

Effectiveness of Government Accountability in Sustainable Development-Based Urban Waste Management (SDGs): Case Study of the Bantar Gebang Integrated Waste Management Site

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Abstrak

Pengelolaan sampah perkotaan di TPST Bantar Gebang menghadapi berbagai tantangan dalam mewujudkan pembangunan berkelanjutan sekaligus memenuhi tanggung jawab dari pemerintah. Penelitian ini bertujuan untuk menganalisis pemenuhan prinsip Sustainable Development Goals (SDGs) aspek lingkungan serta kendala dan implikasi hukum dalam pertanggungjawaban Pemerintah Provinsi DKI Jakarta. Hasil penelitian menemukan bahwa pemenuhan SDGs khususnya tujuan 11, 12, dan 13 belum optimal dikarenakan metode open dumping masih menjadi prioritas dalam proses pengelolaan sampah yang sebenarnya melanggar Undang-Undang Nomor 18 Tahun 2008. Hal ini secara tak langsung berakibat pada akumulasi 55 juta ton sampah, pencemaran lingkungan, dan longsor sampah yang menewaskan beberapa orang pada Maret 2026. Kendala utama dalam pengelolaan sampah yang optimal meliputi ambiguitas kewenangan lintas wilayah Jakarta-Bekasi, ketergantungan pada teknologi tidak ramah lingkungan, serta lemahnya penegakan hukum administratif. Implikasi hukum mencakup sanksi administratif yang tidak dipatuhi, potensi gugatan class action dan citizen lawsuit berdasarkan UU No. 32 Tahun 2009, serta penetapan tersangka mantan Kepala Dinas LH DKI Jakarta dalam ranah pidana. Dapat ditarik kesimpulan bahwasanya bahwa pertanggungjawaban pemerintah belum efektif dan diperlukan perbaikan sistem dan tata kelola mulai dari pengurangan sampah sumber, optimalisasi teknologi ramah lingkungan, serta penguatan koordinasi lintas daerah.

Kata Kunci: sampah perkotaan; TPST Bantar Gebang; Sustainable Development Goals (SDGs); pertanggungjawaban pemerintah; hukum lingkungan

Abstract

Urban waste management at the Bantar Gebang Integrated Waste Management Site (TPST) faces various challenges in achieving sustainable development while fulfilling government responsibilities. This study analyzes the fulfillment of the environmental dimensions of the Sustainable Development Goals (SDGs), together with the legal constraints and implications of the accountability of the Provincial Government of DKI Jakarta. The findings show that the fulfillment of the SDGs, particularly Goals 11, 12, and 13, remains suboptimal because open dumping continues to be prioritized in the waste-management process despite its prohibition under Law Number 18 of 2008. This condition has indirectly contributed to the accumulation of 55 million tons of waste, environmental pollution, and a waste landslide that killed several people in March 2026. The main obstacles to effective waste management include ambiguity in cross-jurisdictional authority between Jakarta and Bekasi, dependence on environmentally unfriendly technology, and weak administrative-law enforcement. The legal implications include non-compliance with administrative sanctions, the potential for class actions and citizen lawsuits under Law Number 32 of 2009, and the designation of the former Head of the DKI Jakarta Environmental Agency as a criminal suspect. The study concludes that government accountability remains ineffective and requires systemic and governance

improvements, including source-based waste reduction, optimization of environmentally friendly technology, and stronger interregional coordination.

Keywords: *urban waste; TPST Bantar Gebang; Sustainable Development Goals (SDGs); government accountability; environmental law.*

INTRODUCTION

Urban waste has become an increasingly complex global social problem alongside rapid urbanization in densely populated areas, growing consumption of single-use goods, and massive population growth. Municipal solid waste refers to waste generated by people in their daily activities and may originate from households, offices, factories, or schools. It includes plastic containers, paper, furniture, food waste, and electronic scrap.¹ Municipal solid waste can no longer be regarded merely as a technical issue; it is a multidimensional problem involving social, environmental, economic, and legal aspects. Diego's 2022 study shows that waste-management systems significantly affect environmental quality, public health, and a country's level of development.² Poor waste management may contaminate soil, water, and air and reduce people's quality of life.³ It can therefore generate serious consequences, including environmental pollution, greenhouse-gas emissions, and socio-ecological inequality.

The concept of sustainable development, as articulated by Gro Harlem Brundtland in the report *Our Common Future*, requires development to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.⁴ This principle later developed within the Sustainable Development Goals (SDGs), which emphasize the integration of environmental protection, economic growth, and social justice. In the context of waste management, the SDGs are reflected particularly in Goal 11 on sustainable cities, Goal 12 on responsible consumption and production, and Goal 13 on climate action.⁵ Waste management should therefore not focus solely on final disposal, but should adopt a systemic approach involving source reduction (waste minimization), recycling, and reuse within a circular-economy framework that emphasizes processing waste back into useful cycles.⁶ In practice, however, developing

¹ EVS.Institute, "Municipal Solid Waste: Understanding Hazardous and Non-Hazardous Waste," *evs.institute*, 2025, <https://evs.institute/environmental-biotechnology/municipal-solid-waste-hazardous-non-hazardous/>.

