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Juridical Aspects in the Management of Household Waste and Household-Like Waste by the Government of the Special Region of Yogyakarta (Case Study in Piyungan Integrated Waste Disposal Site)

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Abstract

The presence of waste can have negative impacts as well as positive impacts. Waste has a negative impact when the management and utilization of waste is not optimal so that it can cause environmental damage. However, waste becomes useful when it is managed properly. The handling and management of waste must receive special attention from the Government. This study uses a normative juridical approach. The results showed that the management of household waste and household-like waste by the Government of the Special Region of Yogyakarta was carried out based on Perda DIY No. 3 of 2013 concerning Management of Household Waste and Waste Similar to Household Waste, by increasing supervision both in efforts to reduce waste and in handling waste. However, the limitations of the waste collection area become an obstacle in proper waste management.

Keywords: Juridical Aspects; Waste Management; Household Waste; Household-Like Waste

Introduction

Waste is an inseparable part of human life. Waste is something that is removed from the production process, both industrial and domestic (household). Waste is also material that has no value or is not valuable to be used normally or specifically in production or use. The existence of waste has a negative impact as well as a positive impact. Waste is basically material that is wasted or discarded in a source of results from human activities, as well as natural processes and does not or does not yet have a negative economic value because handling to dispose of or clean it requires a significant cost in addition to polluting the environment. Waste can have a negative impact when the management and utilization of waste is not optimal so that it can become a source of disease and environmental damage. However, waste becomes a positive thing when it is managed properly. The waste problem is something that has not been

¹ Apriadi, 1989, *Menghindari, Mengolah, dan Menyingkirkan Sampah*, Abdi Tandur, Jakarta, hlm. 78.

² Murtadho, D dan Sa'id E. G. 1988, *Penanganan Pemanfaatan Limbah Padat*, Sarana Perkasan, Jakarta, hlm 1.

resolved properly until now. Handling and managing waste receive special attention from the government, one of which is the Indonesian government, both central and local.

The 1945 Constitution of the Republic of Indonesia (UUD 1945) gives everyone the right to have a good and healthy environment as regulated in Article 28 H paragraph (1) of the 1945 Constitution. This shows that the state through the government, both the central government and the government regions have the responsibility to fulfill a good and healthy environment.

The implementation of waste handling and management in Indonesia is carried out by referring to Law Number 18 of 2008 concerning Waste Management. Waste management in Indonesia is carried out by local governments, including planning, implementing, managing, as well as cooperation and partnerships. Waste management also refers to Government Regulation Number 81 of 2012 concerning Management of Household Waste and Household-like Waste. This is further regulated in the Minister of Home Affairs Regulation No. 33/2010 concerning Guidelines for Waste Management.

Waste consists of household waste, household-like waste, and specific waste. Household waste is derived from daily activities in the household, excluding feces and specific waste. Household-type waste is originating from commercial areas, industrial areas, special areas, social facilities, public facilities, and / or other facilities. Specific waste is waste which due to its nature, concentration, and / or volume requires special management.

The government, both central and regional, has a duty to ensure the implementation of good and environmentally friendly waste management. As one of the tourist destination areas, DIY also faces the problem of waste management is the Special Region of Yogyakarta (DIY). This is because during the holiday season more and more tourists come to DIY, it will also increase the volume of waste. The biggest increase in waste volume in DIY is in Yogyakarta City, Sleman Regency and Bantul Regency. The three regions are the biggest waste producers in DIY.

Waste management in DIY is based on DIY Regional Regulation (Perda) Number 3 of 2013 concerning Management of Household Waste and Household-like Waste. The Perda generally regulates the duties and authorities of local and district / city governments, waste management, retribution, compensation, and cooperation and investment in managing household waste and household-like waste. This regional regulation is also the basis for the management of each district and city.

Final waste management in DIY is currently centered at the Piyungan Integrated Waste Disposal Site (TPST). From the start, the waste management method at TPST Piyungan uses the sanitary landfill method, which is a method of destroying waste by hoarding and compacting waste in the soil basin. This method has several advantages, including in terms of cost and reduction of air pollution. However, because the volume of existing waste is increasing, the waste handling at TPST Piyungan is currently mostly done by simply throwing away the waste without any further treatment of the waste.

Based on the description above, several problems can be formulated as follows:

- 1. What is the juridical aspect in managing household waste and household-like rubbish by the Yogyakarta Special Region Government in Piyungan Integrated Waste Disposal (TPST)?
- 2. What are the obstacles faced by the Government of the Special Region of Yogyakarta in waste management.

