



Regulation of the Obligation of Industrial Business Actors in Making Wastewater Treatment Plant (WWTP) According to Indonesian Legislation

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Abstract. Waste water is the residue of a processing process from business activities that has the potential for pollution and destruction and negative impacts on the environment. Therefore, every business actor, especially industrial business actors, is required to make a waste water treatment plant (WWTP) and must comply with the provisions of regulations governing waste water treatment in the environment. The research aim to find out the obligations of business actors in waste water treatment and the regulation of the obligations of industrial business actors in making WWTP according to laws and regulations. This research method uses normative legal research. The data collection technique uses literature study. The result of this research is that the obligation of business actors in waste water treatment is regulated in Article 130 paragraph (1) of Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management which states that the person in charge of businesses and/or activities that produce waste water must treat waste water. WWTP management is an obligation for every industrial business in Indonesia in accordance with the governing regulations, namely Law Number 32 of 2009 concerning Environmental Protection and Management, Law Number 6 of 2023 concerning Job Creation, Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management and other implementing regulations. The purpose of making a WWTP for industrial businesses is to reduce the occurrence of risks to the environment in the form of pollution and/or environmental damage which has considerable potential and can have a negative impact.

Keywords: Regulation, Obligation of Industrial Business Actors, Making Waste Water Treatment Plant (WWTP), Indonesian Legislation

1 Introduction

Industrial potential has contributed to the Indonesian economy through the products and services produced, but on the other hand, industrial growth has caused serious environmental problems. Industrial waste water discharges result in river water pollution that can harm people who live along the river, such as reduced agricultural production, decreased pond yields, and reduced use of river water by residents [1].

The development of development with various technologies used has an impact on the quality of the environment which is decreasing and threatens the continuity of human life and other living things so that it is necessary to protect and manage the environment seriously and consistently by all stakeholders.

Industrial development is one of the efforts to improve the welfare of the community in the context of implementing national and regional development. Therefore, the development of industrial activities/businesses must pay attention to the preservation of environmental functions, especially waste management.

As in the regulation, waste management obligations are regulated in Article 1 point 23 of Law Number 32 of 2009 concerning Environmental Protection and Management and Law Number 6 of 2023 concerning the Stipulation of Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation into Law which states that 'Hazardous and toxic waste management is an activity that includes: reduction, storage, collection, utilisation, processing, and/or landfill.

Furthermore, Article 58 of Law Number 32 of 2009 concerning Environmental Protection and Management, stipulates as follows:

(1) Every person who imports into the territory of the Unitary State of the Republic of Indonesia, produces, transports, circulates, stores, utilises, disposes of, processes, and/or stockpiles hazardous and toxic substances must carry out hazardous and toxic substances management;

The obligation to carry out hazardous waste management is an effort to reduce the occurrence of possible risks to the environment in the form of pollution and/or environmental damage considering that hazardous waste has a large enough potential to cause negative impacts. Industrial business actors are obliged to carry out waste management, especially waste water by making a WWTP as in Article 130 paragraph (1) of Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management which states that the person in charge of businesses and/or activities that produce waste water must treat waste water.

Based on the description above, the purpose of this research is to find out the obligations of business actors in wastewater treatment and the regulation of the obligations of industrial business actors in making WWTP according to Indonesian laws and regulations.

2 Method

Normative legal research is a type of legal research that looks at library materials or secondary data only. The research approach used in this study is a statutory approach. The data sources used in this research were secondary data, which consists of legal materials in the form of laws and regulations, books, and scientific works. The data collection technique used in this research is data collation. Furthermore, the legal material analysed is synchronised with the topics and problems in this research. The data analysis used in this research is qualitative research.

3 Result And Discussion

3.1 Obligations of Business Actors in Waste Water Treatment

Based on Article 1 point 20 of Law Number 6 of 2023 concerning Job Creation, waste is the residue of a business and/or activity, while waste water is water that comes from a process in an activity according to Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management.

Business actors who produce waste water are required to treat the waste water produced before discharging it into the environmental media, this obligation is regulated in Article 130 paragraph (1) of Government Regulation Number 22 of 2021 which states that the person in charge of businesses and/or activities that produce waste water must treat waste water.

In relation to treating waste water, business actors need to consider the following:

- a. selecting the appropriate technology to treat waste water;
- b. determining the location of disposal or utilisation of treated waste water;
- c. periodically checking the levels of waste water quality standard parameters.

The results of waste water treatment as referred to in paragraph (1) shall be carried out:

- a. utilisation by means as referred to in Article 128 paragraph (3) letter b through the implementation of reduction, reuse, recycling, recovery of benefits, and/or replenishment of waste water;
- b. utilisation by way of application to land; and/or
- c. discharge to surface Water Bodies and/or to certain formations.