² Diego Gabriel Rossit and Sergio Nesmachnow, "Waste Bins Location Problem: A Review of Recent Advances in the Storage Stage of the Municipal Solid Waste Reverse Logistic Chain," 2022.

³ Alicya Rahmawati, Heni Dora Sinaga, and Rayi Kharisma Rajib, "Pengelolaan Sampah Di Jawa Tengah Melalui Implementasi Kebijakan Dalam Peraturan Daerah," *Jurnal Ilmiah Research Student* 1, no. 5 (2024): 2, <https://doi.org/https://doi.org/10.61722/jirs.v1i5.1366>.

⁴ United Nations, "Our Common Future," 1987.

⁵ Woimacorporation, "Global Waste Management Trends and UN's Sustainable Development Goals," *woimacorporation.com*, 2025, <https://www.woimacorporation.com/global-waste-management-trends-and-uns-sustainable-development-goals/>.

⁶ Agus Kristian, Tantry Widiyanarti, and Aulia Erlinnawati, "Waste Management through the 3R Program in Perspective Sociology of Environmental Communication," *Jurnal Ilmu Sosial Mamangan* 13, no. 2 (2024).

countries, including Indonesia, remain dependent on landfill methods that carry high ecological risks of soil, water, and air pollution.⁷

Jakarta, as a megacity, produces more than 7,500 tons of waste per day, placing intense pressure on the Bantar Gebang Integrated Waste Management Site (TPST), where the city's waste is concentrated. The 110-hectare site has contained approximately 39 million tons of waste piled to a height of around 40 meters. As the final processing and management site for waste from DKI Jakarta, TPST Bantar Gebang has faced continuing pressure on its effectiveness from the uninterrupted arrival of thousands of tons of municipal waste each day.⁸ Waste management at TPST Bantar Gebang is affected by various structural problems that allow waste to continue accumulating. One of these is capacity approaching its maximum limit, which creates the potential for a severe pollution crisis.⁹ In addition, controlled-landfill management has been insufficient to address pollution problems such as leachate, methane emissions, and health disturbances among surrounding communities.¹⁰ This inadequate management system contributed to a waste-mound landslide at TPST Bantar Gebang that killed several people and carried tons of waste into the Ciketing River in March 2026.¹¹ The tragedy represented the culmination of a series of management failures during the 37 years in which TPST Bantar Gebang had operated, even though its designed operational life was only 17 years. The open-dumping method, which should have been discontinued no later than five years after Law Number 18 of 2008 on Waste Management was enacted, continued to be used.

From the perspective of environmental law, this condition cannot be separated from the state's failure to fulfill its obligation to guarantee the right to a good and healthy environment.¹² Within the framework of state responsibility, the government should be accountable for ensuring that environmental policies and management do not harm the public.¹³ Normatively, Indonesia already has a legal framework for waste management, including Law Number 18 of 2008 on Waste Management and Law Number 32 of 2009 on Environmental Protection and

⁷ Nur Ilman Ilyas, "Dampak Pembuangan Sampah Terbuka (Open Dumping) Terhadap Kualitas Udara," *Jurnal Ilmiah Multidisiplin* 2, no. 2 (2024): 647–56.

⁸ Benny Tuahta Bangun et al., "Analisis Ketahanan Energi Pembangkit Listrik Tenaga Sampah (PLTSA) Metode Landfill Dan Thermal Di Tempat Pembuangan Sampah Terpadu (TPST) Bantar Gebang," *Lektrokom : Jurnal Ilmiah Program Studi Teknik Elektro* 2 (2019).

⁹ Adi Darmawan, Tri Edhi Budhi Soesilo, and Sri Wahyono, "Model Optimasi Pengelolaan Sampah Di TPA (Suatu Studi Di Tempat Pengolahan Sampah Terpadu Bantargebang)," *JURNAL PENDIDIKAN LINGKUNGAN DAN PEMBANGUNAN BERKELANJUTAN* 21, no. 02 (2020), <https://doi.org/https://doi.org/10.21009/PLPB.212.02>.

¹⁰ Ismail Rimi Abubakar et al., "Environmental Sustainability Impacts of Solid Waste Management Practices in the Global South," *International Journal of Environmental Research and Public Health* 19 (2022): 1–26.

¹¹ Nurpini Aulia Rapika and Ambaranie Nadia Kemala Movanita, "7 Tewas Dan 6 Selamat, Ini Daftar Korban Sampah Longsor TPST Bantargebang," *megapolitan.kompas.com*, 2026, <https://megapolitan.kompas.com/read/2026/03/10/08250271/7-tewas-dan-6-selamat-ini-daftar-korban-sampah-longsor-tpst-bantargebang?page=2>.

¹² Rena Zulfaidah and Utang Rosidin, "Pengujian Konstitusionalitas Hak Atas Lingkungan Hidup Yang Baik Dalam Kasus Pencemaran Lintas Batas: Telaah Terhadap Prinsip Kedaulatan Negara," *ALADALAH: Jurnal Politik, Sosial, Hukum Dan Humaniora* 2, no. 1 (n.d.): 213–26, <https://doi.org/https://doi.org/10.59246/aladalah.v2i4>.

