182.99	23.80	206.79
	Denpasar City	0.96	726,599	767,29	98.73	866.01

Source data: The 2021 RPJMD master plan report (Dinas Environment Life and Cleanliness of Denpasar City)

Based on Table 1, total waste generation in Denpasar City reached 866.01 tons/day, originating from 767.29 tons/day of domestic waste and 98.73 tons/day of non-domestic waste. The highest volume of waste generation was in the South Denpasar area, with 268.74 tonnes/day. This is because the population in South Denpasar sub-district is relatively denser than in other regions.

Based on the data above, the absolute waste problem must be handled jointly by involving all stakeholders: the government, non-governmental organizations, universities and the community. In this case, government policy is very supportive of the success and welfare of a region, not only in the field of administration and service to the community but in all areas related to the comfort of the community, including waste management in environmental cleanliness in the community (Winarsih, Candranegara & Mahardhika, 2019).

To deal with waste problems to create a quality environment that is clean, green and environmentally friendly, a paradigm shift in waste management must be carried out by reducing the volume of waste at the source by implementing waste reduction through the 3R movement (Reuse, Reuse and Recycle) with direct involvement by the community. There are a number of laws and regulations in Indonesia with a connection to or a direct bearing on waste management, including law number 32 of 2009 concerning the Protection and Management of the Environment, law number 32 of 2004 concerning Regional Government, which has been replaced by law number 23, 2014 concerning Regional Government, law number 18 of 2008 concerning Waste Management, and several regional regulations that have been established by local governments either directly or through regional laws.

The sanctions contained in the regulation, especially those concerning waste management, do not provide a deterrent effect for people who do not carry out waste management in an environmentally sound manner, so it is necessary to study the effectiveness of sanctions in law enforcement in waste management. By directing and requiring all facets of society, including government agencies, business/private entities, BUMN, markets, hospitals, and educational institutions, to carry out the waste reduction process through waste sorting and processing to create good governance, the Denpasar City Government seeks to ensure that waste management is carried out. Good environmental management in Denpasar City (Good Environmental Governance).

According to (Addahlawi, Mustaghfiroh, Ni'mah, Sundusiyah & Hidayatullah, 2019), Good Environmental Governance is a state management framework derived from relations with the people in managing the environment. Thus, it can be concluded that Good Environmental Governance is a variety of activities organized by the government while still paying attention to the sustainability and preservation of the environment, especially natural resources by involving all members of society.

Based on the description above, regarding waste management in Denpasar City, especially in realizing good environmental governance, it has not fully gone as expected, then problems immediately arise that must be investigated further regarding the efforts and measures that must be taken to realize effectiveness application of the rules by the purpose of the rules themselves. Thus the author is interested in analyzing Environmental Law Enforcement in Waste Management Based on the Principles of Good Environmental Governance in the City of Denpasar. At the same time, the legal issues include how the application of the principles of good environmental governance in waste management which is the responsibility of the Denpasar City Government and how effective the application of sanctions in waste management based on the principles of good environmental governance in Denpasar City.

Method

The type of research used is empirical legal research. Empirical legal research observes how the law operates or works in society. The impression is between what is ideally regulated in laws and regulations and the facts that occur in society, which are solely to give an overview of a phenomenon, and the focus of attention is the careful measurement of one or more dependent variables in a certain population group or a sample of a certain population group (Amirudin & Asikin, 2007). Secondary legal data sources are obtained indirectly, primarily from data documented in documents, books, reports, and articles, as well as previous research related to efforts to enforce environmental law by the Regional Government of Denpasar City in waste management. Primary legal data sources are obtained directly from the first source (Marzuki, 2011). Research usually has three types of data collection tools: library materials, observations and interviews (Amirudin & Asikin, 2004). Normative law research The location for this thesis research is the Denpasar City Environment and Sanitation Service, which is located at Jalan Majapahit number 6 Lumintang, Dauh Puri Kaja Village, North Denpasar District, and the

regional civil service police unit organization, Denpasar City, which is located at Jalan Amethyst I number 4, Sumerta Kaja Village, East Denpasar District. Analysis of legal materials used, namely processing and analysis of data in this study, is by qualitative analysis by selecting data whose quality can answer the problems posed and where the data obtained is processed into a series of words that are monographic or in the form of cases so that they cannot be organized into a classification structure. The processing process is divided into three stages, namely: first, data processing, second, organizing data, third, determining results. The qualitative research data can be analyzed, and a systematic and factual picture can be seen. Then the results of the analysis and interpretation, the authors conclude to answer these legal issues. The data analysis ends by suggesting what to do about the problem.

Results and Discussion

Source-based waste management begins with segregating waste at sources of waste generation, such as households. Separation of waste at the source of waste generation is the key to success in waste management to reduce the flow rate of waste to TPA. It can be said that minimizing the downstream waste supply (TPA) is largely determined by the success of the upstream waste handler (waste source). The success of upstream waste handlers is the key to the success of overall waste management.

Activities carried out upstream or at the source of waste are not limited to segregating or segregating waste but are continued with further waste processing activities into various products with economic value. The type of waste that cannot be processed and that results from processing at the waste source are referred to as residue, which will then be transported to be managed again at the TPA. Due to the limited land owned by households as a source of waste generation, it is impossible to process waste at the household level, so a wider space is needed for this. The space or place used to sort and process waste is called TPS3R.

In TPS3R, sorting and re-election activities will be carried out on household waste according to its type. Minimum separation is expected to be two types or groups of waste: organic and inorganic. Organic waste will be further processed into compost. In contrast, inorganic waste is further divided into waste that still has economic value (market value) and wastes with no economic value, called the residue.