In addition to considering the appropriate technology to treat waste water, business actors, especially industrial business actors, also need to think about and prepare environmental media in the form of WWTP as a disposal and/or utilisation of treated waste water.

As for several ways that can be done by industrial businesses in treating industrial waste are:

- a. material recycling;
- b. using green technology;
- c. clean production process;

- d. management of Hazardous and Toxic Material waste;
- e. use of renewable energy;
- f. employee training and familiarity; and
- g. collaboration with external parties.

Reduction, storage, collection, transportation, use, processing, and/or landfilling are all included in hazardous waste management. The obligation to carry out hazardous waste management is an effort to reduce the occurrence of risks to the environment in the form of pollution and/or environmental damage considering that hazardous waste has considerable potential to cause negative impacts.

The obligations of business actors in hazardous waste management are as follows:

Producers, ie:

- a. Must prevent pollution and damage to the environment;
- b. Must register the hazardous waste produced;
- c. Must make MSDS (Material Safety Data Sheet);
- d. Must package each hazardous waste according to its classification and provide symbols and labels;
- e. Must have a qualified storage place;
- f. Must complete an emergency response system and hazardous waste handling procedures;
- g. Must maintain occupational safety and health;
- h. Must respond to accidents and emergencies;
- i. Must submit activity reports.

Depositors, ie:

- a. Must prevent pollution or damage to the environment;
- b. Must have MSDS;
- c. Must package each hazardous and toxic material waste according to its classification and provide symbols and labels;
- d. Must have an emergency response system and hazardous waste handling procedures;
- e. Must carry out accident and emergency management;
- f. Must maintain occupational safety and health;
- g. Must submit activity reports.

Users, ie:

- a. Shall prevent the occurrence of environmental pollution and damage;
- b. Must maintain occupational safety and health;
- c. Must have MSDS;
- d. Must install symbols and labels according to their classification;
- e. Must carry out accident and emergency management;
- f. Must carry out handling and emergency procedures;
- g. Must conduct reports.

3.2 Regulation of the Obligation of Industrial Business Actors in Making WWTP According to Indonesian Legislation

In Indonesian legislation, the obligation of WWTP for the implementation of industrial businesses is regulated to preserve the environment and prevent pollution due to industrial activities. Regulations related to waste water management are elaborated in various laws and government regulations, which aim to ensure that industries carry out waste treatment according to applicable standards.

The Department of Water Resources, Mining and Energy is the agency responsible for water pollution control, particularly in conducting field verification of waste water discharge permit applications. Meanwhile, the Industry and Trade Agency has the authority to issue licences for industrial activities. This is in accordance with Regulation of the Minister of Industry No. 35/2010 on Technical Guidelines for Industrial Estates, which stipulates that in the development of industrial estates, industrial estate managers are required to carry out environmental control and management in accordance with applicable laws and regulations [2].

Law No. 32/2009 on Environmental Protection and Management is the legal basis that regulates various aspects related to environmental protection and management, with special emphasis on the management of Hazardous and Toxic Waste. This law strictly regulates the management of hazardous and toxic waste, with clear regulations and consistent law enforcement without discrimination against businesses and individuals. Effective hazardous and toxic waste management efforts are expected to achieve maximum results.

In the implementation of Law No. 32/2009, the positive impacts obtained are not only in the form of reduced environmental pollution, which contributes to the improvement of health and environmental conditions, but also the improvement of human health. An environment polluted by hazardous waste can have a significant negative impact on human health and well-being. As such, effective hazardous waste management plays an important role in safeguarding public health and the environment as a whole [3].

Law No. 32 of 2009 on Environmental Protection and Management is still valid today, but some of its articles have undergone changes, deletions, or adjustments through Law No. 6 of 2023 on the Stipulation of Government Regulation in Lieu of Law No. 2 of 2022 on Job Creation into Law, called the Job Creation Law.

Nevertheless, Law Number 32 of 2009 on Environmental Protection and Management remains the main foundation for environmental protection and management in Indonesia. The changes that occur through the Job Creation Law are more related to the simplification of licensing and some sanctions related to environmental management, including the replacement of environmental permits to environmental approvals.

There are several articles that have been revoked or amended, one of which has been much debated is Article 102 of Law Number 32 of 2009 concerning Environmental Protection and Management which functions as an environmental law enforcement instrument aimed at maintaining and improving the quality of the environment in Indonesia, by stipulating sanctions for anyone who manages B3 waste without a permit.