¹³ Fahmi. Sudi, "Asas Tanggung Jawab Negara Sebagai Dasar Pelaksanaan Perlindungan Dan Pengelolaan Lingkungan Hidup," *Jurnal Hukum* 18, no. 2 (2011): 212–28.

Management.¹⁴ In practice, however, implementation has remained suboptimal. Under the theory of good environmental governance, government environmental policy should satisfy the principles of accountability, transparency, public participation, and sustainability.¹⁵ Failures in waste management may therefore produce administrative, civil, and even criminal legal consequences where the resulting damage causes extensive harm to the environment and society.

Accordingly, waste management at TPST Bantar Gebang lies at the intersection of sustainable-development demands and the government's legal obligations. On the one hand, SDG principles are intended to be integrated extensively into waste management, including through waste-to-energy utilization and the promotion of the 3R approach.¹⁶ On the other hand, technical, governmental, institutional, and regulatory constraints continue to hinder their implementation in practice.

Accordingly, this article addresses two related questions. First, to what extent are sustainable-development principles (SDGs) fulfilled in the environmental dimension of waste management at TPS Bantar Gebang? Second, what constraints and legal implications arise in the implementation of the Jakarta Government's accountability for the management of TPS Bantar Gebang?

RESEARCH METHOD

This article employs a literature-review approach. A literature review is a research method focused on collecting and examining relevant scholarly sources in order to obtain an in-depth understanding of a research problem.¹⁷ The method involves searching for, selecting, and examining relevant literature, including books, scholarly articles, legislation, government regulations, regional regulations, research reports, and online materials related to the research topic. The research process therefore includes the search, selection, and analysis of literature used to support the study's objectives and to draw conclusions from the reviewed sources. All collected data and information are examined comprehensively to identify aspects related to the research object. The findings are then arranged systematically by connecting insights from the literature so as to develop a deeper understanding of the subject under examination.

RESULTS AND DISCUSSION

Fulfillment of Sustainable Development Principles (SDGs) in the Environmental Dimension of Waste Management at TPS Bantar Gebang

The United Nations established the Sustainable Development Goals as a global development agenda in 2015 to achieve sustainable development by 2030 while

¹⁴ Zorya Kanoubie Attar Bakhri, "Permasalahan Normatif Pengelolaan Sampah Perkotaan Di TPST Bantar Gebang Dalam Menjamin Hak Atas Lingkungan Hidup Yang Baik Dan Sehat," *Advance in Education Journal* 2, no. 3 (2025): 2309–17.

¹⁵ Zevanya Praja Syaharani, "Sinkronisasi Prinsip Good Environmental Governance Dalam Kebijakan Green Building: Studi Perbandingan Jakarta Dan Surabaya," *Media Hukum Indonesia (MHI)* 3, no. 4 (2025).

¹⁶ Priska Aulia Anggraeni, Lutfi Uzaimah, and Rayi Kharisma Rajib, "Implementasi Hukum Lingkungan Dalam Pengelolaan Sampah Pasca Banjir Untuk Pemulihan Lingkungan Yang Berkelanjutan," *Jurnal Ilmiah Wahana Pendidikan* 10, no. 24 (2024): 387.

¹⁷ Gadis Fransiska Apriliana Sari, Devi Yolanda, and Rayi Kharisma Rajib, "KRISIS AIR MENANGANI PENYEDIAAN AIR BERSIH DI DUNIA YANG SEMAKIN KEKURANGAN SUMBER DAYA," *Jurnal Ilmiah Research Student* 1, no. 5 (2024): 334–41.

taking economic, social, and environmental dimensions into account. The SDGs call on every country to reduce significantly the amount of waste generated through prevention, reduction, recycling, and reuse in order to establish sustainable production and consumption patterns by 2030.¹⁸ The central concept of the SDGs is sustainable development: development that meets the needs of the present generation without reducing the ability of future generations to meet their own needs.¹⁹ This study focuses on SDG 11 concerning sustainable cities and settlements, SDG 12 concerning responsible consumption and production, and SDG 13 concerning climate action, all of which are directly related to waste management and environmental concerns. Through these three goals, waste management is directed not only toward final disposal but also toward waste reduction, pollution-impact control, and the implementation of sustainable environmental management.

Environmental law comprises the norms and statutory provisions established to protect the environment from damage, regulate the sustainable use of natural resources, and minimize the negative impacts of human activity.²⁰ In addition to the sustainable-development principles embodied in the SDGs, waste management in Indonesia is regulated by Law Number 18 of 2008 on Waste Management. This law provides the legal basis for government action in environmentally sound and sustainable waste management. It requires the government to ensure proper and environmentally responsible waste management, including systematic, comprehensive, and continuous waste reduction and handling. The government is also responsible for providing waste-management facilities, controlling environmental impacts, and increasing the use of management methods that are safe for both the environment and public health.

