Legal Protection for Hospitals in Managing Infectious Solid Medical Waste Using Incinerators (Study at St **Antonius General Hospital Pontianak)**

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Abstract

Hospital whose main function is as health service facilities, can produce waste as result of their activities. The waste produced includes infectious solid medical waste and if this waste is not handled properly and correctly it can cause environmental pollution. Burning this waste using incinerators may cause air pollution which can harm the environment and public health. The government has issued laws and regulations regarding the management of hospital medical waste, and hospital must comply with the principle of absolute responsibility administratively, civilly and criminally, so that the legal protection efforts carried out by hospital are preventive protection by taking preventive measures in managing highly infectious medical waste. In this research, we can be learned that hospitals whose main fuction is as health service fascilities as regulated in Law No 17/2023 concerning Health, can be subject subject to administrative, civil and criminal environmental sanction as stated in Law No 32/2009 concerning Environmental Protection and Management. This sanction imposed are not related to negligence in carrying out its function as a health service

Keyword: Hospitals, Medical waste management, Legal protection

1. INTRODUCTION

Indonesia is a country that recognizes and regulates the value of human rights, the provisions of which are regulated in the 1945 Constitution. Human rights are inherent to a person from the time they are in the womb and throughout their life, without these rights humans cannot live properly as humans. According to article 1 paragraph (1) of Law Number 39 of 1999, human rights are a set of rights that are inherent in the nature and existence of humans as creatures of God Almighty and are gifts that must be respected, upheld and protected by the State, law and government, and every person for the sake of honor and protection of human dignity (Ali.Z, 2006; Sidi, 2022). One of the Human Rights is the right to a good and healthy living environment which is regulated in Article 28 H paragraph (1) of the 1945 Constitution. In article 1 paragraph 1 of Law Number 32 of 2009 concerning Environmental Protection and Management it is stated that "the living environment is the unity of space with all objects, forces, conditions and living creatures, including humans and their behavior, which influence nature itself, the continuity of life, and the welfare of humans and other living creatures" In Law No. 17 of 2023 concerning Health (hereinafter referred to as the Health Law), it is stated in Article 4 paragraph 1a, article 5, article 5 paragraph (2), that every person has the right to live a healthy life by getting a healthy environment to achieve a level of health, to the highest level, and every person is obliged to make efforts to realize, maintain and improve health standards, as well as respecting the rights of other people in an effort to obtain a healthy environment; In Chapter III, article 9, article 13, article 14 and article 15, it states how the roles and responsibilities of the central government and regional governments are responsible for providing them by fulfilling supporting facilities and infrastructure, empowering and encouraging community participation, and establishing policies and regulations that refers to the norms and regulations of the Central Government. According to the Health Law, a hospital is a health service facility that provides comprehensive individual health services through promotive, preventive, curative, rehabilitative and/or palliative health services by providing inpatient, outpatient and emergency services. Hospitals are one of the health service facilities which are part of the health resources that are very necessary to support the implementation of development efforts in the health sector. As a public service facility, hospitals are a gathering place for sick and healthy people which allows environmental pollution, health problems and can become a place for disease transmission. (Amelia R, 2020; Kader et al., n.d.; Oktamala D, 2022; Saragih JL, 2013; Setiyo Dewi et al., 2021). As a service facility, hospitals will produce hospital waste which has the potential to infect and spread various diseases, germs of disease. Therefore, hospital waste must be handled seriously and carefully, so that it can prevent and reduce pollution to the surrounding environment.

