

# Legal Framework of Waste Management in Indonesia

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## ABSTRACT

This paper analyzes waste management in DKI Jakarta. It aims to understand the opportunities that the DKI Jakarta government can increase investment by plastic waste management. The recycling business is one of the implementations of the circular economy in Indonesia. However, it will cause some problems without the right sorting process. This research is a doctrinal/normative legal research employing a statutory approach. Data collection involved library research, and the data were then analyzed qualitatively. Legal aspects in waste management in Indonesia refers to three levels, namely national, regional and local. Law enforcement in waste management is also an embodiment of the government and the regional government of DKI Jakarta, which requires producers to provide Temporary Shelter, Temporary Shelter of 3R (Reduce, Recycle, Reuse) and collection equipment for disaggregated waste.

**Keywords:** *waste to management, Regulation of Governor of DKI Jakarta*

## 1. INTRODUCTION

The economic growth of DKI Jakarta citizen from year to year is increasing, followed by population growth. The quality of the environment continuously decreases, causing environmental degradation problems in people's lives. One of the environmental problems that still become problematic in urban areas is waste management. According to Yul. H, garbage is one of the environmental problems that has been handled properly, especially in developing countries, while the ability of waste management in dealing with garbage is not balanced with the production. According to article 1 figure (1) Law of Republic of Indonesia Number 18 the year 2008 on waste management, garbage is the remnant of daily human activities and/or solid natural processes. While according to article 1 figure (5) Waste Management is a systematic and continuous activity that includes the reduction and handling of waste. Thus, the management of urban areas faces various complex problems.

Three research questions of this paper are as follows.

- Why is the energy and waste management policy based on the Regional Regulation of the Special Capital Province of Jakarta, Number 3 the Year 2013, about Waste Management not being implemented?
- Why is the plastic recycling waste in Indonesia unsuccessful?
- Does the draft of regional regulation have academic texts that consider the philosophical, sociological and juridical aspects?

The Scope and Limitation

Aspects of waste management in Indonesia would include legal, institutional, funding, socio-cultural and technological. This paper puts a particular emphasis on the law. Therefore the limitation of the paper is the exclusion of

other aspects, such as institutional, sponsorships, social cultures and technologies on waste

According to Article 1 number (1), Law no. 18 of 2008, concerning Waste Management, waste is the residue of daily human activities and/or solid natural processes. Article 1 number (5) defines Waste Management as a systematic, comprehensive, and sustainable activity which includes the reduction and handling of waste. So that management in urban areas, today faces various complicated problems.

These problems include the high rate of landfill waste, public awareness (human behavior), which is still very low, and problems in final disposal activities (final disposal). Besides, in urban society, there is a consumptive culture that influences the improvement of the quality and type of waste. Thus, waste management cannot be separated from the intervention of the state and various sectors in the community, including the business world. In addition, the role of the community, which is a network or community of garbage disposal also, has a significant role in waste management, in this case, the recycling process. Therefore, waste management is part of public services that must be regulated in regulations to provide comfort in the daily lives of the citizens.

### A. Sources of Authority of Local Governments in Drafting Regulations

Basically, the regions conduct the broadest possible autonomy, except for matters that are by the law determined by the Central Government. Central Government has a full authority related to foreign policy, defense, security, justice, monetary and national fiscal, as well as religious affairs. Concerning these issues, (e.g. national monetary and fiscal), regions do not have the authority to innovate, except if they are granted authority with decentralization.

Regional Governments have regulatory authority in regional regulations based on delegation and attribution. In the case of delegation, the formation of regional regulations must be ordered by law or higher laws and regulations. In terms of attribution, the formation of regional regulations is based on authority, both the authority assigned by the sectoral law, which is included in the implementation of regional autonomy and the task of assistance as well as accommodating the special conditions of the region.

In addition to regional regulations, Local Governments can also establish Governor regulations. However, attribution in terms of Governor's Regulations is far more limited than Regional Regulations, which are based on authority or by the power of legislation. It is interpreted as the implementation of certain government affairs in accordance with the provisions of the legislation. The rest, Regional Leaders Regulation is more of a delegation, especially to implement Regional Regulation.