Research Methods

The method used in this research is normative juridical method. This normative juridical method is often referred to as doctrinal research, which is a research that refers to legal analysis, both in the sense that law as it is written in the book, and in the sense that law as it is assigned by judge through judicial process.³ Primary data is data obtained directly in the form of information and opinions from resource persons through interviews and observations.⁴ The resource persons in this study were from the Environment and Forestry Service of the Special Region of Yogyakarta, the Yogyakarta Special Region Spatial Planning Service, the Piyungan TPST Manager, the Yogyakarta City Environmental Service, the Bantul Regency Environmental Service, and the Sleman Regency Environmental Service. Secondary data is data obtained from literature studies and has binding legal force, which consists of primary raw materials, secondary legal materials and tertiary legal materials⁵, namely laws and regulations related to household waste management and waste similar to household waste.

Finding and Discussion

1. Juridical Aspects in Managing Household Waste and Similar Waste for Household Waste By the Government of Yogyakarta Special Region in Piyungan Integrated Waste Disposal (TPST).

According to Article 2 paragraph (1), paragraph (2), paragraph (3) and (4) Law No. 18 of 2008 concerning Waste Management, the managed waste can consist of:

- a) household waste; i.e., rubbish originating from daily activities in the household, excluding feces and specific rubbish,
- b) waste similar to household waste; namely waste originating from commercial areas, industrial areas, special areas, social facilities, public facilities, and / or other facilities,
- c) specific waste; namely waste which includes;
 - 1) waste containing hazardous and toxic materials;
 - 2) waste that contains hazardous and toxic waste;
 - 3) waste arising from a disaster; d. rubble of building demolition;
 - 4) waste that cannot be processed technologically; and / or
 - 5) waste that does not arise periodically.

The authority of local governments for waste management is regulated in Law Number 18 of 2008 concerning Waste Management (UUPS). Article 5 UUPS states that the Government and regional governments are tasked with ensuring the implementation of good and environmentally friendly waste management in accordance with the objectives referred to in this Law. As for waste management, it aims to improve public health and environmental quality and make waste a resource. Furthermore, in Article 6 UUPS states that the duties of the Government and regional governments consist of:

- a) develop and increase public awareness in waste management;
- b) conducting research, developing technology for reducing and handling waste;
- c) facilitate, develop and implement efforts to reduce, handle and utilize waste;
- d) implement waste management and facilitate the provision of infrastructure and facilities for waste management;
- e) encourage and facilitate the development of benefits from waste processing;

³ Johnny Ibrahim, 2006, Teori dan Metodologi Penelitian Hukum Normatif, Banyu Media, Malang, hlm 302.

⁴ Bambang Sunggono, 2008, *Metodologi Penelitian Hukum*, Rajawali Pers, Jakarta, hlm15.

⁵ Bahder Johan, 2004, *Metode Penelitian Ilmu Hukum*, Mandar Maju, Bandung, hlm 23.

- f) facilitate the application of specific local technology that develops in local communities to reduce and treat waste; and
- g) to coordinate between government agencies, communities and the business world so that there is an integrated waste management.

In the waste management system, basically it can be seen from the components that support one another. These components are operational technical aspects, institutional aspects, financing aspects, legal and regulatory aspects, and community participation aspects. The operational technical aspect relates to the flow of waste management, while the legal and regulatory aspects relate to the legal and regulatory basis for waste management.⁶

According to Article 9 paragraph (2) and (2) Government Regulation Number 81 Year 2012 concerning Management of Household Waste and Similar Household Waste, it is stated that the regency / city government in addition to establishing policies and strategies for waste management, must also prepare master plan documents and studies the feasibility of managing household waste and household-like waste. This master plan contains at least: a. restrictions on waste generation; b. waste recycling; c. reuse of waste; d. waste sorting; e. waste collection; f. waste transport; g. waste processing; h. final waste processing; and i. funding. This master plan is stipulated for a period of at least 10 (ten) years.

The management of household waste and household-like waste in the Special Region of Yogyakarta is regulated in the Regional Regulation (Perda) of the Special Region of Yogyakarta Number 3 of 2013 concerning Management of Household Waste and Waste Similar to Household Waste. Furthermore, it is further regulated in the Yogyakarta City Regional Regulation Number 10 of 2012 concerning Waste Management, Bantul Regency Regional Regulation Number 2 of 2019 concerning Management of Household Waste and Household-like Waste, and Sleman Regency Regional Regulation Number 4 of 2015 concerning Management of Household Waste and Waste A type of household waste.