TPST Bantar Gebang is the largest waste-management site in Indonesia and has served as the principal disposal site for waste from DKI Jakarta since 1989.²¹ It receives all types of waste, including organic waste, which is readily degradable, and inorganic waste, which requires special handling.²² As population and urban activity have increased, the amount of waste entering TPST Bantar Gebang has continued to grow each year. According to data from the DKI Jakarta Environmental Agency, the average amount of waste sent to TPST Bantar Gebang in 2025 reached approximately 7,354 tons per day, or about 2.68 million per year. The accumulated

¹⁸ Anggraeni, Uzaimah, and Rajib, "Implementasi Hukum Lingkungan Dalam Pengelolaan Sampah Pasca Banjir Untuk Pemulihan Lingkungan Yang Berkelanjutan."

¹⁹ M Ferdi Septianda, "Strategi Pembangunan Ekonomi Melalui Pertambangan Timah Di Pulau Singkep Dilihat Dari Konsep Sustainable Development Goals (SDGs)," *Jurnal Archipelago* 2, no. 2 (2023): 147–56.

²⁰ Zerlinda Mendy Mahardhika, Ivana Mirella Hapsari, and Rayi Kharisma Rajib, "URGENSI REFORMASI HUKUM LINGKUNGAN TERHADAP PERUBAHAN IKLIM DI INDONESIA," *Jurnal Kebijakan Pembangunan* 19, no. 2 (2024): 236, <https://doi.org/DOI.10.47441/jkp.v19i2.376>.

²¹ Tifani, "Sejarah TPST Bantargebang Dari Bekas Galian Tanah Jadi Gunung Sampah," *rmol.id*, 2026, <https://rmol.id/nusantara/read/2026/03/11/700269/sejarah-tpst-bantargebang-dari-bekas-galian-tanah-jadi-gunungan-sampah>.

²² Farida Hesti Pratiwi, Dianita Nurul Islami, and Rayi Kharisma Rajib, "Strategi Pengendalian Sampah Plastik Guna Mendukung Kelestarian Hidup Di Kota Semarang Ditinjau Dari Perwal No. 27 Tahun 2019 Tentang Pengendalian Penggunaan Plastik," *Jurnal Ilmiah Wahana Pendidikan* 10, no. 24.2 (2024): 418–28, <https://doi.org/>: <https://jurnal.peneliti.net/index.php/JIWP/article/view/9328>.

waste at the site was estimated to have exceeded 55 million tons.²³ This high volume demonstrates that waste management at TPST Bantar Gebang continues to face serious difficulties, particularly because the system remains dominated by landfilling. Waste management should instead prioritize procedures that safeguard long-term environmental sustainability. Presidential Regulation Number 59 of 2017 on the Implementation of the Sustainable Development Goals contains a range of indicators related to sustainable waste and refuse management. Under this regulation, waste management is directed toward the 3R approach (reduce, reuse, recycle) as a means of reducing waste accumulation. The regulation also emphasizes prevention, reduction, recycling, and reuse as support for sustainable development and encourages companies, particularly large and transnational companies, to implement sustainable practices in their operations.²⁴

In practice, most waste entering TPST Bantar Gebang still ends up accumulating in final-disposal zones, while waste processing based on the 3R principle has not been implemented optimally. As a result, waste mounds have continued to rise, reaching approximately 40-50 meters in several zones.²⁵ The continued dominance of landfilling is considered not fully consistent with the sustainable-development principles of the SDGs, particularly SDG 11, SDG 12, and SDG 3, which emphasize sustainable environmental management and the reduction of pollution impacts. A professor of chemical engineering at Universitas Gadjah Mada has likewise assessed that the waste-management system at TPST Bantar Gebang remains oriented toward final disposal rather than processing and source-based waste reduction.²⁶

In addition to the growing volume of waste, conditions at TPST Bantar Gebang create a range of adverse environmental impacts. Large-scale waste accumulation can generate methane gas that may pollute the air and increase the risks of fire and waste landslides, as occurred recently. On Sunday, 8 March 2026, a landslide involving an approximately 50-meter-high waste mound occurred in Zone IV of TPST Bantar Gebang, causing four deaths and damage to operational facilities.²⁷ The incident indicates that the site's capacity has reached a critical condition under the continuing burden of increasing waste volumes.

Environmental pollution in the form of air, water, and soil contamination from plastic waste, chemical waste, and other pollutants threatens human health and long-term environmental sustainability. Pollution is also caused by leachate from

²³ Rinjani Meisa Hayashi, "Sampah Bantargebang Di 2025 Capai 55 Juta Ton: 43% Sampah Makanan, 28% Plastik," *kumparan.com*, 2024, <https://kumparan.com/kumparannews/sampah-bantargebang-di-2025-capai-55-juta-ton-43-sampah-makanan-28-plastik-26yYk2FFpyu/1?>

²⁴ Rahmawati, Sinaga, and Rajib, "Pengelolaan Sampah Di Jawa Tengah Melalui Implementasi Kebijakan Dalam Peraturan Daerah."