## ***B. Distribution of Authority in Waste Management***

The mapping the authority of the regional government in managing waste originates from Law of Republic of Indonesia Number 18 of 2008, concerning Waste Management and its implementing regulations. The mapping of waste management authority shows that most of the regulatory authority lies with the Central Government, but the implementation authority is almost entirely in the regions. Meanwhile, there is also authority that is shared between the central, provincial and district / City Governments.

Concerning plastic waste, two authorities needed major attention are related to the determination of waste management policies and strategies, and the implementation of waste management based on norms, standards, procedures and criteria (NSPC):

*1) Determination of waste management policies and strategies:* The Waste Management Law stipulates that the determination of national waste management policies and strategies is the authority of the Central Government. However, the Regional Government is also authorized to establish policies and strategies for waste management in their respective administrative areas, with notes according to policies at the level above. District / City policies and strategies must be made by referring to Provincial policies, which must be made by referring to national policies. It can be seen that the Central Governments and Provincial Governments have more role in guiding district/city governments in waste management as well as following the Regulation of Government of Republic of Indonesia Number 81, Year 2012, concerning Management of Household Waste and Similar Household Trash (Government Regulation of Republic of Indonesia, Number 81, the Year 2012).

The Regulation of Government of Republic of Indonesia Number 81, the Year 2012, further explains that the policies and strategies in waste management cover the direction of program policies and targets for waste reduction and handling.

Specifically for the district/city governments, in addition to compiling and stipulating district/city policies and strategies in waste management, district/city governments must also prepare master plan documents and feasibility studies on the household waste management and household-like waste at least for a period of ten years. This master plan should be able to become a regional innovation space in identifying and selecting appropriate alternatives for the region concerning waste management from the upstream to downstream, from limiting waste generation to funding.

*2) Determination Of Norms, Standards, Procedures And Criteria (NSPC) For Waste Management:* The Waste Management Law stipulates that the implementation of waste management is carried out by the Regency/City Government based on the norms, standards, procedures, and criteria of waste management determined by the Central Government. In this case, the authority of the Regency/City Government is only to "implement" the NSPC. Only the central government is given the authority to determine the NSPC of waste management.

To date, the Central Government has established a waste management NSPC that includes:

*a)* The arrangement of emergency response system in Article 53, Regulation of Minister of Public Works of Republic of Indonesia, Number 3 Year 2013, concerning the Implementation of Solid Waste Infrastructure and Facilities in Handling Household Waste and Trash of Similar Household Trash (Regulation of the Minister of Public Works and Public Housing of Republic of Indonesia Number 3 Year 2013);

*b)* The Provision of Compensation by the Regional Governments of the Republic of Indonesia in Articles 31-32, the Regulation of Government Number 81 Year 2012, and Articles 31-32 the Regulation of the Minister of Home Affairs Number 33 the year 2010 concerning Guidelines for Waste Management (Regulation of the Minister of Home Affairs Number 33 Year 2010);

*c)* The procedure for providing waste sorting facilities, the procedure for labeling and the obligation of producers to manage the packaging and/or goods they produce, which are difficult to decompose in Article 12-14, the Regulation of Government of Republic of Indonesia, Number 81 the Year 2012;

*d)* Waste management which regulates the sorting, collection, transportation, processing and final processing of rubbish in Article 16-30 of the Regulation of Government Number 81 Year 2012; the Regulation of Minister of the Environment Number 13 Year 2012 concerning Guidelines for the Implementation of Reduce, Reuse, and Recycle through Waste Banks (Regulation of Minister of Environment Number 13 year 2012); Regulation of Minister of Home Affairs Number 33 Year 2010 and Regulation of Minister of Public Works and Public Housing Number 3 Year 2013;

*e)* The technical requirements for collecting and providing TPS (waste treatment plant) and/or 3R (Reduce, Recycle, Reuse) TPS in Articles 19-27 and Attachment II the Regulation of Minister of Public Works and Public Housing Number 3 the Year 2013;

*f)* The closing and/or rehabilitation of the landfills that are not operated according to technical requirements in Articles 61-72 and Attachment V of Minister of Public Works and Public Housing Regulation No. 3 the Year 2013;

*g)* The procedures for providing waste treatment and final processing facilities in Attachment IV Minister of Public Works and Public Housing Regulation No. 3 the Year 2013;

*h)* The preparation of regional policies and strategies for the management of household and similar household waste in the Minister of LHK Regulation No. P.10 / MENLHK / SETJEN / PLB.0 / 4/2018 (Minister of LHK Regulation No. P.10 2018);

Meanwhile, the Government has not set the NSPC for the following issues.