Based on Article 4 of the DIY Regulation No. 3 of 2013 concerning Management of Household Waste and Household-like Waste, the duties of the Governor and Regent / Mayor in managing household waste and household-like waste include:

- a) foster development and increase public awareness in waste management;
- b) conducting research, developing technology for reducing and handling waste;
- c) facilitate, develop and implement efforts to reduce, handle and utilize waste;
- d) implement waste management and facilitate the provision of infrastructure and facilities for waste management;
- e) encourage and facilitate the development of benefits from waste processing;
- f) facilitate the application of specific local technology that develops in local communities to reduce and treat waste; and
- g) coordinating between government agencies, the community and the business world so that there is integration in waste management.

Furthermore according to Article 5 paragraph (1) DIY Regulation No. The governor's authority in managing household waste and household-like waste includes:

- a) establish policies and strategies in waste management referring to national policies;
- b) fostering institutions, human resources, facilities and equipment, as well as financing that supports solid waste management which is the authority of the Regional Government;

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⁶ Kodoatie, Robert J. dan Rustam Sjarief, 2008, Pengelolaan Sumber Daya Air Terpadu, Andi Offset, Yogyakarta,hlm 217.

- c) establish Norms, Standards, Guidelines and Criteria (NSPK) based on Minimum Service Standards (SPM) set by the Government;
- d) coordinating, fostering and supervising district / city performance in waste management;
- e) grant permits for cross-regency / city waste management infrastructure and facilities;
- f) facilitate cooperation between regions within a province, partnerships and networks in waste management;
- g) facilitate the resolution of disputes / problems between district / city governments in waste management;
- h) facilitate the participation of the business world and society in the development of district / municipal solid waste infrastructure and facilities;
- i) provide technical assistance for the implementation of cross-regency / municipal solid waste infrastructure and facilities development;
- j) compiling a master plan for cross regency / municipal waste management;
- k) determine service fees or contributions from the Regency / City Government in accordance with the level of services provided;
- 1) withdraw solid waste services which fall under the authority of the Regional Government;
- m) facilitate the handling of waste in the event of a natural disaster at the Regional level;
- n) supervise the implementation of infrastructure and facilities for solid waste in the region;
- o) provide technical recommendations for the issuance of solid waste management permits across districts / cities;
- p) carry out empowerment and control of cross-Regency / City waste management; and
- q) receive complaints from the public due to pollution caused by waste which is the authority of the Regional Government.

Regarding the authority of the Regent / Mayor in managing household waste and household-like waste, it is regulated in Article 6 of the DIY Regulation No. 3 of 2013 which states that includes:

- a) establish policies and strategies for solid waste management referring to national and regional policies;
- b) fostering institutions, human resources, facilities and equipment, as well as funding to support the provision of infrastructure and waste facilities in the regency / city area;
- c) stipulating Regional Regulations based on the Guidelines and Criteria Standards (NSPK) established by the Government and Local Governments;
- d) grant a permit to operate waste infrastructure and facilities in a regency / city area;
- e) resolving waste management disputes / problems in the district / city environment;
- f) carry out cooperation with the business world and the community in the development of district / municipal solid waste infrastructure and facilities;
- g) provide technical assistance for the implementation of the development of solid waste infrastructure and facilities at the sub-district, village government, and community groups in their area;
- h) constructing solid waste infrastructure and facilities for regencies / cities in order to meet Minimum Service Standards (SPM);
- i) compile a master plan for the development of infrastructure and facilities for solid waste in the district / city;
- j) determine service fees or contributions from the Regency / City Government in accordance with the level of services provided;
- k) handling solid waste in the event of a natural disaster at the district / city level;
- 1) monitor the implementation of infrastructure and facilities for solid waste in the district / city;
- m) evaluating the implementation of solid waste development in districts / cities;
- n) supervise and control the implementation of the Minimum Service Standards (SPM);
- o) supervise the administration of waste infrastructure and facilities in the area;
- p) empowering and controlling solid waste management in the Regency / City;

- q) determine and collect solid waste service fees;
- r) provide protection to the community from the impact of environmental damage and pollution caused by solid waste;
- s) providing sustainable waste management knowledge and technology to the community;
- t) provide incentives and disincentives for people who carry out waste management;
- u) receive complaints from the public due to pollution caused by waste which is the authority of the Regency / City.
- v) carry out district / city scale waste management in accordance with the norms, standards, procedures and criteria stipulated by the Government and Regional Government;
- w) conducting guidance and monitoring the performance of waste management carried out by other parties;
- x) determine the location of TPS, TPST and / or TPA for waste;
- y) carry out regular monitoring and evaluation every 6 (six) months for 20 (twenty) years on the final waste processing site with an open disposal system that has been closed; and
- z) prepare and implement a waste management emergency response system in accordance with their respective authorities.