In order to reduce these impacts and risks, the government issued the Republic of Indonesia Minister of Health Decree No. 7 of 2009 concerning Hospital Environmental Health (hereinafter referred to as the KLRS Minister of Health Decree). In article 4 paragraph 2(h), it is stated that reducing waste is included in efforts to create environmentally friendly hospitals. Waste management is included in one of the environmental health requirements for hospitals because as a health service facility, due to its various activities, it produces waste that can pollute the environment and cause health problems for the community, so hospitals have an obligation to manage this waste. The types of waste produced by hospitals are mentioned in Minister of Health Decree No. 1204 of 2004 concerning Hospital Environmental Health Requirements (hereinafter referred to as Minister of Health Decree PKLRS), including: (1) Solid Waste, consisting of (2) Medical waste, consisting of (3) Infectious waste (4) Pathological waste (5) Sharps waste (6) Pharmaceutical waste (7) Cytotoxic waste (8) Chemical waste (9) Radioactive waste (10) Pressurized waste containers (11) Waste with high heavy metal content (12) Non-medical solid waste (13) Waste Gas (14) Liquid waste. According to WHO (2013), the amount and composition of hospital waste is 75% - 90% domestic waste, and 10% - 25% is hazardous waste which can pose a risk to health and is dangerous for the environment (Purwohandoyo, 2016). Before the Covid-19 pandemic, the composition of household waste illness is 85% non-B3 waste, 10% infectious B3 waste and 5% non-infectious B3 waste. The average waste from hospitals throughout the world is 0.5 kg/bed per day and in developing countries in 2003 it was 0.14 kg/bed/day. Of the waste produced / beds / that day, 10-20% (if in Indonesia 23%) is in the form of solid medical waste whose management requires special methods because the danger of this waste is very large for the environment, society and the environment. (Prihartanto, 2020; Purwohandoyo, 2016). The standards that must be implemented in the management of medical waste are contained in the Minister of Environment and Forestry Regulation No. 56 of 2015 concerning Procedures and Technical Requirements for Management of Hazardous and Toxic Waste from Health Service Facilities (hereinafter referred to as PMLH 56/2015 which means waste management is starting to be produced to processing through the stages of reduction, sorting at the waste producing place (eg: treatment room, laboratory, etc.), storage, removal and destruction. One method of processing medical waste is the thermal method by burning solid medical waste using an incinerator. Incineration systems can reduce the volume of solid waste significantly, which can reach 80% of the original volume(Saragih.JL, 2013).

However, the use of incinerators is still a debate and environmental issue. Is incineration the right way to process solid waste? The main aspect of the debate is the possibility of potential risks to human health resulting from pollutant emissions produced by the incineration process. Several pollutants with higher ambient concentrations than those produced by incineration facilities have been found to cause various adverse health effects and there is still much debate about the possible health effects of pollutants with smaller amounts/concentrations produced by the incineration process (Al-Khatib et al., 2015). Another possibility is the issue of the social, economic and psychological impacts associated with living or working near an incinerator facility(Lima, 2004). There are many obstacles faced by hospitals in providing incinerators, including the high investment value of procuring incinerators, the lack of land for the location of the incinerator, the need for human resources/sanitarians who understand and are trained in the process of operating the incinerator and the difficulty and length of obtaining an operational permit for the incinerator (Amelia R, 2020). Operational permits are given in the form of an Operational Feasibility Letter (hereinafter abbreviated as SLO). According to Government Regulation no. 22 of 2021 concerning the Implementation of Environmental Protection and Management (hereinafter referred to as PP No. 22/2021 PPPLH) SLO is a letter containing a statement of compliance regarding standards for Environmental Protection and Management of Businesses and/or Activities in accordance with statutory regulations. The Incinerator SLO is issued by the Ministry of Environment and Forestry. Because of these various obstacles, not all hospitals have their own incinerators. There is not a single hospital in West Kalimantan that has an Incinerator SLO and there are no incinerators managed by the Regional Government. Apart from technical problems, the obstacles faced are protests from the community and the environment around the hospital incinerator

regarding air pollution, which is because the incineration process from the incinerator produces exhaust emissions which flow into the air and also cause odors. In an effort to process the solid infectious medical waste produced, RSU St Antonius Pontianak (hereinafter abbreviated as RSSA) uses an incinerator to process the medical waste apart from of course collaborating with waste transport services and waste management services as outlined in the form of a 3 (three) party Cooperation Agreement Meanwhile, household/non-medical waste or domestic waste is disposed of at TPS in collaboration with the Pontianak City Environmental Service. As a form of effort to overcome obstacles and for legal protection, RSSA is trying to obtain an Incinerator SLO as a legality for the use and operation of the incinerator. By obtaining the Incinerator SLO, it becomes proof of the implementation of the house's legal responsibility in processing infectious solid medical waste in accordance with applicable laws and regulations and becomes legal protection for the hospital, the community and the environment. The aim of this research is to analyze how hospitals' legal protection efforts are implemented in the form of fulfilling statutory and regulatory obligations regarding the management of infectious solid medical waste produced using incinerators and to analyze the obstacles faced by hospitals in managing Incinerator SLOs.