*a)* The preparation of the emergency response system (it should be stipulated in the form of Minister of Environment and Forestry Regulation);

*b)* The procedures for the use of the rights to obtain services in good and environmentally sound waste management from the Government, Regional Government and/or other parties that are in charge (they should be stipulated in the form of Government Regulations and/or Regional Regulations);

*c)* The types, forms and procedures for providing incentives and disincentives in terms of waste reduction (should be determined in the form of a Government Regulation);

*d)* The specific waste management (it should be determined in the form of a Government Regulation);

*e)* The procedures for collecting and returning waste (it should be stipulated in the form of Minister of Environment and Forestry Regulation);

*f)* The road map for implementing producer obligations in terms of limiting waste generation, recycling and reusing of waste (Articles 12-14) is done in stages every 10 Years (should be stipulated in the form of Minister of Environment and Forestry Regulation);

*g)* The requirements for waste transportation equipment (it should be stipulated in the form of a Minister of Transportation Regulation);

*h)* The procedure for calculating the levy tariff based on the type, characteristics and volume of waste (it should be determined in the form of a Minister of Domestic Affairs Regulation);

*i)* The procedures for certifying the competence of transportation, processing and final processing of waste (it should be stipulated in the form of Minister of Environment and Forestry Regulation);

*j)* The procedures for reducing waste (should be stipulated in the form of Minister of Environment and Forestry Regulation, compiled by the Minister of Environment and Forestry);

## 2. METHODOLOGY

This is descriptive research. It is also doctrinal or normative legal research. Meanwhile, in term of its nature and its form, this research is diagnostic research, aiming to obtain information about the causes of a symptom.

The type of data used in this study was secondary data, namely data or information from a review of similar research documents, library materials, such as books, literature, magazines, journals or archives that are relevant to the topic to be discussed.

In this paper, we used several terms to explain plastic waste management in Jakarta. We use the term 'recovered' that refer to plastic wastes that are collected and sorted for recycling. This term used for waste bank and for explaining where waste bank and scavengers are included because there is a sorting activity happens in a waste bank. Meanwhile, to express scavengers' activity, we use the term 'collected', as we believe there is a possibility that the sorting/removing of the residue of plastic waste happens at the later stage. Then, we use term 'recycled' to define plastic wastes that are going through the recycling process (pelletizing/ being used for the recycled products).

Data collection was carried out by a literature study to collect and compile data related to the problem under study. The data obtained in this paper were qualitative, then the analysis involved qualitative data analysis, implementing a problem approach of the Statute Approach (6). In this case, a normative study, of course, must use a legislation approach, because a variety of legal rules were examined as the focus and the central theme of the study.

## 3. DISCUSSION AND RESULT

Another gap found in the existing laws is the ambiguity, such as the lack of socialization about professional regulations, weak law enforcement for violators of the Law and/or regional regulations on waste. It also seems that the drafting of the regulations did not actively involve all components. Based on Law No. 18 the Year 2008 Article 15, Producers must manage the packaging and/or goods they produce, which cannot or are difficult to decompose by natural processes. Therefore, the Government Regulation of the Republic of Indonesia Number 81, the Year 2012, concerning Management of Household Waste And Waste similar to Household Waste, states that the management of residential areas, commercial areas, industrial zones, special zones, public facilities, social facilities, and other facilities must comply with the following.

- in collecting rubbish, providing TPS, TPS 3R, collection tools for disaggregated waste (Article 18 paragraph 2), and
- providing Area scale waste treatment facilities in the form of 3R TPS (Article 21 Paragraph 3).