²⁵ Luthfi Maulana Adhari et al., "Indonesia Darurat Sampah: Pemulung Terkubur Gunung Sampah Di Bantar Gebang," *konde.co*, 2026, <https://www.konde.co/2026/01/indonesia-darurat-sampah-pemulung-terkubur-gunungan-sampah-di-bantar-gebang/?>

²⁶ Triya Andriyani, "Tragedi Bantargebang, Alarm Perubahan Sistem Pengelolaan Sampah," *ugm.ac.id*, 2026, <https://ugm.ac.id/id/berita/tragedi-bantargebang-alarm-perubahan-sistem-pengelolaan-sampah>.

²⁷ Yulia Suryanti, "Bantar Gebang Longsor Lagi, Menteri LH: Kita Harus Selesaikan Akar Masalah Sampah Jakarta Agar Tak Ada Lagi Korban," *kemenlh.go.id*, 2026, <https://kemenlh.go.id/news/detail/bantar-gebang-longsor-lagi-menteri-lh-kita-harus-selesaikan-akar-masalah-sampah-jakarta-agar-tak-ada-lagi-korban?>

waste piles that contaminates soil and water sources, further degrading environmental quality.²⁸ One study reports that such pollution affects not only areas immediately surrounding TPST Bantar Gebang but has also extended to nearby river flows.²⁹ Communities around the site face health threats including respiratory disorders, skin diseases, and a decline in quality of life caused by odor and pollution from accumulated waste. Although the government has begun developing waste-processing technologies such as Refuse Derived Fuel (RDF) and plans for waste-to-energy power generation (PLTSa), existing processing capacity remains unable to keep pace with the amount of waste entering the site each day. Data from the DKI Jakarta Environmental Agency show that RDF processing capacity at TPST Bantar Gebang remains limited compared with daily waste volumes reaching thousands of tons.³⁰

Assessment of the fulfillment of sustainable-development principles, particularly those reflected in the SDGs, requires a comparison between normative indicators and actual conditions at TPST Bantar Gebang. With respect to waste reduction, SDG 12 emphasizes reducing waste generation through the 3R approach. In practice, however, management at TPST Bantar Gebang remains focused primarily on the downstream stage of landfilling rather than source-based reduction. The continuing rise in daily waste volumes demonstrates that the policies applied remain reactive and end-of-pipe in character rather than preventive as required by sustainable-development principles.

From the perspective of environmental protection, the SDGs require waste management capable of minimizing air, water, and soil pollution. Actual conditions, however, show that large-scale landfilling continues to produce environmental impacts, including methane emissions, leachate-related water contamination, and declining air quality around the site. These conditions generate broad environmental degradation affecting public health, from increased disease risks to declining biodiversity and disruption of food chains.³¹ This indicates that environmental-impact control has not been fully effective and remains inconsistent with the environmental-protection principles of sustainable development.

From a technological perspective, sustainable development emphasizes the use of environmentally friendly technology in waste management. Although measures have been introduced through technologies such as Refuse Derived Fuel

²⁸ Herjuno Putro et al., "Melangkah Menuju Lingkungan Yang Berkelanjutan: Tantangan Dan Solusi Untuk Masa Depan Bumi," *Jurnal Multidisiplin Ilmu Akademik* 1, no. 3 (2024): 113, <https://doi.org/https://doi.org/10.61722/jmia.v1i3.1368>.

²⁹ Shabiika Juniar Khansa, Kusuma Diah Tantri, and Desy Safitri, "Ancaman Keselamatan Dan Kenyamanan Lingkungan Hidup Di Sekitar Area Pembuangan Sampah: Studi Kasus TPST Bantar Gebang," *Jurnal Ekologi, Masyarakat Dan Sains* 5, no. 1 (2024): 93–99, <https://doi.org/https://doi.org/10.55448/ems>.

³⁰ lingkungan hidup Jakarta, "Pasca Longsor TPST Bantargebang, RDF Plant Rorotan Dioperasikan Bertahap Untuk Jaga Stabilitas Pengelolaan Sampah Jakarta," lingkunganhidup.jakarta.go.id, 2026, <https://lingkunganhidup.jakarta.go.id/detail-artikel/pasca-longsor-tpst-bantargebang-rdf-plant-rorotan-dioperasikan-bertahap-untuk-jaga-stabilitas-pengelolaan-sampah-jakarta>?

³¹ Wismu Bagus Prayoga, Nur Afni Manullang, and Rayi Kharisma Rajib, "Kesehatan Masyarakat Dalam Kerusakan Lingkungan :Upaya Mengatasi Polusi Dalam Kerusakan Lingkungan Dan Keberagam Hayati Di Jakarta," *Jurnal Ilmiah Wahana Pendidikan* 10, no. 24.2 (2024): 810–17, <https://doi.org/https://jurnal.peneliti.net/index.php/JIWP/article/view/9306>.

(RDF) and planned waste-to-energy development, their implementation remains limited and has not been able to offset the high volume of daily waste. These technologies therefore have not yet become the principal solution and continue to serve only a supporting role within a system still dominated by landfilling.