2. RESEARCH METHODOLOGY

The research used in this research is included in the type of empirical legal research which with this research can examine the implementation/application of law in society and obtain things that hinder the implementation of the law (Amiruddin & Asikin, 2021). It is qualitative in nature with a descriptive and analytical observational approach which is research that describes existing facts and analysis of how the implementation of applicable laws and regulations in the field is connected to existing legal theory (Wahyuni.S, 2023). The research data source is primary data obtained from direct observation, through hospital sanitarians, hospital legal departments, hospital cleaning service officers and reviewing hospital archives at the research site. Secondary data through reviewing primary legal materials which include laws, statutory regulations, secondary legal materials with explanations through theories of legal experts, scientific journals, books and scientific research, while for tertiary legal materials use legal dictionaries, website articles via the internet. Data collection techniques using direct observation and direct interviews with respondents. This research was carried out at St Antonius Pontianak General Hospital, West Kalimantan Province, from January 2 2024 to February 2 2024.

3. RESULT AND DISCUSSION

St Antonius General Hospital, is one of the health service facilities in the city of Pontianak, West Kalimantan province. Historically, the hospital was founded in 1929, and currently has 268 beds. To process medical waste so far, hospitals have used incinerators with several incinerator replacements. Incinerator replacement occurs due to an increase in the amount of waste produced so that the incinerator capacity must be increased and also due to damage due to use. During use of the incinerator, the hospital only has the exhaust gas emission test results as proof that the gas emissions produced from the combustion process are still within the required quality standards. In accordance with the legislation regarding waste management, including medical waste, as explained in the introduction, hospitals are required to obtain an Incinerator SLO as a form of hospital legal responsibility in processing the medical waste produced. Fulfillment of these obligations is carried out by fulfilling the technical requirements for managing hazardous waste which refers to PMLH 56/2015. In article 1 paragraph 1, it is stated that waste is the remainder of a business or activity, while in paragraph 2, hazardous and toxic materials (B3) are substances, energy and/or other components which, due to their nature, concentration and/or amount, either directly or indirectly, can pollute and/or damage the environment, and/or endanger the environment, health and survival of humans and other living creatures. The explanation regarding B3 Waste is in paragraph 3; B3 waste is the remainder of a business and/or activity that contains B3. Paragraph 5 Infectious waste is waste contaminated with pathogenic organs that are not routinely present in the environment and these organisms are in sufficient quantity and virulence to transmit disease to susceptible humans. Infectious waste as B3 waste is contained in PP No 22/2021 PPPLH PP No. In paragraph 9 PMLH 56/2015, it states that B3 waste processing is a process to reduce and/or eliminate dangerous and/or toxic properties. Hospitals as producers of B3 waste, with infectious characteristics are mentioned in article 3, article 3 paragraph 2, article 4 paragraph 1 PMLH 56/2015. Sources of medical solid waste at RSSA come from the activities of the Emergency Room (IGD), Intensive Care Installation (ICU/ICCU/NICU), Inpatient Room, Outpatient Polyclinic, Laboratory Installation,

Radiology Installation, Pharmacy Installation, and corpse handling, all of which are included in infectious waste

Table 1. List of Medical Waste at RSU ST Antonius.

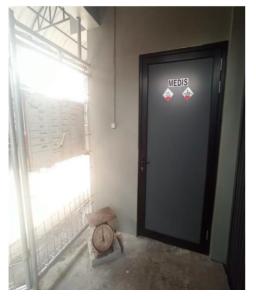
No	Code	Waste Description	Category	Waste Type	Amount
	Waste	•	Danger		(kg/day)
	A337-1	Clinical waste that has	1	Transfusion set/Infusion	2
		nfectious characteristics		set Urinary catheter	1
				Urine bag Disposable	2
				diapers/Underpad	5
				exposed to blood	
				Gauze plaster	1
				Face mask	1
				Verban	1
				Gloves	2 5
				Sanitary napkins	5
				Cotton swaddle	0.5
				Cotton stick	0.5
				Deper	0.5
				Alcohol cotton (plastic)	0.5
				Blood bag Garbage	2
				contaminated with bodily	4
				luids	
	A337-2	Expired pharmaceutical products	1	-	0
	A337-3	Expired chemicals	1	-	0
	A337-4	Laboratory equipment	1	Glass glass	2
		contaminated with B3		Spoit without needle	5
				Needle	6
				Flacon	1
				Jar	5
				Plastic and glass	10
				containers that are not	
				contaminated with body	
				fluids	
	A337-5	Medical equipment contains	1	-	0
		neavy metals, including			
		mercury (Hg), Cadmium			
		(Cd), and			
	B337-1	Pharmaceutical product	2	Medicine vials	15
		packaging		Ampoule	6
				Medicinal shell	10
	B337-2	WWTP sludge	2	-	0
				Amount	88