Next, article 26 paragraph 1b states that in carrying out the transportation, processing and final processing of waste, the rency or city government can partner with a business entity or the community.

Article 35 paragraph 2c states that community participation includes carrying out activities for handling

household waste and similar household waste independently and/or in partnership with the district/city government.

Therefore, based on Government Regulation Number 81 the Year 2012, Article 12 states that manufacturers must limit waste generation by:

- a. prepare plans and/or programs to limit waste generation as part of a business and/or its activities; and/or
- b. produce products using packaging that is easily decomposed by nature and processes cause as little garbage as possible.

Article 15 states that:

- a. The use of production and packaging raw materials that can be decomposed by natural processes, which reduce garbage as much as possible, and which can be recycled and/or reused as intended in Article 12 to Article 14 is carried out every ten years through a road map.
- b. Phasing, as referred to in paragraph (1) is regulated by the minister who conducts government affairs of environmental protection and management.

Waste minimization would imply the reduction of feedstock for generating energy. Thus, it is only recently that the sanitary office established the waste hierarchy, emphasizing on waste minimization and prevention. Therefore, the laws and regulations should clearly indicate waste minimization as the priority for waste management and the remaining portion that would end up in the landfill can be used for energy generation both through capturing the methane and incineration. To achieve the goals on optimal waste minimization, retribution can be imposed with volume-based pricing, which implies that the disposal fee is set on a per unit volume basis. Another plausible instrument is refundable deposit systems, of which the initial charge to cover the expenses of disposal that can be refunded upon the return of products for recycling. The individuals or communities who are active to reduce the wastes significantly may also be offered incentives, both for composting and recycling activities.

In general terms, the objectives that are established by the regional policies in Indonesia should be accompanied by scenarios that include SMART criteria (Specific, Measurable, Achievable, Realistic, Time-bound). These criteria will be useful to evaluate the objectives of a particular activity. It is expected that with the inclusion of these criteria, the policies will translate itself into guidelines for the implementation of proper waste management and waste-to-energy practices.

However, there is a rather sceptical view towards Waste to Energy, as the Commission is concerned that increasing Waste to Energy capacity will jeopardize recycling, hence undermining the waste hierarchy. Even though the Commission concludes that Waste to Energy could play a role in the transition to a circular economy, the waste hierarchy must be used as a guiding principle to ensure that prevention, reuse, and recycling are not averted. Most certainly, Waste to Energy plants meet the requirements set by the Industrial Emissions Directive [3]. In addition, the Commission notes that the Member States whose their future waste management plans to invest in

Waste to Energy must take into account the risk of “stranded assets”. The new plants should only be built provided that the availability of feedstock would be sustained for the operation of new incineration plants over their lifespan (20–30 years) without neglecting separate collection and recycling obligations [4]. Finally, the Member States are also advised to gradually phase-out public support for the recovery of energy from mixed waste and either introduce or raise incineration taxes. Therefore, the message from the EU is clear that the development of separate collection structures and recycling capacity (preferably in the form of anaerobic digestion) should be a priority.

#### 4. CONCLUSION

1. Settings regarding waste management in Indonesia are governed by central and regional level regulations. Central level regulation that has a correlation to waste management and directly related to waste management of Law of Republic of Indonesia Number 32 the Year 2009 on environmental protection and Management, Law of Republic of Indonesia Number 23 the Year 2014 About Local Government, Law of Republic of Indonesia Number 18 the Year 2008 on Waste Management. In the regulations, it is governed by the maintenance of waste management, namely by the reduction and handling of waste involving various elements from both government and local governments and communities to create the environment a good and healthy life.
5. Legal aspects in waste management in Indonesia due to lack of professional socialization on regulations, weak law enforcement for violators of the Law or Regional Regulation on Solid Waste and at the time of drafting regulations did not actively involve all components. In addition, two authorities that need to be considered in relation to determining waste management policies and strategies and applying waste management based on norms, standards, procedures and criteria are the determination of waste management policies and strategies and determination of Norms, Standards, Procedures And Criteria (NSPC) For Waste Management.

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