Composting is one of the technologies that will process organic waste into compost, but it is also possible that there are other technological options. Any technology that will be used in TPS3R is left entirely up to the policy of the city government together with the TPS3R management with a record that the technology is operationally feasible both technically, economically and environmentally. Technically feasible means that the technology is inclusive, follows the available land area, does not require special skills and is easy to operate. Economically feasible means that the processed waste product has a market or can be sold so that the production process can continue and is environmentally feasible, meaning that the impact of waste processing activities does not pollute the surrounding environment.

An adequate legal basis is needed to fulfil the maximum and well-coordinated implementation of waste management. The success of the solid waste management system also needs to be supported by regulations involving the authority and responsibility of the management agency and community participation. Implementing these regulations needs to be accompanied by guidance, supervision and sanctions in enforcing them.

The legal aspect is needed to support the implementation of waste management programs. The legal aspect functions as a direction and encouragement so that people pay attention to the importance of waste management, starting from the waste source to the final processing stage. Only now, the city of Denpasar has a regional regulation on waste management. Local retribution regulations have been drafted but are still in the legalization process.

If it is related to Law No. 18 of 2008 concerning waste management, in Article 6, the Regional Government's duties in managing waste consist of the following:

- Growing and increasing public awareness of waste management
- Conduct research, development of waste reduction and handling technologies
- Facilitate, develop and implement efforts to reduce, handle and utilize waste
- Carry out waste management and facilitate the provision of waste management infrastructure and facilities
- Carry out waste management and facilitate the provision of waste management infrastructure and facilities
- Encouraging and facilitating the development of benefits from waste processing
- Facilitate the application of locally specific technologies developed in local communities to reduce and handle waste
- Coordinate between government agencies, the community and the business world so that there is integration in waste management

Judging from the completeness of regional regulations, the City of Denpasar in waste management needs to have at least 3 (three) types of regional regulations on the waste that should exist, namely:

- Perda on strengthening official villages/sub-districts and customary villages in resource-based waste management
- Perda on the levy tariff structure and service limits provided
- Perda on cleanliness, beauty, and city order or waste management.

In Denpasar City, many cases of waste disposal in rivers and vacant land exist. In this case, the Denpasar city government followed the act by imposing administrative and criminal sanctions. In Denpasar City Regional Regulation No. 3 of 2015 concerning Waste Management, it is emphasized that the mayor applies administrative sanctions to waste managers who violate the conditions set out in the licensing. Administrative sanctions as intended can be given in the form:

- Reprimand/warning;
- Coercion government city;
- Cost force; And
- Repeal cancellation licensing or recommendation, repeal/restriction licensing activity and/or effort.

In Denpasar, violations were found related to waste disposal into the river. Based on data from interviews with civil servant investigators at the Denpasar City Environmental Service, there is a quote from the criminal list decision number: 146/Pid.R2018/PN.Dps Denpasar District Court Class I A has decided several cases regarding waste disposal into rivers. One was the case with the defendant Wayan Gede Sumantara P, who disposed of chicken waste into the river. Bearing in mind Article 12 Paragraph 3 Jo Article 58 paragraph 2 Regional Regulation of Denpasar City No. 1 of 2015 regarding Public Order, states that the defendant Wayan Gede Sumantara P has been proven legally and convincingly guilty of committing a minor crime, namely throwing chicken meat waste into the river and imposing a sentence on the defendant therefore with a fine of Rp. 2,000,000 (two million rupiahs) with the provision that if the fine is not paid, it is replaced by imprisonment for 7 (seven) days.

The legal basis for imposing sanctions is Denpasar City Regional Regulation Number 1 of 2015 concerning Public Order, from now on referred to as Denpasar City Regulation Number 1

of 2015. In the provisions of Article 12 paragraph (3) Regional Regulation Number 1 of 2015 stipulates that "Everyone is prohibited from throwing waste on roads, green belts, city parks, rivers, canals/drainages, and other places that can cause pollution".

Sanctions regarding the disposal of chicken slaughter waste into rivers are regulated in Article 58 paragraph (2) of the Denpasar City Regional Regulation Number 1 of 2015, which stipulates that anyone who violates the provisions in Article 12 of this Regional Regulation is threatened with imprisonment for a maximum of 6 (six) months or a maximum fine of Rp. 50,000,000 (fifty million rupiahs) may be subject to other sanctions according to the applicable laws and regulations.

Based on the facts in the field, according to the minutes of inspection of minor crimes (attached) and there are still many people and business actors who throw garbage and their business waste to places where they shouldn't be without carrying out waste management so that it has an impact on overloading the (TPS) place Temporary waste storage in Denpasar City, according to Figure 1 one of the temporary waste storage sites in the West Denpasar District area and Figure 2 one of the temporary waste storage sites in the South Denpasar District area.

If not accompanied by a good waste management system planning, various industrial and technological activities that exist today will allow environmental pollution, both directly and indirectly, which can threaten the health and activities of the people of Denpasar City.



Figure 1. one of the temporary waste storage sites in the West Denpasar District area
Source: DLHK City of Denpasar



Figure 2. One of the temporary waste storage sites in the South Denpasar District area.
Source: DLHK City of Denpasar

Conclusion

Based on the discussion of the problems described in the previous chapters, a conclusion can be drawn that Denpasar City already has various regulations regarding waste management, so the effectiveness of enforcing environmental laws can be carried out preventively by involving the community in programs related to waste management. To raise public awareness of the importance of a good and healthy environment. Implementing waste management based on good environmental governance in Denpasar City has yet to be effective because many people and business actors still violate or do waste management inappropriately and pollute the environment. This needs to be followed up by the government by studying and conducting socialization with the community regarding waste management properly and correctly.

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