The amount of medical waste produced by the hospital every day is approximately 80-88 kg/day, which also includes infectious solid medical waste. This is no different from that in other hospitals, which is around 50-100 kg (Saragih.JL, 2013; Siddik. S & Wardhani, 2020). Observations and interviews were carried out regarding the stages of medical waste management in hospitals, starting from the patient care room, sorting and placing infectious medical waste and placing it in yellow bag containers, taking it to TPS B3 Hospital. These stages already have guidelines with the SPO for Medical Waste Processing (infectious). Storage of B3 waste at the B3 Waste TPS. The size of the TPS building is 7.85 m x 4.2 m. B3 waste at the B3 TPS has been stored according to its type and characteristics in a designated place, apart from that there have also been efforts to avoid waste by implementing good governance procedures. On the walls of the B3

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waste TPS building there is a nameplate for the B3 waste TPS, symbols and packaging for B3 waste, scales, a whiteboard (recording the entry/exit of B3 waste) in accordance with Standard Operational Procedures (SPO).









There is no cold storage as a place to store medical waste at St Anonius Hospital. Meanwhile, the rules for storing infectious medical waste at TPS B3 for storage time are 2 days for temperatures > 00 C and 90 days for temperatures < 00 C. When the research was carried out, it was discovered that the time for waste collection from a third party (licensed transporter) would be transported at least 1 -Once every 2 weeks. Because the characteristics of solid medical waste are considered infectious waste, emergency response equipment is also equipped with standard K3 equipment, including fire extinguishers, first aid facilities, safety showers or eye wash, sinks and emergency doors. There is already an Incinerator Emergency Response SPO.

Perlengkapan Sistem Tanggap Darurat Fasilitas Incenerator Rumah Sakit Umum Santo Antonius

No.	Jenis Alat	Fungsi Alat	Gambar Alat	Keterangan
Ĺ	APAR	Memadamkan api kecil	COO	Ada
2.	Helm Bencana	Penyamaan persepsi petugas gawat darurat incenerator dengan K3RS	Done 1	Ada
3.	Tombol Emergency	Tombol darurat mesin dalan kondisi kebakaran/gagal mesin, segera tekan tombol melingkar merah	D TO DESCRIPTION	Ada
4.	Pelindung Wajah	Melindungi wajah dan mata dari percikan api dan bahan asing yang membahayakan wajah	D	Ada

5.	Tempat APD dan Safety Set (Kotak P3K)	Semua alat-alat pelindung diri dan P3K ditempatkan dalam kotak ini		Ada	
6.	Rambu-Rambu Safety (Perintah dan Larangan)	Penyamaan persepsi, daerah terinfeksius dan perintah harus menggunakan APD lengkap sebagai safety		Ada	
7.	Sepatu Safety	Perlindungan kaki dari api dan benda tajam		Ada	
8.	Sarung Tangan	Perlindungan tangan dari hantaran panas		Ada	
9.	Kacamata Safety	Perlindungan mata dari percikan panas/api	600	Ada	

10.	Wear Pack	Perlindungan badan dari hantaran panas		Ada
11.	Welding Apron dan Sleeve Cover	Perlindungan badan dan lengan dari hantaran panas	MENCHALIPME. Value of the second seco	Ada
12.	Panel Incenerator	Mematikan aliran listrik sementara dari bahaya gagal mesin (elektrik)	•••	Ada
13.	Masker Respirator (Pelindung Pemapasan)	Respirator pemapasan dari bahaya kepulan asap yang berbau menyengat dan berbahaya		Ada
14.	Shower dan Eye Wash	Pembersih badan dan mata/wajah bila terpapar barang/bahan berbahaya	**	Ada

Foto Alat Tanggap Darurat



Processing infectious solid medical waste in hospitals uses two methods, namely by collaborating with a third party (licensed transporter) and by using an incinerator.