The management of waste in DIY, both household waste and household-like waste is based on cooperation between the Regional Governments of Sleman Regency, Yogyakarta City and Bantul Regency called Karmantul by designating the location of the Integrated Waste Disposal Site (TPST) in Piyungan, Bantul Regency. The location determination of TPST Piyungan is based on the Cooperation Agreement between the Yogyakarta City Government, the Sleman Regency Government, and the Bantul Regency Government Number 07 / Perj / Bt / 2001, 05 / PK.KDH / 2001, and 02 / PK / 2001 regarding the Management of Final Disposal Sites. (TPA) Waste in Piyungan, Bantul Regency. Then confirmed by the Bantul Regency Regulation No. 17 of 2010 concerning the Business Permit for Disposing of Waste to the Piyungan TPA.

In 2015 based on the Regulation of the Governor of DIY Number 99 of 2014 concerning Implementation of Use of Waste Management Facilities and Services at Regional Final Disposal Sites at the Urban Sanitation and Water Supply Infrastructure Management Center, the management of TPST Piyungan shifted to the DIY Regional Government. In a day, TPST Piyungan can receive waste up to 600-700 tons of waste a day.

In waste management, the following principles are recognized:

- a) (Reduce) Reduce the use of consumable items that can cause waste. Because the more things wasted, the more waste.
- b) (Reuse) Trying to find items that can be reused, and avoid using disposable items to maximize the life of an item.
- c) (Recycle) In addition to looking for items that can be reused, you can also look for items that can be recycled. So that these items can be used instead of becoming waste.
- d) (Replace) This method can be done by making observations around. Replace disposable items with items that are more durable, and use items that are environmentally friendly.
- e) (Respect) This method uses a sense of love for nature, so that it will lead to a wise attitude before choosing.⁷

Regarding waste management in the Special Region of Yogyakarta, it refers to Article 16 of the DIY Regulation No. 3 of 2013 concerning Management of Household Waste and Similar Waste that handling household waste and household-like waste is carried out by sorting, collecting, transporting,

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⁷ Panji Nogroho, 2012, *Panduan Membuat Pupuk Kompos Cair*, Pustaka Baru Press, Yogyakarta.

processing, and final waste processing. Every process in handling household waste and household-like waste must be carried out properly. This is because when there is a process that is not carried out properly and correctly, it will have a bad impact on the entire process of handling household waste and household-like waste.

Furthermore, Article 17 paragraph (1) and (2) of the Perda also emphasizes that waste handling is carried out by grouping and separating waste according to the type and nature of waste, which is divided into:

- a) Waste containing hazardous and toxic materials;
- b) Waste that is easily biodegradable;
- c) Waste that can be reused;
- d) Waste that can be recycled; and
- e) Other waste.

The waste sorting process as regulated in Article 17 of the DIY Regulation No. 3 of 2013 regarding the Management of Household Waste and Similar Waste is also followed up by regional regulations of each district / city in the Special Region of Yogyakarta. In the Integrated Waste Disposal Site in Piyungan, it turns out that many hazardous materials were disposed of, such as batteries, battery stones, and shards of used tubular lamps (TL). These materials contain elements of lead (Pb) which are harmful to humans. The waste management model at TPST Piyungan uses the sanitary landfill method, (sanitary landfill), which is the destruction of waste by making a hole in the ground then the waste is inserted and filled with soil as a cover then compacted. This method requires the requirement that there are 19 large areas, available land to stockpile it, and available large equipment.

Management of Household Waste and Waste Similar to Household Waste in DIY as regulated in DIY Regional Regulation Number 3 of 2013 Management of Household Waste and Similar Waste, it is stated that one way of handling waste is by sorting the waste before transporting it to the final disposal site. But for the sake of the process of sorting household rubbish and similar rubbish household rubbish in DIY so far has not gone well. So far, the waste transported to Piyungan TPST tends to go through no sorting process at all. Based on this fact, public awareness is very important and has a big role in the process of handling household waste and household-like waste in DIY.