However, the article has been removed by Law Number 6 Year 2023 on the Stipulation of Government Regulation in Lieu of Law Number 2 Year 2022 on Job Creation into Law, in order to facilitate the implementation of business activities. Facilitating various matters related to business activities that bring in investment should not override the importance of maintaining environmental quality standards. The elimination of criminal sanctions for violations of hazardous waste management without a permit has the potential to provide leeway for parties that damage environmental quality standards. This could allow hazardous waste management to be carried out without adequate supervision, including the disposal of hazardous waste directly into the environment without an official permit [4].

In addition, regulations regarding the obligation of WWTP for the implementation of industrial businesses are contained in Presidential Regulation (Perpres) Number 2 of 2018 concerning National Industrial Policy 2015-2019 revoking Presidential Regulation No. 28 of 2008 concerning National Industrial Policy. The main objective of Presidential Regulation (Perpres) No. 2/2018 on National Industrial Policy is to encourage the acceleration of national industrial development in order to increase the competitiveness of Indonesian industry in the global market. This Presidential Regulation stipulates the policy and direction of industrial development in order to create an independent, competitive, and advanced industry in a sustainable manner.

Furthermore, in the Minister of Environment Regulation Number 03 of 2010 concerning Wastewater Quality Standards for Industrial Estates Revoking the Decree of the Minister of Environment Number: KEP-03/MENLH/1/1998 concerning Liquid Waste Quality Standards for Industrial Estates is a legal basis that provides a more structured and clear framework for industrial estates to manage their liquid waste in accordance with the development of current environmental and technological conditions.

Then the Minister of Environment and Forestry Regulation Number 5 of 2022 concerning Waste Water Treatment for Mining Businesses and/or Activities Using the Artificial Wetland Method is a legal basis that regulates activities in the mining sector in order to improve mining practices that are more environmentally friendly with a focus on waste water treatment, while still meeting sustainability standards in business activities.

The implementation of industrial businesses has a negative impact on the environment and to minimise this negative impact, there should be a forced effort from the government as a responsibility for the activities and/or businesses of the industrial sector to comply with all regulations governing the obligations of business owners to manage existing environmental impacts due to the production process carried out [5].

The increasing number of cases of environmental pollution and destruction from the industrial sector that have occurred recently has made the government urged to take this seriously to increase the effectiveness of environmental monitoring [6].

This is done in order to find out how effective the level of industrial compliance with the provisions of laws and regulations in the environmental field in ensuring the preservation of environmental functions from the results of business activities or industrial activities that are running. The role of the government in this case is the obligation to

make provisions such as policies and regulations, guidance and jointly synergise to carry out supervision.

On the other hand, business actors in the industrial sector have an obligation to fulfil the provisions of environmental legislation as stipulated in Law Number 32 of 2009 concerning Environmental Protection and Management and related derivative regulations.

In an effort to measure or determine how much the level of compliance of the person in charge or business activities towards fulfilling obligations in environmental management, the compliance criteria adopted and updated from the Proper criteria in the Minister of Environment Regulation Number 3 of 2014 concerning the Company Performance Rating Assessment Program in Environmental Management are used.

The use of PROPER criteria is because PROPER itself is a standard for assessing the performance of a company in managing the environment at its place of business so that it can be used as a reference in environmental management compliance. The scope of the scope of obedience itself consists of [7]:

1. Ownership and implementation of Environmental Permits and AMDAL/UKL-UPL documents;
2. Air pollution control;
3. Water Pollution Control; and
4. Hazardous Waste Management.

The duties and powers of the central government and local governments are crucial aspects of the government structure that aim to ensure effective and efficient management of the state and regions. The central government has the primary responsibility for setting national policies, formulating laws, and overseeing the implementation of policies and regulations that affect the entire country. Meanwhile, local governments are tasked with implementing policies and programmes that suit local needs, as well as managing resources and public services at the local level. Therefore, the central government's policy to delegate some affairs to local governments is implemented through legislation [8].

4 Conclusion

The obligation of business actors in waste water treatment is regulated in Article 130 paragraph (1) of Government Regulation Number 22 of 2021 which states that the person in charge of businesses and/or activities that produce waste water must treat waste water. WWTP management is an obligation for every industrial business actor in Indonesia in accordance with the governing regulations, namely Law Number 32 of 2009, Law Number 6 of 2023, Government Regulation Number 22 of 2021 and other implementing regulations. Building a Wastewater Treatment Plant (WWTP) for industrial enterprises aims to lower environmental risk in the form of pollution and/or environmental harm which has considerable potential and can cause negative impacts.

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