On the basis of these three dimensions, fulfillment of sustainable-development principles in waste management at TPST Bantar Gebang remains partial and suboptimal. The divergence between SDG indicators and empirical conditions reveals a gap between norms and implementation. Systemic improvement is required not only downstream but also upstream. Strengthening source-based waste reduction is crucial to reducing the burden on TPST Bantar Gebang significantly. At the same time, more efficient and environmentally friendly waste-processing technology must be optimized to reduce dependence on landfilling. Without fundamental change in the waste-management system, comprehensive realization of sustainable-development principles will remain difficult.

Constraints and Legal Implications in the Implementation of the Jakarta Government's Accountability for the Management of TPS Bantar Gebang

The interaction of institutional arrangements, environmental-management techniques, and the effectiveness of law enforcement creates various constraints and legal implications for the accountability of the Provincial Government of DKI Jakarta in managing waste at TPST Bantar Gebang. The environment is fundamentally a space inhabited by all living beings on Earth, particularly humans.³² As Philippe Sands and Jacqueline Peel explain in *Principles of International Environmental Law*, state responsibility is not limited to ensuring formal compliance with regulations but also encompasses the obligation to prevent environmental harm in order to maintain ecological sustainability in public-impact policies.³³

A principal obstacle in the management of TPST Bantar Gebang is the cross-jurisdictional nature of its institutional structure. Administratively, the site is located within the City of Bekasi, while the waste deposited there originates from Jakarta and its management is carried out by a Technical Implementation Unit under the DKI Jakarta Environmental Agency.³⁴ A statement by the Governor of West Java, Dedi Mulyadi, that management of TPST Bantar Gebang falls within the authority of the Bekasi City Government together with the DKI Jakarta Provincial Government, while the overall authority rests with the Mayor of Bekasi, adds ambiguity and further complicates the issue.³⁵ Although Government Regulation Number 27 of 2020 on Waste Management provides a legal framework for interregional cooperation on waste issues, the continued occurrence of incidents indicates that

³² Aprilia Wahidatul Hasanah, Anggita Oktaviana, and Rayi Kharisma Rajib, "ANALISIS DAMPAK PENGESAHAN UNDANG-UNDANG NOMOR 6 TAHUN 2023 TENTANG CIPTA KERJA TERHADAP PERMASALAHAN LINGKUNGAN BIDANG PERTAMBANGAN DI KALIMANTAN," *Jurnal Multidisiplin Ilmu Akademik* 1, no. 3 (2024): 288–98.

³³ Philippe Sands et al., *Principles of International Environmental Law* (Cambridge University Press, 2018).

³⁴ PAI Dheevanadea, "Konflik Antara Pemerintah Provinsi DKI Jakarta Dan Pemerintah Kota Bekasi Dalam Pengelolaan Sampah Bantar Gebang Tahun 2015-2016," 2017.

³⁵ Dimas Rafi, "TPST Bantar Gebang Longsor, Dedi Mulyadi Soroti Peran Dan Wewenang Wali Kota Bekasi," *disway.id*, 2026, <https://disway.id/read/934634/tpst-bantar-gebang-longsor-dedi-mulyadi-soroti-peran-dan-wewenang-wali-kota-bekasi>.

coordination has not operated effectively. Jie Yu's study shows that cross-boundary governance models often encounter coordination and accountability problems that ultimately weaken the effectiveness of environmental-policy implementation.³⁶ Other studies of local-government responsibility for urban waste management in different regions similarly identify gaps between regulation and implementation, showing that local governments may possess clear normative obligations and rules while implementation is hindered by inadequate cross-sectoral coordination and public participation.³⁷

Another urgent structural obstacle is the continued use of open dumping in waste management since TPST Bantar Gebang was established in 1989.³⁸ Law Number 18 of 2008 on Waste Management prohibits open dumping and required the method to be discontinued no later than five years after the law entered into force. In practice, open dumping continued at TPST Bantar Gebang, resulting in a prolonged violation without meaningful enforcement. The continuing daily increase in waste without adequate management has forced the site to remain in operation even though its ideal service life was only 17 years. It has now operated for 37 years with a waste volume of approximately 80 million tons. Although TPST Bantar Gebang has gradually begun adopting sanitary-landfill methods that are theoretically more environmentally friendly than open dumping, this system still does not fully embody sustainable-development principles.³⁹ Dependence on landfills can also increase greenhouse-gas emissions, particularly methane, which has a substantially higher global-warming potential than carbon dioxide.⁴⁰ This demonstrates the gap between policies that normatively adopt the SDGs and implementation that remains end-of-pipe in character.

From a law-enforcement perspective, the principal constraint is weak implementation of existing legal instruments. Indonesia already has a comparatively strong legal framework through Law Number 23 of 1997 on Environmental Management, subsequently updated by Law Number 32 of 2009 on Environmental Protection and Management.⁴¹ These laws regulate various pollution-control instruments, including environmental-quality standards and administrative sanctions.⁴² The problem in developing countries, however, lies not

³⁶ Jie Yu and Chao Ye, "A New Conceptual Framework and Case Analysis of Rural Environmental Cross-Boundary Governance in Megacities of China," *Habitat International* 156 (2025): 103258, <https://doi.org/https://doi.org/10.1016/j.habitatint.2024.103258>.