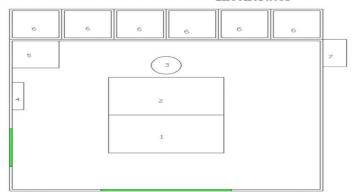
RSSA Incinerator

Incinerator location

Santo Anthony General Hospital is located on Jl. KH Wahid Hasyim no. 249, Pontianak City, West Kalimantan, is at coordinates 0° 01' 12" S, 109° 19' 38" E. The Incinerator Room is in the northern part of the Hospital. The location of B3 Waste Processing activities is at coordinates 00° 01' 10.69" South Latitude and 109° 19' 38.83" East Longitude.



Tata Letak/Lay Out Incenerator





- Keterangan:
 1. Burner 1
 2. Burner 2
 3. Cerobong
 4. Panel Incenerator
 5. Solar
 6. Bak Penampungan
 7. Tangga



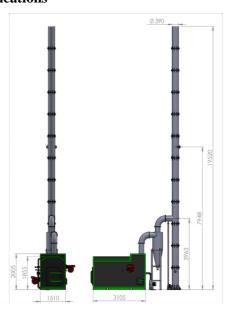






Picture 1. RSSA Incinerator Specifications

	SPESIFIKAS	SI TEKNIS INCINERATOR	
Model		BGI-100S	
Kapasitas		100 kg/jam	
Kade Produksi		012.01.22	
Tipe		Dobel chamber idle grate	
Sistem Po	embakaran	Batch	
37.1	Chamber	2 m3	
Volume	Chamber 2	0,6 m3	
D	Chamber	Ecoflam Minor 20 (2 unit)	
Burner	Chamber 2	Ecoflam Minor 20 (1 unit)	
n.i	Blower 3	Intermediate Pressure; 750 W 220 V	
Blower	Blower 4	Intermediate Pressure; 250 W 220 V	
Control Panel	Material	AISI 304	
	Dimensi	300 x 400 x 150 mm	
	Tipe	Cyclone Wet Scrubber	
Scrubber	Material	AISI 304	
Scrubber	Dimensi	ø 600 x 2200 mm	
	Jumlah	9	



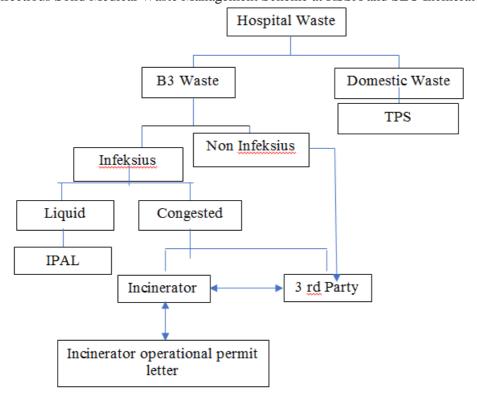
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The operational parameters of the incinerator to ensure the combustion heat remains stable are influenced by the combustion chamber temperature, turbulence residence time, air supply, incinerator construction materials, and additional equipment. The technology used for incinerators currently uses the Controlled Air Incinerator principle, the main components of the incinerator are combustion chamber 1, combustion chamber 2, boiler, air pollution control equipment with wet and dry scrubbers which function to reduce gas emissions and particles released into the air so that prevent toxic pollutants from being released into the free air(Paramita, 2007). There is already an SPO for Burning Medical Waste with an Incinerator. There has been a trial of burning medical waste with an incinerator to test the working of the equipment after installation of the equipment from the seller. At the same time, exhaust gas emission tests were also carried out. Until the time the research was carried out, the incinerator equipment could not be used because it was waiting for the Incinerator SLO to be released, so only maintenance was carried out on the incinerator equipment so that it was not damaged.