The effort made by the DIY Regional Government is through supervision of every process of waste management and handling, starting from sorting, transportation, to the final waste process. This is done by the Regional Government of DIY by giving authority to each District / City Government to manage household waste and household-like waste. The determination of the location for the dumping of waste at TST Piyngan is based on the DIY Regulation No. 2/2010 concerning the 2009-2029 Provincial Spatial Plan for the Special Region of Yogyakarta. Efforts to move the landfill to another location or the construction of a new landfill cannot be done, considering that finding new land is also difficult to obtain.

2. Obstacles Faced by the Yogyakarta Special Region Government in Waste Management

Management and handling of household waste and household-like waste in DIY is still a problem that has never been resolved. The increase in the volume of household waste and household-like waste from year to year obliges the DIY Regional Government to continuously seek the right solution for the management and handling of household waste and household-like waste. TPST Piyungan, which is the

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⁸ Ganefeti SP, Susanto JP, Suwarni A., 2008, *Pengelolaan Leachete Tercemar Pb Sebagai Upaya Pencegahan Pencemaran Lingkungan TPA*, *Jurnal Teknik Lingkungan*., hlm 92.

⁹ Iqbal Mubarak, Wahid dan Nurul Chayatin, 2009, *Ilmu Kesehatan Masyarakat Teori dan Aplikasi*, Salemba Medika, Jakarta, hlm 279-280.

only final waste disposal site that supports three regions in Yogyakarta, namely Yogyakarta City, Bantul Regency, and Sleman Regency, is currently in an alarming condition. The volume of household rubbish and similar rubbish household rubbish is not proportional to the maximum capacity of the Piyungan TPST, the result is excess capacity and a heap of waste piled up in the Piyungan TPST.

The problem that occurs at this time is that the sorting of household waste and household-like waste by the community through waste banks is not separated into organic waste and non-organic waste, but waste that still has a selling value and waste that has no selling value. This condition causes the sorting process to be problematic and constrained, because the waste that has been sorted also still consists of organic waste and non-organic waste, it all depends on whether there is still a sale value or not. Handling and managing household waste and household-like waste are also constrained by limited land, especially in Yogyakarta City. This has the result of missing the sorting process. This is because the largest volume of waste transported every day to TPST Piyungan comes from the city of Yogyakarta. If the sorting process is also carried out in waste banks or temporary disposal sites (TPS), of course, it will take a long time and the effect is waste accumulation.

At present the method of managing household waste and household-like rubbish at Piyungan TPST is slowly switching from sanitary landfills to controlled landfills and tends to look open dumping. The waste that enters the TPST Piyungan is loaded and unloaded from the truck to the waste disposal site and then the waste will be pushed to the center by heavy equipment operated by heavy equipment staff at Piyungan TPST. This is what causes waste to pile up to form like mountains or hills. Furthermore, landfilling waste is very difficult to do considering the condition of the waste that has accumulated due to excess capacity. If the landfill is carried out, then the waste that has been piling up must be unloaded, which of course takes a lot of time because of the lack of personnel and the waste carried by waste trucks will continue to arrive every hour. It is very impossible to unload waste that has accumulated. Household waste and household-like waste that is disposed of at Piyungan TPST do not go through a sorting process. This shows that the implementation of the DIY Regional Regulation Number 3 of 2013 regarding how to handle and manage waste cannot run well.

The current condition of Piyungan TPST is quite apprehensive due to various problems that occur. The method of processing waste by closing the waste with the soil begins to turn to open dumping, that is, the waste is left alone without further handling. This has exacerbated the conditions in the Piyungan TPST, because the waste from the three regions in the Special Region of Yogyakarta, namely Yogyakarta City, Bantul Regency, and Sleman Regency are all dumped into Piyungan TPST. The handling and management of household waste and household-like waste in DIY currently has shortcomings in terms of funding, supervision of management implementation, and lack of community participation in engaging in waste management. In addition, there are no sanctions for people who litter, for banks that do not separate waste, for villages or villages that do not manage waste properly. Sanctions in the form of administrative or criminal sanctions as stipulated in the Regional Regulation have not ever applied.

Conclusion

Based on the results of the research and analysis carried out, it can be concluded as follows:

1. The juridical aspect in the management of household waste and household-like waste by the DIY Regional Government is an important issue that must be addressed immediately. For this reason, the DIY Regional Government and the Regional Government who are members of Karmantul issued several Regional Regulations related to the management of household waste and household-like waste. This is intended to support increased supervision of household waste management and household-like waste, both in terms of waste reduction and waste management.

2. Obstacles in managing household waste and household-like waste in DIY are the excess capacity of waste storage bins, and a lack of public awareness to be involved in waste management, which causes the management of household waste and household-like waste to be not optimal.

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