³⁷ Ni Nyoman Kartika Yanti, "ANALISIS KEBIJAKAN PUBLIK DALAM PENGELOLAAN SAMPAH PERKOTAAN DI INDONESIA: STUDI LITERATUR TENTANG EFEKTIVITAS IMPLEMENTASI DAN TANTANGAN," *Locus Majalah Ilmiah FIA_Unipas* 18, no. 1 (2026): 100–120.

³⁸ Fakta, "Longsor Bantar Gebang Bukti Kegagalan Pengelolaan Sampah," [fakta.or.id](https://fakta.or.id/2026/03/09/longsor-bantar-gebang-bukti-kegagalan-pengelolaan-sampah/), 2026, <https://fakta.or.id/2026/03/09/longsor-bantar-gebang-bukti-kegagalan-pengelolaan-sampah/>.

³⁹ Pariwusiana Anwar et al., "Pengelolaan TPA Bantar Gebang Dalam Perspektif Hukum Lingkungan: Penerapan Prinsip Perlindungan Dan Penegakan Hukum Lingkungan Hidup," *Media Hukum Indonesia (MHI)* 4, no. 1 (2025): 1025–36.

⁴⁰ Heijo Scharff et al., "The Impact of Landfill Management Approaches on Methane Emissions," *Waste Management & Research* 2024 42, no. 11 (2023): 1052–64.

⁴¹ Najwa Rizkiana Hanum, Mitha Widyaningsih, and Rayi Kharisma Rajib, "Implikasi Penegakan Hukum Lingkungan Upaya Mewujudkan Pembangunan Berkelanjutan (Studi Kasus Kebakaran Hutan)," *Jurnal Ilmiah Wahana Pendidikan* 10, no. 24 (2024): 223–34, <https://doi.org/https://jurnal.peneliti.net/index.php/JIWP/article/view/9324>.

⁴² A'an Efendi, "INSTRUMEN HUKUM LINGKUNGAN SEBAGAI SARANA PENCEGAHAN PENCEMARAN LINGKUNGAN," n.d., 1–15.

merely in the absence of regulation but in weak enforcement. Insufficient supervision of pollution, leachate management, and gas emissions demonstrates that the government's supervisory function has not operated optimally as a component of administrative accountability.

The legal implications may be examined through three dimensions of government accountability: administrative, civil, and criminal.⁴³ Administratively, the government is required to ensure that waste management complies with applicable environmental standards. It also has authority to impose administrative sanctions ranging from written warnings and government coercive measures to suspension and revocation of permits.⁴⁴ Nevertheless, violations remain evident in the management of TPST Bantar Gebang. Although the Ministry of Environment imposed a government-coercion sanction in December 2024 for regulatory non-compliance and conducted further supervision in April and May 2025, the results showed that the operator had not fulfilled the stipulated obligations. The Ministry also required an environmental audit, yet no significant improvement in waste management at the site had occurred by the time the investigation proceeded.⁴⁵

In civil law enforcement, communities affected by pollution may pursue either a class action or a citizen lawsuit.⁴⁶ Affected communities may use a representative class-action mechanism to claim compensation under Articles 91 and 92 of Law Number 32 of 2009 on Environmental Protection and Management.⁴⁷ People suffering material losses from air, water, or soil pollution and associated illnesses may sue the government and seek material compensation. Citizens who are not directly affected may also pursue non-compensatory claims demanding stronger government supervision and firmer policymaking through the citizen-lawsuit mechanism. A citizen lawsuit gives citizens standing to sue the government or public officials alleged to have neglected their obligations or violated public rights.⁴⁸ In Indonesian environmental law, Article 88 of Law Number 32 of 2009 regulates strict liability, a principle of responsibility that does not require the claimant to prove fault as a basis for compensation for activities that create serious threats to the environment. The source article further states that strict liability in Indonesia remains limited to compensation obligations in civil litigation and has not been

⁴³ Nadia Sheila Majid, Rustiyah Setyaningsih, and Rayi Kharisma Rajib, "PENYELESAIAN SENGKETA LINGKUNGAN DITINJAU DARI HUKUM PERDATA MELALUI GUGATAN CLASS ACTION," *Jurnal Multidisiplin Ilmu Akademik* 1, no. 3 (2024), <https://doi.org/10.61722/jmia.v1i3.1414>.

⁴⁴ Qinthara Nur Faza, Rezya Apriliana Nylam Fitriani, and Rayi Kharisma Rajib, "Penegakan Hukum Terhadap Kasus Pencemaran PT. Greenfields Di Blitar Jawa Tengah," *Jurnal Multidisiplin Ilmu Akademik* 1, no. 3 (2024), <https://doi.org/10.61722/jmia.v1i3.1372>.