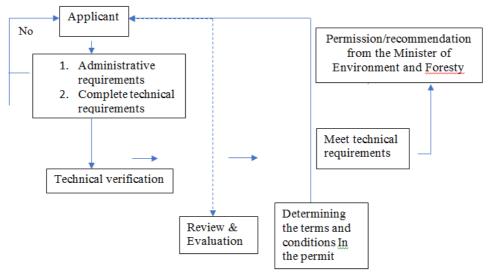


Infectious Solid Medical Waste Management Scheme at RSSA and SLO Incinerator



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In article 5 letter (d) and article 17 paragraph 1 PMLH 56/2015 it is stated that B3 Waste Processing is carried out thermally by: (a) B3 Waste Producers who have a B3 Waste Management Permit for B3 waste management; or (b) Hazardous Waste Processors who have a Hazardous Waste Management permit for Hazardous Waste Processing activities and fulfill the requirements in Attachment V of Minister of Environment and Forestry Regulation No. 56 of 2015, are required to have an Incinerator SLO, this is done by submitting an application via Integrated Services http://integrated service.menlh.go.id.



From the results of interviews with the hospital leadership, legal department, hospital sanitation, information was obtained that the hospital had reached the stage of verifying administrative requirements and technical requirements and had been reviewed by the Ministry of the Environment and had revised the review. Currently waiting for the continuation of the evaluation/field visit

According to Soerjono Soekanto, legal protection is protection given to legal subjects in the form of legal instruments and there are several factors that influence law enforcement and protection, including: 1). legal factors, 2) law enforcement factors, namely the parties involved in law enforcement, 3) means or facilities factors that support law enforcement such as skilled human resources and adequate tools, 4). community factors, namely the environment where the law applies and is determined and how society accepts the applicable law, 5) cultural factors. Meanwhile, according to Kansil, legal protection is legal measures that must be provided by law enforcement officials to provide a sense of security, in terms of mental and physical, from interference and threats from any party. (law online). Legal protection is a guarantee provided by the state to all parties to be able to exercise their legal rights and interests in their capacity as legal subjects. The legal protection that can be given to hospitals in relation to environmental law is:

1. Preventive Legal Protection.

Preventive legal protection is applied to hospitals in an effort to control environmental impacts. Efforts in the form of preventing violations or deviations from applicable provisions by means of monitoring mechanisms, licensing, tax relief, fines or penalties (Akib.M, 2021). Preventive legal protection by hospitals is defined as efforts made by hospitals to prevent violations or possible irregularities in the management of their medical waste by the hospital carrying out maximum supervision in the process of managing medical waste and completing permits related to incinerator SLOs and other permits.

2. Repressive Legal Protection

The aim of protecting hospitals' repressive laws related to environmental law is aimed at effective law enforcement, consistent with the consequences for pollution/environmental incidents that have occurred (Akib.M, 2021). It is also used as a legal remedy to resolve environmental disputes related to the use of incinerators which cause air pollution.

According to the Big Indonesian Dictionary, responsibility is the obligation to bear everything. Responsibility is human awareness of their intentional and unintentional behavior. The theory of legal responsibility is a theory that analyzes the responsibility of legal subjects or perpetrators who have

committed unlawful acts or criminal acts to bear costs or losses or carry out crimes for their mistakes or negligence.(Tim Hukumonline, n.d.) Absolute responsibility of the hospital (strict liability).

Medical waste incineration activities using incinerators are very susceptible to causing air pollution and several things that can cause this pollution include:

- 1. The incinerator equipment does not meet the required standards, resulting in exhaust gases whose emission values are above the quality standards
- 2. Non-compliance with the SOP for Burning Medical Waste with Incinerators

Force majeure conditions in the process of burning medical waste. There is a principle of absolute responsibility in the PPLH-2009 Law, namely for types of business that:

- 1. Businesses/activities that use B3
- 2. Businesses/activities that produce and manage B3 waste
- 3. Businesses/activities that can cause serious threats to the environment

The use of incinerators as an effort to process hazardous hospital waste must comply with the principle of responsibility because the incineration process fulfills the following things:1

- 1. Hospitals use and produce B3 waste
- 2. Hospitals that, because of the use of these incinerators, have the possibility of causing air pollution/environmental pollution

Violations that occur can be proven by examining exhaust gas emissions from the incinerator compared to standard air quality standards set by statutory regulations. In enforcing Environmental Law, there are 3 (three) forms of sanctions that can be imposed on hospitals, namely: Application of Administrative Sanctions. The enforcement of administrative sanctions in environmental disputes aims to ensure that acts of neglect or violation of the law, and do not meet the requirements, stop or return to their original state. So the application of administrative sanctions in environmental law focuses on the actions. According to Siti Sundari Rangkuti, quoted from Aris PA Santoso, there are several environmental administrative sanctions, namely:

- 1. Hospital closure
- 2. Termination of hospital activities
- 3. Written warning to the hospital
- 4. Temporary suspension of activities and revocation of hospital operational permits
- 5. Revocation of hospital license
- 6. Application of Civil Environmental Law Sanctions

The aspect of civil sanctions in environmental law relates to liability, compensation in the environment concerns the occurrence of environmental pollution and damage due to the use of hospital incinerators. In the 2009 UUPPLH environmental responsibility includes individual compensation and environmental restoration financing.(Santoso.APA et al., 2022; Sihombing & Hadita, 2022). Application of Criminal Environmental Law(Dwita & Zamroni, 2021; Santoso.APA et al., 2022). In applying criminal sanctions in the environmental sector, environmental offenses must be applied to determine whether an act is categorized as environmental pollution and damage so that it can be punished. Types of environmental criminal acts that are in accordance with the provisions of the PPLH Law include:

- 1. Actions that result in exceeding the standard values for the quality of air, water, sea water and the environment negligence resulting in exceeding the standard values for air, water, sea water and environmental quality release/distribute genetically engineered products to environmental media
- 2. Carry out B3 waste management without permission
- 3. Dumping waste without permission
- 4. Carrying out business without having an environmental permit

From observations in the field, it is necessary to use an incinerator to process medical waste, which if possible can be burned every day because with daily burning it is possible to only burn 80% of the incinerator capacity, so that it can reduce air pollution (Gusdini et al., 2023). Pembakaran jugain order to prevent waste from accumulating due to the transportation of medical waste, only carried out by a third party every 1-2 weeks. Also to reduce the costs of managing B3 waste by hospitals (Purwohandoyo, 2016). Follow and provide technical guidance on incinerators from the Pontianak City LHK Service, Kalimantan Province LHK Service in an effort to fulfill the Incinerator SLO requirements. Regarding the issuance of SLOs, it is stated in Minister of Environment and Forestry Regulation No. 5 of 2021 concerning Procedures

for Issuing Technical Approvals and Operational Feasibility Letters in the Field of Environmental Pollution Control. The processing of RSSA SLOs has reached the stage of waiting for answers to the results of the substance assessment to issue technical approvals. SLO will be issued if there are administrative requirements and technical requirements. is correct/passed.

4. CONCLUSION

Legal protection for hospitals in managing infectious solid medical waste using incinerators consists of preventive and repressive legal protection. Preventive protection relates to efforts to prevent air pollution during the process of using the incinerator. And repressive legal protection if legal problems arise due to air pollution, through litigation. The principle of absolute legal responsibility can be applied in relation to the management of medical waste using the incineration process due to suspected air pollution incidents. Regarding this research, suggestions that can be given to various parties are:

- 1. Hospitals as producers and managers of B3 waste are obliged to comply with procedures and provisions regarding the management of Medical Waste in accordance with applicable laws and regulations.
- 2. Hospitals Develop Risk Management related to the waste produced.
- 3. Hospitals must be able to provide incinerators that comply with applicable regulatory provisions.

In terms of arranging SLOs for Incinerators, hospitals are able to carry out independent assessments for technical feasibility and complete administrative requirements and provide technical guidance to the Environmental Service at the Municipal/Regency level and at the Provincial level. Other benefits of this research for other researchers can still be expanded and sharpened in terms of enforcing regulations on air pollution, public understanding of incinerators and others.

REFRENCES

1945 Constitution of the Republic of Indonesia

Akib. M. (2021). Environmental Law from Global and National Perspectives (Vol. 5).

Ali.Z. (2006). Sociology of Law (Vol. 1). Graphic Rays.

Al-Khatib, IA, Kontogianni, S., Nabaa, HA, & Al-Sari, MI (2015). Public perception of hazardousness caused by current trends of municipal solid waste management. Waste Management, 36, 323–330.

Amelia R, IARA (2020). Management of Solid Medical Waste at the Mamuju Regional General Hospital, West Sulawesi Province. Window of Health: Journal of Health, 3(1).

Amiruddin, & Asikin, Z. (2021). Introduction to Legal Research Methods (12th ed.). Rajawali Press.