⁴⁵ Ryan Suryadi, "Setahun Dibina Tak Berubah, Kasus Bantargebang Berujung Pidana," *rri.co.id*, 2026, <https://rri.co.id/nasional/2351856/setahun-dibina-tak-berubah-kasus-bantargebang-berujung-pidana>.

⁴⁶ Humaira Khorunnisa, Shafa Amalia Choirinnisa, and Raden Muhammad Arvy Ilyasa, "QUO VADIS: PENERAPAN CITIZEN LAWSUIT SEBAGAI UPAYA PERLINDUNGAN TERHADAP LINGKUNGAN HIDUP," *LITRA: Jurnal Hukum Lingkungan, Tata Ruang, Dan Agraria* 1, no. 1 (2021), <https://doi.org/10.23920/litra.v1i1.587>.

⁴⁷ Muzakkir Abubakar, "HAK MENGAJUKAN GUGATAN DALAM SENGKETA LINGKUNGAN HIDUP," *Kanun Jurnal Ilmu Hukum* 21, no. 1 (2019).

⁴⁸ Iblam, "Konsep Dan Penerapan Citizen Lawsuit Di Indonesia," *iblam.ac.id*, 2024, <https://iblam.ac.id/2024/02/09/konsep-dan-penerapan-citizen-lawsuit-di-indonesia/>.

effectively applied in large-scale environmental-pollution cases, thereby constraining the restoration of the rights of affected communities.⁴⁹

Criminal-law implications arise where conduct exceeds legal limits and produces harmful consequences for others. A concrete example at TPST Bantar Gebang is the designation of the former Head of the DKI Jakarta Environmental Agency (AK) as a suspect by the Ministry of Environment in April 2026 following the Zone IV waste-landslide tragedy that killed several people. The designation was based on allegations that waste management failed to comply with applicable regulations and procedural standards, aggravated by the occurrence of fatalities. The provisions applied were drawn not only from Law Number 32 of 2009 but also from Law Number 18 of 2008 on Waste Management. Deputy for Environmental Law Enforcement Rizal Irawan stated that the suspect faced a maximum prison sentence of five years for negligence in waste management that failed to meet procedural standards and criteria and resulted in death and serious injury.⁵⁰

CONCLUSION

The discussion demonstrates that fulfillment of sustainable-development principles in the environmental dimension of waste management at TPST Bantar Gebang has not reached an optimal standard. Although Indonesia adopted the SDG framework through Presidential Regulation Number 59 of 2017, particularly SDG 11 on sustainable cities and settlements, SDG 12 on responsible consumption and production, and SDG 13 on climate action, conditions in practice have not reflected those objectives. Waste management continues to use open-dumping methods prohibited by Law Number 18 of 2008, and the site has exceeded its ideal operational life. The accumulation of millions of tons of waste has generated not only landslide risks but also environmental pollution in surrounding areas.

The constraints faced by the DKI Jakarta Government are complex. Cross-jurisdictional authority is a central problem because the TPST is located in Bekasi, resulting in coordination difficulties among environmental agencies, the DKI Jakarta Provincial Government, the Bekasi City Government, and the West Java Provincial Government. Other constraints include dependence on open dumping and regulatory violations by the operator despite prior warnings. The legal implications span administrative, civil, and criminal law. Administratively, non-compliance with sanctions and environmental-audit obligations indicates weakness in the government's supervisory function. In the civil sphere, affected communities have the right to pursue class actions and citizen lawsuits under Articles 91 and 92 of Law Number 32 of 2009, although the source article states that the application of strict liability in Indonesia remains limited and has not been effective in large-scale pollution cases. In criminal law, the designation of the former Head of the DKI Jakarta Environmental Agency as a suspect by the Ministry of Environment in April 2026 following a landslide tragedy that killed seven people demonstrates that failures of government accountability may have serious criminal implications,

⁴⁹ Alfisyahr. Nor, "PRINSIP STRICT LIABILITY DALAM PENYELESAIAN SENGKETA PENCEMARAN DAN KERUSAKAN LINGKUNGAN HIDUP BERBASIS KEADILAN: STUDI KASUS PT NEWMONT MINAHASA RAYA," *Rawang Rencang : Jurnal Hukum Lex Generali* 6, no. 11 (2025).

⁵⁰ Humas, "KLH/BPLH Ungkap Kronologi Penegakan Hukum Kasus Bantargebang," kemenlh.go.id, 2026, <https://kemenlh.go.id/news/detail/klhbplh-ungkap-kronologi-penegakan-hukum-kasus-bantargebang>.

including potential liability under Articles 98 and 99 of Law Number 32 of 2009 and provisions of Law Number 18 of 2008.

This study remains subject to several limitations because it relies on a literature-review approach without field observation. Empirical data, including in-depth interviews with TPST managers, the Ministry of Environment, and communities surrounding the site, would be important for developing the research further. The analysis also does not address regional finance and budgeting in support of sustainable waste management and does not compare TPST management with practices in other regions or countries. Future research is therefore encouraged to employ empirical mixed approaches combining case studies, interviews, and direct measurement. Further examination of financing schemes and public-private partnerships for accelerating the adoption of waste-to-energy technology would also be highly relevant.

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