Askary.M, Procedures for Licensing for Hazardous Waste Incinerators, accessed 2 February 2024 from https://incinerator.id

Dwita, A., & Zamroni, M. (2021). Legal Responsibilities of Waste Transport Services in Hospital Solid Medical Waste Management. In Journal of Health Law and Ethics (Vol. 1, Issue 1).

Government Regulation no. 22 of 2021 concerning the Implementation of Environmental Protection and Management

Gusdini, N., Mediana, N., & Pratiwi, R. (2023). Performance Testing of Incinerator and Air Pollution Control Tools to Minimize the Impact of Hazardous Waste. Performance Testing of Incinerator and Air Pollution Control Tools to Minimize the Impact of Hazardous Waste. Journal of Environmental Technology, 24(1).

Hukumonline Team, Theories of Legal Protection According to Experts, accessed 3 November 2023 from https:// Hukumonline.com

Kader, P., Balita, P., Pemberdayaan, S., View Project Khansa, M., Adityani, V., Chairani, MS, & Utami, PS (nd). Review: Medical Waste Management System Hospitals in Indonesia. https://www.researchgate.net/publication/366633187

Law No. 17 of 2023 concerning Health

Law No. 32 of 2009 concerning the Implementation and Management of the Environment

Lima, M.L. (2004). On the influence of risk perception on mental health: living near an incinerator. Journal of Environmental Psychology, 24(1), 71–84.

Minister of Environment and Forestry Regulation No. 56 of 2015 concerning Procedures and Technical Requirements for Management of Hazardous and Toxic Waste from Health Service Facilities

Minister of Health Decree No. 1204 of 2004 concerning Hospital Environmental Health Requirements

- Oktamala D. (2022). Criminal Responsibility of Hospitals Against Medical Toxic and Hazardous Waste Management That Increases During the Covid-19 Pandemic. Champion Familiar Journal, 7(1), 113–127.
- Paramita, N. (2007). Evaluation of Waste Management at Gatot Soebroto Central Army Hospital. Precipitation, 2(1), 51–55.
- Prihartanto, P. (2020). Review Of Research Results On The Generation Of Medical And Household Hazardous Waste During The Covid-19 Pandemic Disaster Research Review On Generation Of Medical And Municipal Hazardous Waste During The Covid-19 Pandemic Disaster. Nature Journal, 4(2), 134–141.
- Purwohandoyo, A. (2016). Comparative Cost Analysis of Solid Medical Waste Management between Self-Managed System and Outsourcing System in "Dharmais" Cancer Hospital. Comparative Cost Analysis of Solid Medical Waste Management in Dharmais Cancer Hospital between Self-Managed System with Outsourcing System.
- Republic of Indonesia Minister of Health Regulation No. 7 of 2009 concerning Hospital Environmental Health
- Santoso APA, Gegen G, & Sukendar, S. (2022). Introduction to Environmental Law (1st ed., Vol. 1). Library Newpress.
- Saragih. JL, HW (2013). Evaluation of the Incinerator Function in Destroying B3 Waste at Dr. TNI Hospital. Ramelan Surabaya. Pomits Engineering Journal, 2(2), D138–D143.
- Setiyo Dewi, D., Nurlini Wenang Tobing, T., Management Studies, P., & Jayakarta College of Economics, S. (2021). Optimizing the Delivery of Public Services in the Period of Change Against Covid-19 in Indonesia. Journal of Information Systems, Applied, Management, Accounting and Research. (Printed), 5(1), 210–214. http://journal.stmikjayakarta.ac.id/index.php/jisamar,
- Siddik. S, S., & Wardhani, E. (2020). B3 Waste Management at Hospital X Batam City. Serambi Engineering, V(1), 760–767.
- Sidi, R. (2022). Human Rights in Perfecting Health Law in Indonesia (2nd ed., Vol. 1). Aulia Graphics.
- Sihombing, E., & Hadita, C. (2022). Legal Research (1st ed.). Equivalent Press.
- Wahyuni.S. (2023). Qualitative Research Strategies and Practical Examples (Nugroho.A, Ed.; 2nd ed., Vol. 1). Kompas Book Publishers.
- Warmadewanthi, Health Facility Waste Management, accessed on 2 February 2024 from https://dlhk.sidoarjokab.go.id